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December 27, 1923

Engineering News-Record

Laying 9-foot pipe on Oregon hydro-electric project

In this issue:

Two articles on structural damage resulting from Japanese disaster:

Earthquake Characteristics and Building Resistance, by R. E. J. Summers;
and Earthquake Damage to Japanese Railways, by Mitsuo Nawa

also

Two Trips of Mixer Construct Four-Way Pavement, by John J. Murphy;
Reconstructing Hell Gate Dam to Eliminate Silt

and

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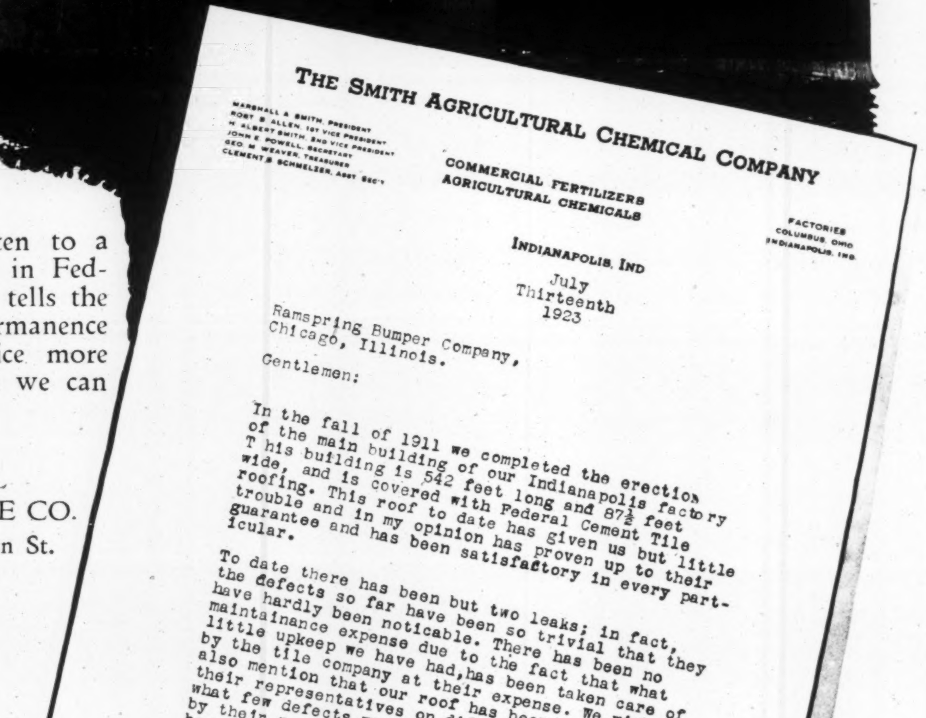

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ENGINEERING NEWS-RECORD

DEVOTED TO CIVIL ENGINEERING AND CONTRACTING

E. J. MEHREN, *Editor*
FRANK C. WIGHT, *Managing Editor*

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Winter Building Facts

WINTER building possibilities assume an increasingly favorable aspect as records of fact are substituted for current opinion. Discussing, recently, steel-skeleton building construction before the New York Building Congress, J. Reid Kilpatrick, Vice-President, Geo. A. Fuller Co., announced that careful statistics covering the firm's operations from 1912 to 1922, a period of ten years, show that the average number of days a year when a winter building program "would be rendered impossible due to temperature conditions" is fourteen. Any increased hazard, because of ice and snow, of winter steel-building construction was not indicated by the firm's records. Nor was it indicated that there was any difference in cost between work begun in winter and that begun in summer. Advocates of a twelve-months-a-year construction industry have always been hampered by lack of quantitative data on winter building conditions. These figures and those published three weeks ago, being developed by the New York Building Congress, serve in a small way to supply the deficiency of facts. It would be a fine thing for the industry if other contractors' organizations would emulate the practice of the New York builders in amassing facts to strengthen the waste prevention arguments becoming somewhat dulled by repetition.

Railroads Using the Highways

AN INNOVATION in freight service put into effect on the Pennsylvania R.R. appears to be a reasonable start toward co-operation between rail and motor transport. On one of its busy lines the local business in less-than-carload lots of freight has been so reduced that the operation of way-freight in this special service is no longer profitable. Consequently the railroad company has abandoned the service and has made arrangements with a trucking organization to call at its stations for the small amount of package freight that is still offered to it for transportation. As a means of doing away with an unprofitable service, this arrangement is admirable. Advocates of store-door delivery may claim that the handlings of the packages should be reduced from four to two by having the trucking concern call for and deliver the packages rather than have the packages delivered to the railroad freight sheds before they are turned over to the truck for movement. Such an arrangement, however, would require the heavy truck used for the long distance moving to do a great deal of traveling in collecting and distributing the individual packages which can be, and now is done by light cars or carts which most concerns maintain for their local business. In addition, the new arrangement probably simplifies the bookkeeping in connection with payment for the shipping, as most concerns of any size have current freight accounts with the railroad company to which the cost of the smaller shipments can be added without the cost of individual collection or of a separate account, which would be necessary under the method of having the trucking company handle the shipment from origin to destination.

To Emphasize Progress in Concrete

IN 1904 the National Association of Cement Users was formed, in recognition of the need for some scientific study of the then infant concrete industry. Next year, in February and at Chicago, the society under its present name, the American Concrete Institute, will celebrate the twentieth anniversary of its founding. Twenty years is not a long time in history of most of the arts, but it comprises practically all of the maturity of the art of designing and making concrete. Because these twenty years have seen concrete rise from the position of foundation material to an almost universal medium of construction expression, the Institute is going to take advantage of the double decennial anniversary to emphasize the progress that has been made. One day of the meeting at Chicago, Feb. 27, is to be devoted to the story of concrete development. The committee which has the meeting in charge has outlined an excellent program with speakers who know the subject and with an exhibit in an adjoining room, both of which should be of exceptional interest. The regular meeting of the Institute will have its usual appeal to those who are concerned with concrete. The inspirational appeal of the one-day session of historic value in concrete should make the February meeting unusually attractive.

Too Big an Undertaking

THE Interstate Commerce Commission, in reversing its decision of last June in which it denied the Virginian Ry. the right to build a short branch line into a new coal field, has taken a step which would imply that it has seen the unwisdom of attempting to control production by determining which coal mines could or could not be opened. The unusual feature of that earlier decision was not that by declining to let the railway build tracks into the new mine the commission did indirectly prevent the opening of the mine, but that the commission specifically stated that in its opinion the mine should not be opened; giving as a further reason for its decision against the building of the spur the fact that the railway had been unable to supply sufficient cars for the mines already in existence along its lines. The far-reaching importance of such a decision is evident, for—lacking the powers of concentrating on coal suggested for it by the report of the Coal Commission—the Interstate Commerce Commission could not well undertake to regulate production in the coal industry unless it also were prepared to regulate production in other industries. It is well that it was able to seize upon the large increase which the

Virginian Ry. has made in its coal-handling facilities as a means of withdrawing from an awkward position in which it had placed itself by an ill considered attempt to improve the coal situation.

Flimsy Prophecies

PROPHECY was ever a precarious occupation, successful only so long as the prophet could preserve a Delphic impartiality or until some one took thought to check up the outcome of past prophecies. The numerous professional economists who have been earning a living for some time forecasting the trend of business have run up against the latter barrier. Someone in the Department of Commerce became curious enough a few weeks ago to compare the course of business with what a dozen or more forecasters said it was going to do. The results are not without humor. In an average of the prophecies of fourteen agencies, 40 per cent proved true and 60 per cent never occurred. The best record was made by a national bank which scored 85 per cent hits. The worst was the most celebrated—or notorious—of the prophets, whose forecasts are accompanied by charts of such astounding complication and color that we have always doubted whether the maker himself knew what they meant. He was right 15 per cent of the time! One ought to do better than that with a ouija board. Some day there may be enough statistical information available to enable one to outguess the future. But even then it will be merely outguessing and there will be so many ulterior and unpredictable influences at work that it will be subject to the failure always inherent in a guess. To claim that any prediction made on the limited information now available is more than an expression of judgment comes pretty close to soliciting money on false pretenses.

Restricting Business Information

GENERAL business forecasting is so doubtful because the subject is complicated and because, too, all calculations may be thrown out of joint by unexpected national and international actions. To take the most obvious example, no prophet in the spring of 1914 knew that an assassination soon to take place in an obscure Serbian town would throw into the discard all the carefully built up data of past economic performance on which might have been predicated the forecasts of the business situation in the coming summer. On the other hand forecasting of a single business is simpler, and while subject also to the major ebbs and flows of economic conditions is most dependent on existing conditions in the trade or business itself. For that reason statistics of his trade or business—authentic and prompt—are the most valuable aids a business man can have in judging how much to produce. Such figures do not forecast for him the demand for his goods; that is something he must learn from other sources, but they do give him a line on the total supply and make less possible the slumps and booms due to ignorance of supply conditions. It is unfortunate, therefore, that the consent decree formulated by the Department of Justice in the tile manufacturers' case apparently prohibits a trade from collecting such statistics and throws the whole onus of such collection on the government. Up to date the government has not been prepared to provide the machinery or the funds, both necessarily large, to carry on such work. The interpretation of the Sherman Act as to trade statistics is running to absurd lengths.

Federal Aid for Roads

ENGINEERS and contractors need to keep in mind that the Congress now in session has before it the task of continuing or, as may be considered, of changing, the federal-aid road law and also of providing appropriations, if federal aid is to be available beyond the present fiscal year. Acting officially in convention the Association of State Highway Officials has asked for an allotment to the states of $100,000,000 a year of federal aid for a period of three years from June 30, 1925. This amount is not too great for the states to absorb if they get about the task of building roads. Just now their delay, or, more accurately, the delay of some, in matching the federal-aid funds and placing work under contract is furnishing the best excuse that Congress will have that appropriations may be reduced and that the present law needs changing. There will be other influences to swing federal activity in road building to a separate system of national highways, to sectional highway systems or to some other object than is contemplated in the present federal aid law. Direction of Congress has to come from engineers and contractors. They are organized to furnish it. The general public, though wanting roads and aid in roadbuilding, may not be expected to take direct action. Contractors' associations and engineers' societies have the important duty this winter of seeing that our present efficient plan of organization for federal-aid road construction is not changed without real reason and that the present liberal appropriations for roadbuilding are continued.

Chances in Garbage Disposal

TWO narrow escapes from the fate so common to garbage disposal plants present themselves for record. The cities are Wheeling, W. Va., and Sacramento, Calif. At Wheeling, a Balmer incinerator, the first of the kind in this country, was put under contract early in 1923. About the time the plant was completed a local election substituted one faction of the dominant political part for another. Straightway began the attempt common under such changes to discredit what had been done by the previous administration. The new Balmer incinerator was beclouded for some weeks but although a test made under the new administration resulted in a report indicating that the plant was far below contract capacity the incinerator was finally accepted. Possibly the local authorities learned of the failure of new city administrations of San Francisco and Atlanta, some years ago, to throw new incinerators onto the hands of the contractors. Both cities were beaten. Atlanta recognized it and has used the furnaces since. San Francisco has tried to make victory of defeat by letting the new incinerator stand idle for many years, while continuing to use destructors of another British type, built in the nineties.

The experience at Sacramento was different in detail, although there also an incinerator came no one knows just how near to abandonment, soon after if not before completion. Just as the plant was nearly ready comes a "senator" of mystery with a proposal to enter into a contract for garbage collection and disposal. The city was priding itself on its collection system it had recently established, and on its new incinerator progressing towards completion and use. Apparently the "senator" had considerable support for his scheme, so concerned were some of the city officials lest it be adopted. Opposition and questioning led to a modified proposal. The plan was not without attractions, since on its face, an operating charge was to give place to revenue for the city. What seemed to be a joker appeared in the revised offer, in that the city was to stand ready to take whatever refuse the "senator" and his friends saw fit to turn over for disposal in the incinerator, evidently at the city's expense. While this would have put the furnace in use as a "standby" it would have been immediate partial abandonment, at the least.

Such are some of the garbage disposal chances being taken in considerable numbers all over the country by cities and contractors alike. They will continue until both see that it is for their interest to have garbage disposal put on a sound engineering basis.

Earthquake Construction

MUCH information is afforded by the views of Japanese earthquake damage printed in this issue. These views, supplied by a number of Japanese readers of *Engineering News-Record*, show the effects produced on civil engineering structures of different kinds, effects which range from the cracking of buildings to the shaking apart of earth masses and bridges. Broadly, the showing agrees with that of other earthquakes; but it is much more important, because of the greater variety of the effects as well as the greater violence of the earthquake. The effect on the railways, especially the culverts, fills, trestles and bridges, as shown in the views—only a few of which can be given for lack of space—is much more severe than most American engineers have realized.

In considering how all such effects may be guarded against by the designer and builder, it is well to bear in mind that earthquake action is dynamic, while the usual structural problem and the methods of analysis applied to it are exclusively static. The difference sets up a formidable difficulty, particularly because the structural engineer will hardly be willing to subordinate his static analysis, which deals with the important service needs, to a radically different kind of calculation, applicable perhaps only once in the lifetime of his structure. The ready way out of the difficulty is to convert the data of the dynamic action into static terms. This course has been followed by the Japanese students of the subject, and is reflected in the brief summary of design principles presented in this issue.

So long as the equivalent static analysis remains well within the range of experience and embodies a fair safety allowance, it should lead to satisfactory results. Accordingly we may consider the general case of buildings to be within reaching distance of solution. Extensive data are furnished by observations on city buildings of structural engineering type. Extending these data to dwelling houses and special types of building may require much careful study, but should be thoroughly feasible. Thus, we may hope to render building construction reasonably secure against earthquake ruin —at least in theory; in practice it may not be found economically desirable to incur the cost of providing this security.

Other structures are not in the same favorable condition, however. Chimneys, high bridges and earthwork constructions come in this category, and these all present special problems that do not appear to be amenable to an equivalent static analysis. The case of the chimney is the simplest of these, and it does not seem impracticable to apply dynamic analysis to this particular problem.

The problems encountered in bridges and earthworks, however, are decidedly more refractory. Such structures are affected in puzzling ways by violent earthquake motions, as some of the illustrations show. It appears that a great deal of further study of shaking forces and resistances will be required before this part of the earthquake problem can be considered on the way to solution.

Financing Subway Construction

FOLLOWING closely upon the report of the Detroit Transit Commission recommending that the cost of new rapid-transit facilities be paid for by assessing the major portion of the cost on the local property which the subway benefits comes an independent recommendation from property owners along Sixth Avenue in New York City that the Sixth Avenue elevated railway be replaced by a subway financed by the property owners along the line. The Sixth Avenue property owners believe that the increase in the value of their property due to the removal of the elevated structure would more than repay them for the increased assessment.

The theory of assessing the cost of subways on the benefited property is not a new one. It is written into the present Rapid Transit Act in New York, but this is the first time that it has been proposed as a means of financing a specific piece of new construction. Its advantage is just as clear in New York as in Detroit, for, as we said in commenting on the Detroit plan in the issue of Dec. 13, the city is so near its debt limit that it is not in a position to finance all the needed rapid transit, nor are the people anxious to have the interest on the city debt continually increasing. Under the bond-issue plan there is little possibility of the city undertaking the replacement of the elevated structure for years to come. What money it can spend will be spent on building aditional subways. Financing by assessment makes possible an otherwise impossible piece of construction.

It has still another advantage. The cost of construction is a direct charge upon the property of shrewd business men who can be depended upon to see that the money which they raise is not spent in the lavish way in which city money is usually spent, nor will they allow a large part of it to be absorbed in paying excessive prices for property rights or supposed damages to abutting property.

In the case of the Sixth Avenue elevated replacement there are many difficulties in the way of carrying out the proposition, but fortunately it is backed by a group of business men who realize that the removal of the noisy and unsightly elevated structure will make Sixth Avenue second only to Fifth Avenue as a business street. The stimulus which this realization has given their efforts is assurance that the project will be undertaken in the near future. Their efforts will be watched with interest by the advocates of more rapid-transit facilities in all our large cities. There is no reason why the same method cannot be applied wherever lack of city funds or disinclination to spend them for such purposes prevent construction.

Earthquake Characteristics and Building Resistance

A Summary of Basic Laws and Constants Deduced From Measurements of Earthquake Motions, and Checked by Observation of Damage Done by Recent Severe Earthquakes

By R. E. J. Summers
Assistant Chief Engineer, H. K. Ferguson Co., Cleveland

During the past year the writer made a study of questions bearing on earthquake resistance of buildings, in connection with the design of a new plant for the Shibaura Engineering Works of Tokyo, Japan, for which the H. K. Ferguson Co. was consulting engineer. No literature in English being available, reference was made entirely to works of Japanese investigators. The works of the Imperial Earthquake Investigation Committee during the past twenty-five years constitute a treatise on the subject. An abstract of what they indicate, when taken in conjunction with observations on actual earthquake effects, is given in the present article.

To explain the problem in hand, it should be said that the Shibaura Engineering Works, a Japanese-controlled organization affiliated with the General Electric Co. and manufacturing similar equipment, decided to build a new plant modeled on best American practice. Plans were to be made in their offices by their own staff, the writer acting as consulting engineer and supervising and checking the plans and specifications. The plant will cost 50,000,000 yen, or $25,000,000. The first of the three construction sections, drawings for which have been completed, includes a heavy machine shop, 304x850 ft.; a forge shop, 186x200 ft.; a pattern shop, 70x300 ft., two stories high; and a warehouse, 70x400 ft., three stories high; together with a central heating plant, sewage disposal plant, and minor items. The machine shop will be twice as large as any factory building in Japan, and will be of steel frame, with large high spans and heavy cranes. The two multistory buildings are of concrete flat-slab construction.

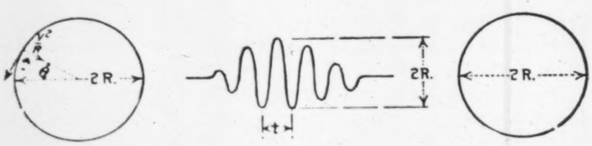


FIG. 1—SIMPLE HARMONIC MOTION IN EARTHQUAKE VIBRATIONS

Earthquake Period and Amplitude—An earthquake is a sort of simple harmonic motion (Fig. 1) similar to the projection of a circular motion on a straight line. If t is the time of travel of one circular motion, r the radius of the circular motion, v the speed of the circular motion, and a the acceleration toward the center of this circular motion, then

$$v = \frac{2\pi r}{t} \text{ and } max.\ a = \frac{v^2}{r} = r\left(\frac{2\pi}{t}\right)^2$$

Applying these terms to the earthquake movement, we have its acceleration, a, expressed in terms of its period t and its range of motion or double amplitude $2r$. Therefore, if from seismograph diagrams we read that with a period of 1 sec. the range of motion is 100 mm., then $a = 50\left(\frac{2\pi}{t}\right)^2 = 2{,}000$ mm./sec.^{2}

Should unsatisfactory seismograph records be secured, the horizontal acceleration of the earth motion can be calculated from observing overturned objects, such as pedestals, tombstones, etc., by using the formula $a = xg/y$, in which g is the acceleration due to gravity, y the height of the center of gravity, and x the horizontal distance between the c.g. and the edge about which the body is overturned.

The force exerted by an earthquake on any structure can be expressed in terms of the weight of the structure, W, by the basic formula $F = Wa/g$. The coefficient a/g is called the *seismic coefficient*, denoted by K; the earthquake force F equals the dead weight multiplied by this coefficient. For example, if $a =$ 2,000 mm./sec.^{2}, then $K = \frac{2{,}000}{9{,}800} = \frac{1}{5}$, so that the total force due to the earthquake $= \frac{1}{5} W$, or $\frac{1}{5}$ of the dead weight of the structure.

Seismic Coefficients—Before the last quake, the Tokyo Weather Bureau had established the maximum seismic coefficient to be used in design at $\frac{1}{10}$, which is that caused by an earthquake with an acceleration of 1,000 mm./sec.^{2} This is the recorded size of the great quake in Tokyo of June 20, 1894. The great quake at Nagoya on Oct. 28, 1891, however, had:

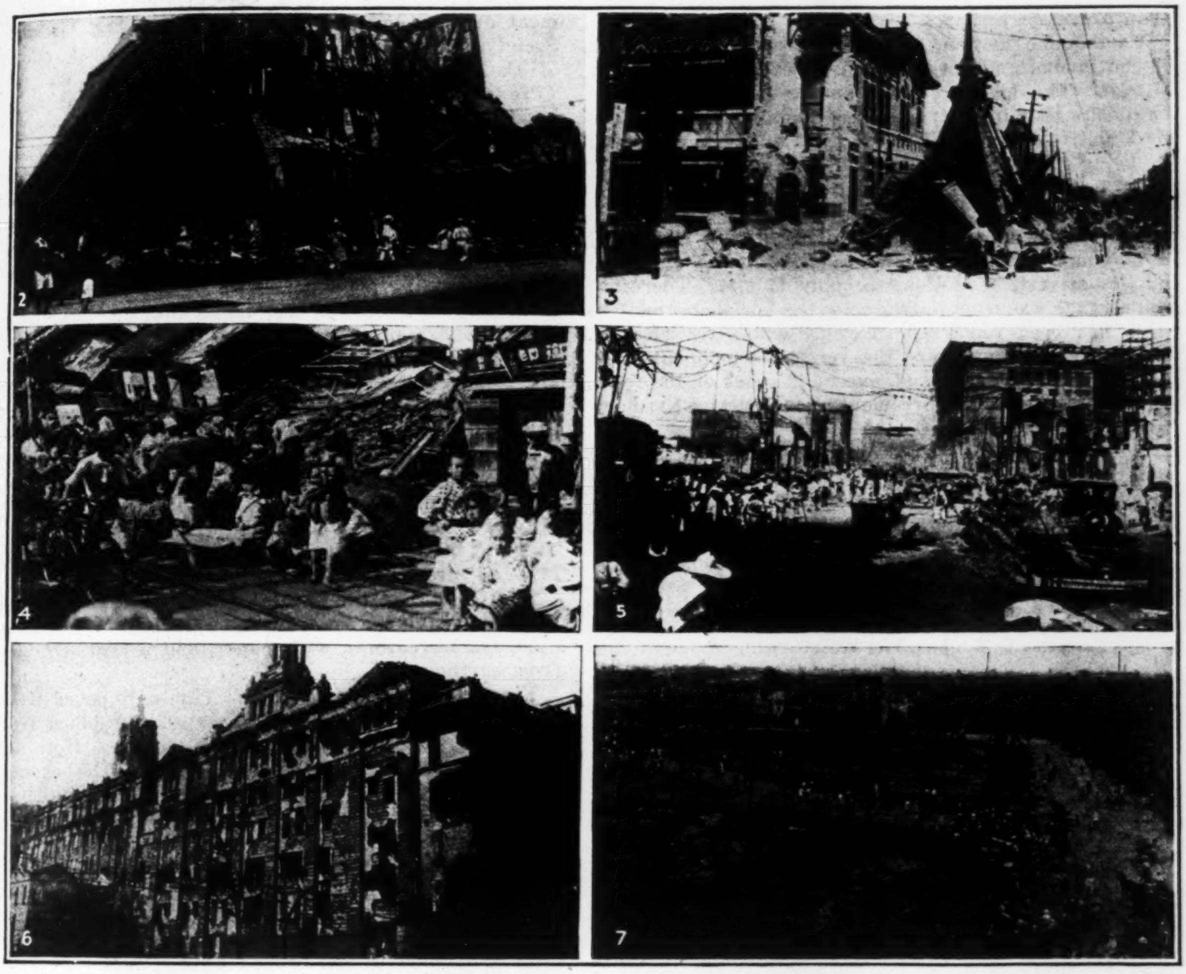
$$a = 2{,}600, \text{ or } K = \tfrac{1}{3}.$$

With these varying seismic coefficients, the designing engineer should consider the probable life of the structure on which he is working, the cost of it, and the cost of increasing his coefficient. Earthquakes in Japan occur apparently in cycles, with a great one every 60 years, like the one of Sept. 1, 1923, which was almost on schedule. With this in view it would seem probable that the use of $K = \frac{1}{3}$ would give ample protection for buildings now being built.

In a one-story building the force $F = KW$ is applied horizontally at the top of the sidewall, and stresses caused thereby are figured the same as for wind stresses. In a multistory building the lateral force is considered transferred by each floor and roof slab, and the stresses are calculated the same as for wind stresses.

It has been observed that an earthquake never occurs while the wind is blowing, but always in a dead calm. This was especially evident from reports of the latest quake, when the high wind prevalent in the morning quieted to a dead calm with oppressive heat just before the quake. Because of this it is not necessary to add the wind and earthquake stresses in securing the maximum stress.

Japanese Construction—From these considerations, it is evident that the lighter the building, especially in the upper parts, the less it will be affected by a quake. The typical Japanese building is exactly the reverse of this, and therefore is easily shaken down. They use a light, flimsy wooden structure, with a very heavy tile roof. The columns, joists and beams are mortised



FIGS. 2 TO 7—SIX VIEWS OF DAMAGE DONE IN TOKYO BY THE EARTHQUAKE OF SEPT. 1, 1923

Fig. 2—Maruzen Book Store; principal damage in upper part.
Fig. 4—Destruction of tile-roofed houses in Dozaka (street).
Fig. 6—Stucco cracked off Mitsukoshi department store building.
Fig. 3—Office of Andogumi; heavy tower thrown into street.
Fig. 5—Uninjured modern buildings; Ginza Building under construction.
Fig. 7—Asakusa ward; effects of fire after the earthquake.

together so that a column is so cut to pieces that one expects to see it break in two when being lifted into place.

As the streets are very narrow, the safest place to stand during a quake is under a lintel. Here one is protected from tile sliding off the roof, or from the roof collapsing inside. In a multistory office building the safest place is the center of the room, as the partitions are most likely to be thrown down, and the center of the room is equidistant from all walls.

Where Cracking Occurs—Every structure has a natural period of oscillation dependent on its shape, size and homogeneity. If this period of oscillation is longer than the period of the destructive earthquake motion, it can be classified as a tall column; if its period is shorter than that of the quake, it is a short column. The period of the destructive earthquake is 1.0 to 1.5 seconds. For a tall column, such as a brick chimney, the tendency to fracture will be at $\frac{2}{3}$ of the height above the ground; in a short column, the tendency to fracture will be at the base. The multistory office buildings recently built in Tokyo come under the latter category. In the usual building of this type, the first story is so massive and so integral with the foundations that it can be assumed as part of the foundations, so that fracture would tend to be in the second story.

This was first proven in the earthquake of April 26, 1921, when the Marunouchi Building, then under construction, had almost every pilaster in the second story cracked at an angle of 45 deg. Observation of the effect of the latest quake on the Palace Hotel, a building of same height, shows the steel column at the second floor offset 3 to 5 in. to the west and 5 to 10 in. to the north, and all of the second-story walls thrown down.

Overturning and Vertical Force—The stability of a building against earthquakes is proportional to its size and not its weight. If b and h are the breadth and height of the building, W its weight, and F the horizontal force tending to overturn, then the overturning moment is $\frac{1}{2}Fh$ and the stability moment is $\frac{1}{2}Wb$. Hence, when $Fh - Wb$ is greater than zero the building will overturn, and when it is less than zero the building will not overturn. Or, since $F = KW$, danger or safety are indicated by K being greater or less than b/h.

Earthquake motion, though sometimes very violent, is continuous and does not consist of isolated jerks or shocks. The idea prevalent among laymen and some engineers that in destructive earthquakes buildings are first uplifted by the vertical motion, and then destroyed by being suddenly thrown downward is quite in error.

In ordinary cases the vertical component of the earthquake motion is much smaller than the horizontal. For instance, the severe Tokyo quake of 1894 registered a maximum horizontal motion of 73 mm., while the maximum vertical motion was only 11 mm. Therefore the damage was essentially due to the horizontal motion. This has been remarked in every quake recorded, so that we can assume that the vertical component is of secondary importance, and, except in cases of the foundation sinking, the entire damage is done by the horizontal motion.

The stability of a building is also affected less by the vertical motion than by the horizontal. This is shown as follows, using the same building and notation as above: If a' is the acceleration of vertical motion, then $\frac{W}{g}(g - a')$ is the effective weight when movement is down, and $\frac{W}{g}(g + a')$ is the effective weight when movement is up. The overturning moment due to horizontal motion $= \frac{Wah}{g\,2}$ or $\frac{1}{2}KWh$, while the minimum stability, when vertical motion is down, is $\frac{W}{g}(g - a')\frac{b}{2}$. Therefore $\frac{Wa}{g}\frac{h}{2}$ must exceed $\frac{W}{g}(g - a')\frac{b}{2}$ for danger from overturning, or danger is present when $\frac{a}{g - a'}$ exceeds $\frac{b}{h}$.

Orientation of Building—Due to the shape of the range of mountains on the main island of the Japanese Empire, the direction of earthquake motion at Tokyo is always east and west. In making the plant layout for the project in hand, it was possible to put the length of the buildings east and west, making the bracing a more simple problem. On the machine shop and forge shop the roof deck was made of 2-in. dressed and matched Oregon fir supported on steel purlins, in order to secure a light, rigid surface that cannot crack and fall, be shaken out of position or slide off. All monitors are provided with continuous top-hung standard rolled steel sash glazed with ¼-in. wire glass, being light and giving light, and the wire glass making for safety in case it should be cracked. This combination of light roof with heavy columns required for the cranes approaches the ideal as to relation of component parts of a building for best resistance to earthquakes.

Due to the excessive wind on the coast line at the building site, the structures were designed for a 30-lb. wind load. The Japanese code, by the way, allows no increase in allowable stress for combined wind and dead-load stresses. Using the usual designing seismic coefficient $\frac{1}{10}$, the total horizontal force proved to be less than one-third of the total pressure of the wind. These stresses not being coincident, the structure actually is proportioned for a seismic coefficient three times that assumed, or $K = \frac{1}{3}$, which is the same as that registered for the severe earthquake of 1891.

It is interesting to note that this checks the statement of the committee on buildings of the American Society of Civil Engineers which reported on the effects of the San Francisco earthquake of April 18, 1906 (*Trans.*, Vol. LIX, p. 208): "Sufficient evidence is at hand to warrant the statement that a building designed with a proper system of bracing to withstand wind at a pressure of 30 lb. per square foot will resist safely the stresses caused by a shock of an intensity equal to that of the recent earthquake."

Actual Earthquake Destruction—Generally the non-synchronizing in horizontal motion of the walls and roof is doubtless the principal cause of the destruction of brick buildings. It has been noted that one-story brick buildings are most damaged at the junction of the walls and roof, and that the two-story ones similarly are damaged most at the junction of the upper walls and the roof while the lower walls remain uninjured or little affected. This is evidenced in Fig. 2, showing a three-story brick building located on the main street in Tokyo. Again, in Fig. 3 the top of the tower rests in upright position in the street, indicating that the heavy top failed to synchronize with the walls and, the range of motion being quite large, was projected bodily into the street.

In Fig. 4, note the usual Japanese style of building, with the heavy tile roof, flimsy walls, with windows of light frames covered with paper, and a typical failure from earthquake.

Fig. 5 is a view of the Ginza (the only paved street in Tokyo, and the main business street) taken from Owaricho, the main intersecting street. Note the burned street car in the foreground. The exposed steel frame on the right is the new Ginza Building, twelve stories high, just under construction, and apparently plumb and safe, with only the concrete hoist tower askew. Incidentally, this steel was erected and being riveted in December, 1922, when the writer arrived in Tokyo; with work apparently uninterrupted, riveting was still under way in August, 1923. The uninjured concrete and brick building on the near side of the Ginza Building is also new. The large building in the distance, apparently in the center of the street, is the office of the Yokohama Life Insurance Co., of heavy stone masonry construction, and is about opposite the building shown in Fig. 2. The small wrecked buildings shown were of poor flimsy construction, likely to fall down with small excuse.

Fig. 6 is a view of the Mitsukoshi Department Store, a very modern and popular store, the showplace of Tokyo. The structure is of reinforced concrete. Its exterior walls are heavily scored to hold the stucco. In pouring concrete, the Japanese use soft unplaned wood forms and take no care in rodding and tamping the wet concrete. When forms are stripped, the surface of the concrete is full of voids, very rough, uneven, and covered with small splinters. Over this is placed a ¾-in. cement plaster coat, well troweled and painted with liquid hardener. As there are hundreds of small quakes every year, this plaster coat peels off every three or four years and has to be replaced. This picture also indicates the truth of the general observation that the main damage done in the recent disaster was by fire and not by earthquake.

Fig. 7 is a view of Asakusa ward in Tokyo, in which was located Asakusa park, Tokyo's Coney Island. Note the two concrete buildings and chimneys in the background, with steel sash still in place. Also note that in all of these pictures the poles are still standing, being one piece of evidence that the quake was not so severe in comparison with previous ones. Thousands of buildings withstood the shock, only to be burned in the fire. This was especially true in Yokohama. The greater part of the homes on The Bluff (the foreign residential section) were much shaken by the quake, but still stood Saturday afternoon, only to burn later.

The writer is indebted for much of this information on earthquakes to the papers of the late Dr. F. Omori, Tokyo Imperial University, which were published in the Bulletin of the Imperial Earthquake Investigation Committee, and to his personal courtesy and help; also to Dr. T. Naitow, of Waseda University, Tokyo, for many of his articles and much advice and assistance in translation; and to P. K. Kishi, engineer for the H. K. Ferguson Co., for assistance in translation.

Earthquake Damage to Japanese Government Railways

Initial Injury to 68 Bridges Mostly Due to Failure of Piers and Abutments—Steel Structures, Rigidly Braced, Offered Greatest Resistance to Shock

By Mitsuo Nawa
Engineer, Government Railways of Japan, Toyko, Japan

FIRE, WHICH was so disastrous a consequence of the earthquake of Sept. 1 in centers of population, did little damage to property of the Government Railways of Japan, except to rolling stock. Most of the damage which spread over an area of 3,270 sq.mi. and made necessary reconstruction of 372 miles of line, was due to the shock itself. In this mileage were included 68 bridges which were injured. Thirty-two tunnels, of a total length of 2,855 ft. also sustained damage. Station buildings which burned included four of brick and thirteen of wood; twenty-two constructed of wood collapsed. An official report lists twenty-two train accidents caused by the quake, 53 locomotives burned or damaged, and 386 passenger cars, 817 freight cars and 31 electric cars burned.

Damage to Bridges—The damage to bridges comprised for the most part the cracking, displacement or complete failure of abutments and piers. Steel girders sustained slight initial damage. Typical of the shock's effect on bridges is what happened to the bridge over the River Banyu on the Tokaido main line. This consisted of two single-track structures each with 28 plate-girder spans 70 ft. long. The piers were of brick and hewn stone piled on elliptical hollow piers known locally as wells. These had a 12-ft. major axis and a 7½-ft. minor axis. Forty-four of these piers were broken at the point near the water line and fell downstream. The wells leaned and some of them shifted off center as much as 2 to 3½ ft.

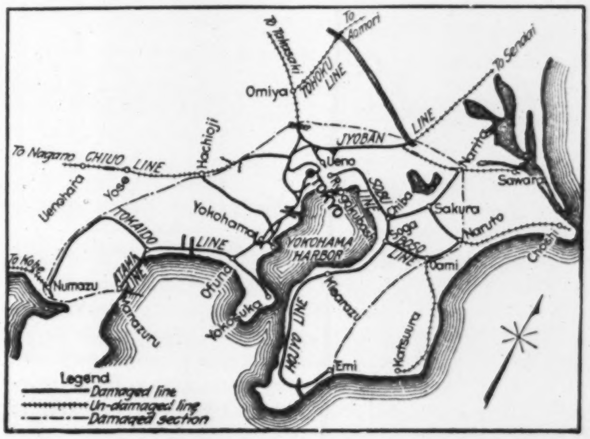
The bridge over the Sakawa River on the Atami line consisted of eight spans of double-track truss girders 150 ft. long, and two lines of 16 spans single-track plate girders 60 ft. long. The piers for the 150-ft. girders sustained no damage; the girders rested on reinforced-concrete cylindrical wells 14½ ft. in diameter and 30 ft. center to center, and the pier wells, sunk 50 ft. below the river bed, were concrete. Upon them concrete columns faced with masonry were built up to the bridge seat. The damage to this bridge, as shown in the accompanying photograph, was due to vibration, a span of truss girders 150 ft. long becoming unseated.

Considerable damage was sustained by bridges of the older type of construction where piers were connected by masonry arches. Absolute comparison of these structures with newer design was had at the crossing of the River Rokugo on the Tokaido main line. The railway bridge consisted of two lines of five spans of double-track truss girders 120 ft. long and four lines of 24 spans of single-track plate girders 44 ft. long. At the center an elliptical well with major axis of 21½ ft. and minor axis of 14½ ft. diameter was sunk and on either side a cylindrical well of 14½ ft. diameter on which piers, as in the case of the bridge over the Sakawa, had been separately erected. Of these piers only a single column was broken but slightly downstream on the Tokyo-Yokohama Electric Ry. Co. line all five piers were cracked at a point under the arch, that structure having piers connected by masonry arches.

There were no arch bridges of long span in the district sustaining heavy damage, but in the bridges of short span whether of brick or concrete, side walls were forced out by the lateral pressure and the arch ring was cracked usually longitudinally.

Damage to Embankments—Inasmuch as embankments and reclaimed land offered a very low resistance to shock, some which met the vibration at right angles were cracked longitudinally or wholly broken. In several instances earth and gravel behind abutments subsided, pushing abutments forward or making them lean so that at several points the track was suspended in mid-air. The subsidence of reclaimed land at the stations of Shimosoga and Odawara and at the wharves at Yokohama was remarkable. Due to this subsidence track was often bent vertically or sidewise and the buildings leaned or collapsed.

Landslides Produced—In some districts where severe tremors occurred as in the mountainous part of Hakone,



RAILWAY MAP OF JAPANESE EARTHQUAKE AREA; DAMAGE TO GOVERNMENT RAILROADS INDICATED BY SOLID BLACK LINE steep mountainsides of rock or earth and sand cracked at several points. Cracks in turn led to permeation of rain water often causing landslides or flows of mud which buried or washed away houses, railways, forests and fields, and othewise inflicted serious damage. The Hakone mountain ranges which were covered with green before the earthquake, now show many barren patches.

The landslide which brought about the greatest disaster occurred just above Nebukawa station on the Atami line. It carried away the main station building, a passenger train then stopping there, plunging everything into the sea and killing more than 100 persons, including passengers and station staff.

The greatest mud flow occurred also near Nebukawa station, coming down along the upper stream of the River Shiraito and washing away the greater part of a bridge, together with its piers. This bridge was 105 ft. high and consisted of three 140-ft. truss girder spans and four 40-ft. plate-girder spans.

Damage to Tunnels—Greatest damage to tunnels consisted in cracks across the walls near portals produced by earth and gravel above the portal sliding down and pushing out the upper parapet wall. However, in some instances, the interiors of tunnels were damaged, though the damage occurred where there was a fault or where there was softer soil and less surcharge.

Elevated Structures Suffer—The elevated line of the Government Rys. through Tokyo in the downtown district is laid in soft ground. The greater part of the track has been built on arches of brick or reinforced concrete of 26 to 40 ft. spans, the foundation of which was made by driving in pine piles and reinforced-concrete piles about 50 ft. in length. Where the ground is weaker, reinforced-concrete slabs were put in instead of the masonry arches. Further steel plate girders were used over roadways and reinforced-concrete skew arches of 125-ft. span were built over the Sotobori Canal. This elevated line sustained practically no damage from the quake itself, a few plate girders alone being shifted. But as various articles were stored beneath the arches and slabs, these took fire and the inner bricks of the arches were affected by the intense heat losing their coherence and flaking off in thin layers. Fire damage to the slabs seems to have been very slight.

The elevated line at Yokohama was laid upon an embankment. In one section a vertical concrete retaining wall was used on each side and in another section a similar wall was used on the one side and the slope was sodded on the other. The intermediate fillings sank a few feet and the retaining wall either was forced out vertically or leaned slightly forward. Owing, however, to the fact that expansion joints were used at 33-ft. centers, no damage was suffered by the wall at any particular point.

Buildings—The main building at the Tokyo station, a three-story steel-frame structure with brick walls, sustained no damage in spite of its size. The main buildings of Manseibashi, Shimbashi and Yokohama stations were two-story brick structures. They were gutted by fire, but remaining walls show no trace of earthquake damage. The fan-shaped reinforced-concrete engine houses at Shinagawa and Yokohama were built upon reclaimed land and have been cracked at several points, as at beam joints.

The majority of the cast-iron columns supporting the roof over the passenger platforms at Tokyo station were broken and fell. There were many wooden main buildings, sheds or storehouses which collapsed at local stations, among which may be mentioned the reinforced-concrete freight shed at the Takashima yard.

Rolling Stock—Most of the rolling stock destroyed by fire was standing in the station yards of Ueno, Tokyo, Shiodome, Iidamachi and Akihanohara. Other chief damage to rolling stock was due to derailment caused by the earthquake.

Conclusions—Conclusions to be drawn from minute examination of damaged property are:

1. The extent of damage to works and structures varies with the distance from the seismic center, the topography and the nature of the soil of the locality affected, method and character of construction and material, etc.

2. The resistance to vibration offered by embankments and fills is low so that construction of any high earth dams or of any structures built upon embankments which span both firm and weak strata should be carefully executed.

3. Brick or masonry generally offers low resistance to earthquake shock. In Tokyo some brick buildings of less than five stories suffered no damage, but they were built upon good ground or upon satisfactory foundations.

4. Resistance to earthquake of plain concrete work seems to be nearly the same as that of brickwork.

5. In general, steel structures offer a high resistance to earthquake shock. Steel framed buildings with reinforced-concrete walls have offered excellent resistance to shock. Just below them are steel frame buildings with good brick or hard stone curtain walls. Any buildings having hollow brick or terra cotta curtain walls sustained severe damage and the walls between windows showed large cross-shaped cracks or else the bricks fell out completely. Where bracing was insufficient steel columns were often found bent. It seems that there were not a few steel structures wherein rigidity had not been fully considered, failure consequently resulting.

6. In point of resistance to earthquake, reinforced concrete comes next to steelwork. Generally, also, reinforced concrete proved excellent against fire.

7. Wooden houses, of less than three stories and those roofed with light materials, offer a fairly high resistance to earthquake shock.

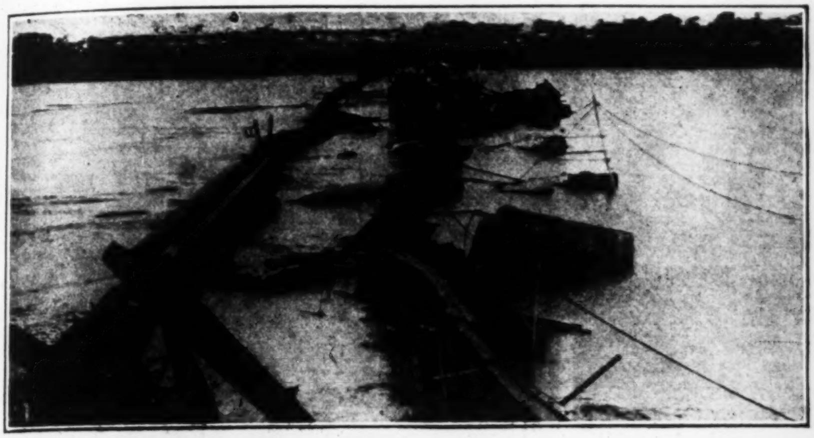
* * *

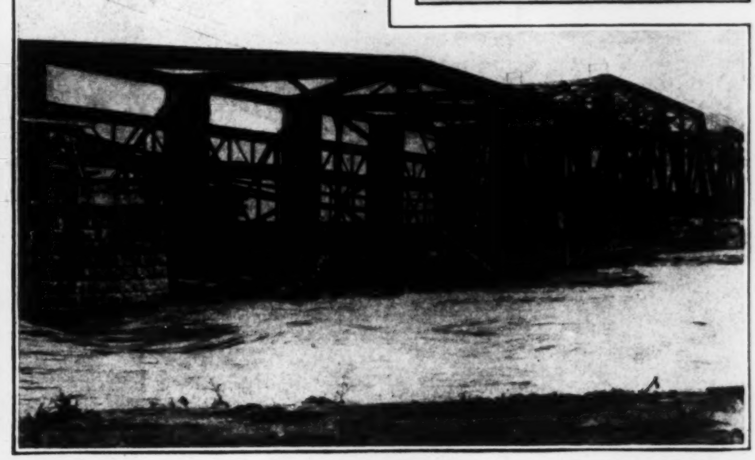
Other Comments on Structural Damage

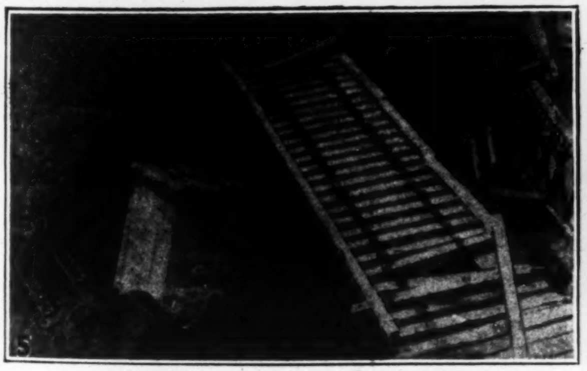
IN A brief letter to *Engineering News-Record* K. Koyanaga, engineer in the Yokohama harbor engineering office of the Japanese Department of Home Affairs, explains that about 3,500 ft. of the breakwater of that harbor sank beneath the low water line. The quay walls, of gravity retaining wall type and constructed principally of large-size concrete blocks, were overturned or shifted, resulting in some cases in complete failure of piers and pier sheds. Many of the sheds were burned.

One of the curious effects of the shock is shown in the view herewith, sent in by Mr. Koyanaga. The statue of Iikamonnokami was turned on its base through an angle of 45 deg., although neither base nor statue was badly damaged.

Several interesting findings regarding earthquake resistance were developed from an examination of buildings in the affected area by Daniel O. Larsen,







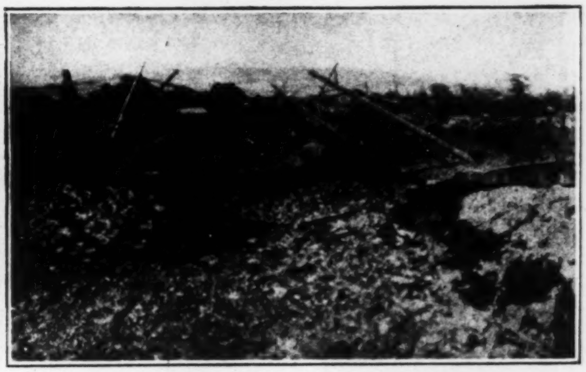


FIG. 1—BANYU BRIDGE ON TOKAIDO MAIN LINE
Structure of two single tracks of plate girders completely wrecked through pier failures.

FIG. 3—ARCH CULVERT ON TOKAIDO MAIN LINE

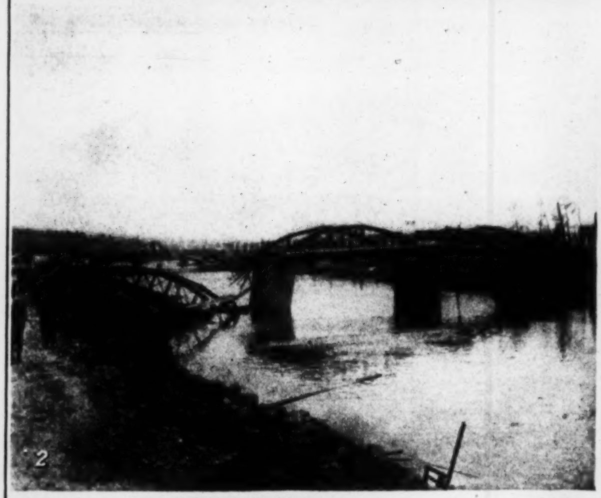
FIG. 5—SHIRAITO BRIDGE ON THE ATAMI LINE
Landslides caused the failure here of two spans of double-track truss girders, 150 ft. long, and three 40-ft. spans.

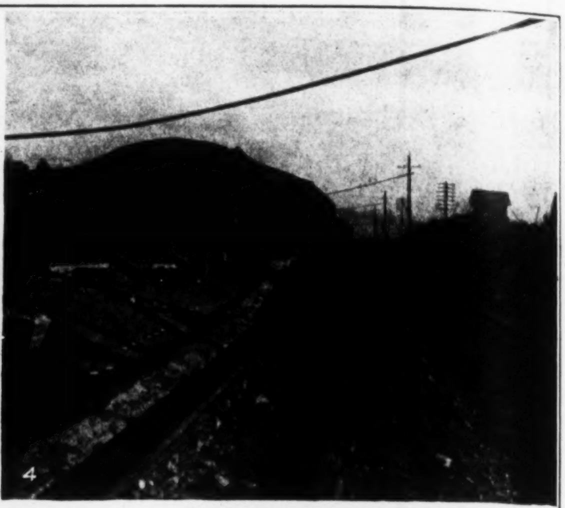
FIG. 2—BRIDGE OVER ROKUGO ON TOKAIDO MAIN LINE
Broken pier supporting end of 120-ft. span.

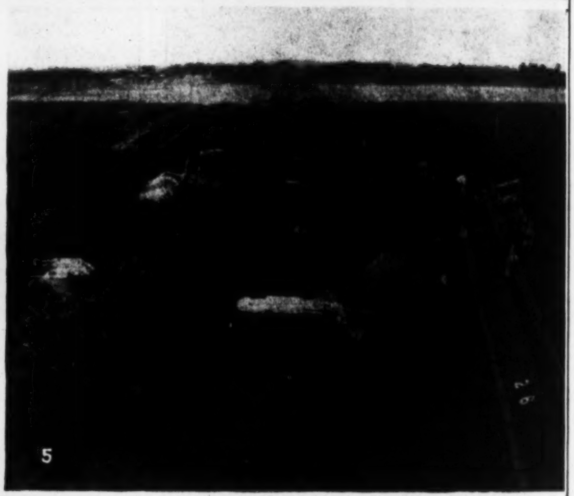
FIG. 4—BRIDGE OVER SAKAWA ON THE ATAMI LINE
Failure occurred through double track truss girder span, 150 ft. long, becoming unseated and falling on its side.

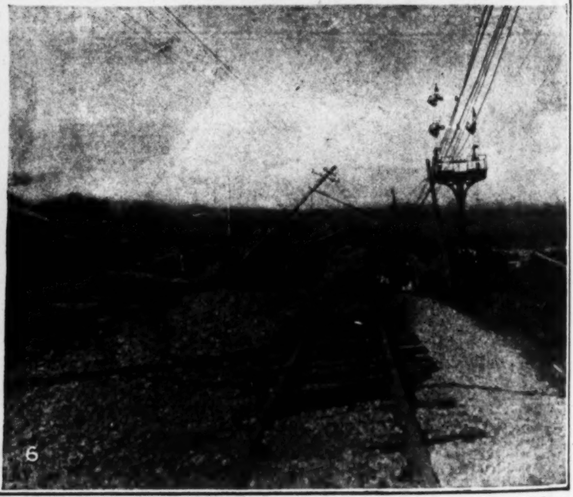
FIG. 6—SHOCK EFFECT ON A FILL ON ATAMI LINE

The article by M. Nawa comes in reply to a letter sent its Japanese subscribers by Engineering News-Record. On page 1050 are shown photographs supplied by H. Sakakibara, manager for F. C. Kogiosho, reinforced-concrete designers and builders of Tokyo, and by K. Koyanagi, of the Yokohama harbor engineering office, Department of Home Affairs. Acknowledgment is also made of letters from Ichiro Goto, engineering department, Daido Electric Power Co., Nagoya, and from R. Ono, Morioka Ry. office.—EDITOR.









Views in left-hand column furnished by K. Koyanaga; those at right by A. Sakakibara

FIG. 1—COLLAPSED QUAY WALL, YOKOHAMA
FIG. 2—WRECKED BRIDGE SPAN, YOKOHAMA
FIG. 3—YOKOHAMA PIER; WALL ALONE DAMAGED
FIG. 4—RAILWAY STATION NEAR TOKYO
FIG. 5—PLATE-GIRDER RAILWAY SPANS OVERTHROWN
FIG. 6—RAILROAD SHOWS EXTENT OF UPHEAVAL

architect, of W. M. Vories & Co. Mr. Larsen's inspection was made in company with several engineers of the Takenaka Co. and the Truscon Steel Co., and covered about thirty modern buildings in Tokyo and Yokohama. Many of their observations were directed to fire resistance. As to earthquake resistance the following points developed:

Continuous-slab reinforced-concrete foundations stood the effects of the earthquake in almost every case, whereas buildings with individual spread footings went to pieces. This was illustrated in the Kogyo Bank building, the Imperial Hotel, Mitsubishi building 27, several of the Marunouchi buildings, and others, which show practically no damage.

Exterior walls were not damaged above the sixth floor, even when hollow tile was used. Reinforced-concrete or solid brick curtain walls are necessary up to at least the sixth floor, however. The Kogyo Bank, which shows no damage, has a reinforced-concrete wall up to the third floor and all corners have reinforced-concrete curtain walls; other walls are brick. Another building which shows no damage has solid brick curtain walls.

Solid partitions are favorable to earthquake resistance. Partitions of reinforced concrete or brick running through a building seemed to add noticeably to its resistance. It was also concluded that ceiling heights should be as low as possible.

Exterior finish will crack in proportion to the strength of the structure. Two buildings which had granite finish in the first three stories and terra cotta above, the Nippon Sekan and the Kogyo Bank, were affected differently. The former was seriously damaged by cracking of both the stone and the terra cotta; its frame comprised steel columns incased in brick and hollow tile. The other building had steel columns incased in concrete (and a better foundation) and showed no cracks in the stone or terra cotta.

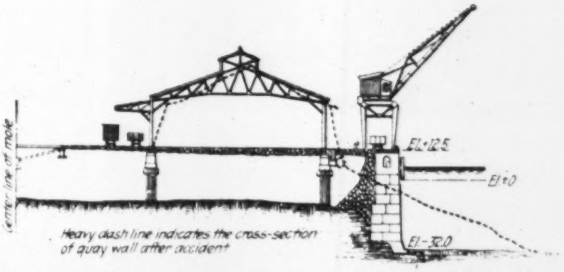
Conclusions as to earthquake resistance have also been given by R. F. Moss, vice-president of the Truscon Steel Co. of Japan. They are:

1. Floors and roof should be made as light as possible, to reduce the earthquake forces imposed on the walls and columns which carry them.

2. Walls and columns should be proportioned for transmitting the earthquake forces to the whole construction above.

3. Large open floor spaces unsupported by walls and partitions should be avoided, so that sufficient wall and column strength may be available. The Marunouchi building suffered less in the 1923 earthquake than in the much smaller 1922 earthquake; in the interim the hollow-tile partitions had been replaced by concrete and cement plaster partitions, the columns had been strengthened, and bracing added, the large floor areas thus being divided into small units each supported by strong partitions.

YOKOHAMA STATUE TURNED 45 DEG. ON BASE



Heavy dash line indicates the cross-section of quay wall after accident

SECTION OF YOKOHAMA QUAY WALL AND PIER

In steel-frame buildings the lateral strength of the steel columns is of secondary importance. Most of the work of transmitting the horizontal earthquake forces to the upper parts of the building must be done by the masonry walls and not by the steel columns. The buildings of the Nippon Oil Co. and the Nippon Yusen Kaisha had unusually strong columns, especially designed to resist earthquakes, but the walls of these buildings suffered more damage than did the walls of the Tokyo Marine Insurance Co. and Marunouchi buildings, which were designed much lighter but had stronger walls.

4. Good workmanship is of primary importance. Well laid stone walls suffered little. The behavior of brick walls seemed to depend on the workmanship and quality of the brick and mortar. Well-built reinforced-concrete walls came through with practically no damage.

5. All parts of the foundation should be connected together by members strong enough to make the various parts act and move together. The partial failure of the fifteenth bank building in Yokohama is chargeable to violation of this requirement. All of the center columns were not connected to the outside walls, and the horizontal displacement of the foundations was not uniform.

6. In tile roofs, every tile should be individually secured so that it cannot slip during an earthquake.

Engineers For Traffic Study

The Philadelphia *Evening Public Ledger* recently commented upon a problem of interest to engineers as follows:

> "Mayor-elect Kendrick is wise in assuming that he might begin his administration well by submitting the whole problem of traffic congestion to a Board of Engineers. The traffic problem has been left to run rather wild. The police do their best with the facilities at their disposal, and, all things considered, they do amazingly well. But the pressure of motors in the narrower streets is leading to something like a deadlock.
>
> "Neither automobiles nor trolley cars can move freely during the morning and evening rush hours. Indeed, the streets no longer serve the purpose for which they were intended. Business is being slowed up in many areas. It may be too much to suppose that engineers could find a prompt and easy way out of the dilemma in which the city finds itself. But they could at least lay the foundations of a scheme by which, as we go along, science may be applied to a problem which haphazard methods have failed to solve."

Hydraulic Tests of Flap Valves on Drainage Pipe Outlets

Determinations of Angles of Repose and Loss of Head in "Calco Gates"—Head Loss Slight and Leakage Small With Closed Gate

By Prof. Floyd A. Nagler
Department of Hydraulics and Mechanics, State University of Iowa, Iowa City

Gates of a flap or shutter type are often installed at the outlets of drains serving low-lying lands and tidal marshes. Manufacturers have claimed that such gates offer little or no obstruction to the normal flow of the water in the drains toward the water course since only a small force is required to open the gate. However, when the water in the main water course rises to flood stages and stands higher than that upon the land itself the gate is forced firmly against its seat preventing the inundation of the land by water from foreign sources.

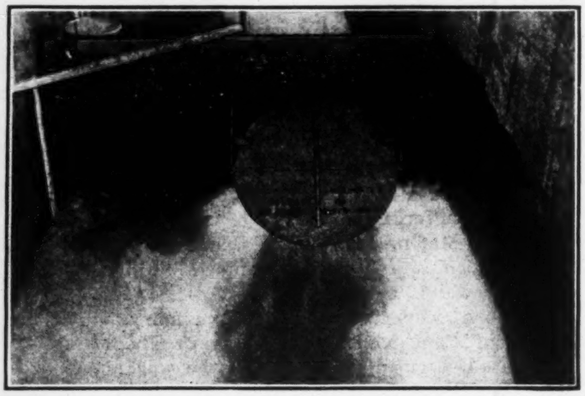


FIG. 1—A 30-IN. CALCO FLAP VALVE DISCHARGING 29.8 SEC.-FT. FREELY INTO AIR

During November, 1922, experiments were performed at the hydraulic laboratory of the State University of Iowa to determine the actual amount of head lost through gates of this type. Double-hinged cast-iron flap gates of the "Calco" type (manufactured by the California Corrugated Culvert Co.) were secured for these tests, in sizes 18, 24 and 30 in. in diameter. Fig. 1 shows one of these gates operating with free discharge at the outlet.

The loss in head through each gate was observed with outlet velocities of from 1 to 8 ft. per second, while the corrugated pipe to which the gate was attached flowed either partially or entirely full, and with the jet at the outlet discharging freely in the air or entirely submerged.

The gates were attached to the end of a 10- or a 12-ft. length of Armco corrugated-iron pipe of the corresponding diameter in the hydraulic canal. By means of piezometer connections at intervals of 2 ft. throughout the entire length of the pipe, and hook gages installed in the basin above the inlet of the pipe, the hydraulic gradient was observed when the shutter of the gate was raised clear of the jet issuing from the outlet. The gate was then lowered so that it floated in a natural position and the hydraulic gradient was again observed, care being taken that the same quantity of water passed through the outlet as in the first case. The difference in the elevation of the hydraulic gradient at points upstream from the gate was taken as a measure of the loss in head through the gate. The volume of water discharging through the gate was measured by a 5-ft. Bazin weir.

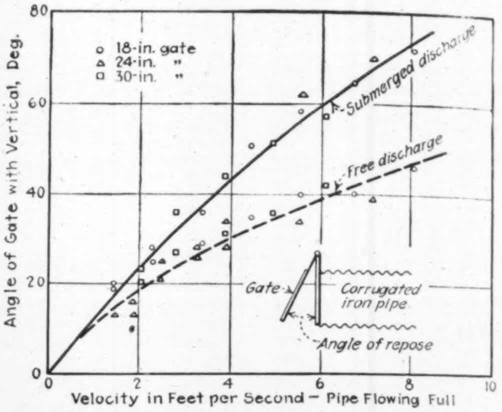


FIG. 2—ANGLE OF REPOSE FOR FLAP VALVES AT VARIOUS FLOW VELOCITIES

The loss in head caused by a gate of this type is obviously dependent upon the amount of obstruction caused by the shutter, and this in turn is dependent upon the angle at which it hangs. If water flows through the outlet at a high velocity the shutter is forced outward so that it rests almost horizontally, causing but little obstruction to the flow of water from the outlet; but if the water issues at a low velocity the shutter falls to a more nearly vertical position. The angle which the shutter makes with the vertical for the various gates tested was found to be practically identical and is shown graphically in Fig. 2 for the condition of both a free and a submerged outlet. Thus with the outlet flowing full with a mean velocity of 6 ft. per second the shutter rests at an angle with the vertical of 39 deg. if the jet discharges freely into the air, whereas the angle is 60 deg. if the gate is submerged. It proved possible to verify theoretically the results shown by these curves by computing the moment of reaction of the jet issuing from the outlet and equating it to the gravity moment of the shutter.

The loss in head caused by any gate proved to be less than 0.01 ft. under all velocities of flow when the water discharged from the outlet freely into the air. The loss in head with a submerged outlet (Fig. 3) is greater. For all three gates a maximum value was

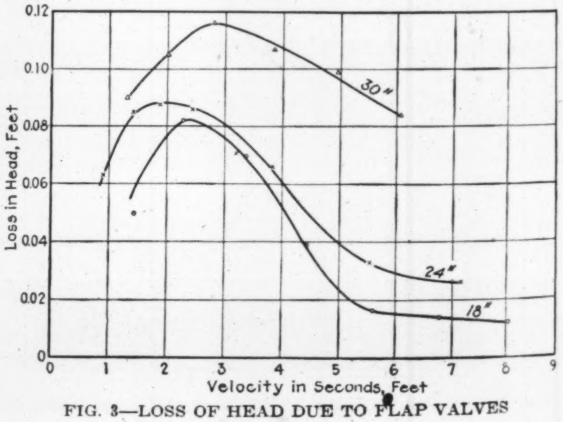


FIG. 3—LOSS OF HEAD DUE TO FLAP VALVES

reached when the velocities of flow were between 2 and 3 ft. per second, in which case the shutter hung at angles between 23 and 34 deg. with the vertical. The loss of head in all experiments proved small, reaching a maximum of 0.116 ft. for the 30-in. gate.

The 30-in. gate was tested for leakage when firmly held against its seat by backwater in a testing flume. The maximum leakage with heads varying from 1.6 to 4.5 ft. on the center of the gate was 0.015 ft. per second, the quantity decreasing with increase in head because the greater the pressure the more firmly was the flap held against its seat.

It may be concluded from these experiments that the loss of head through a gate of the Calco type is very small indeed and that such gates have but little effect upon the discharging capacity of drainage outlets. Also, if they are kept free from twigs and debris and properly installed, they may be depended upon to stop effectively the inflow of backwater.

Two Trips of Mixer Construct Four-Way Pavement

Fifty-Foot Reinforced-Concrete Park Road Pavement Has Three Longitudinal Construction Joints Doweled Every Three Feet

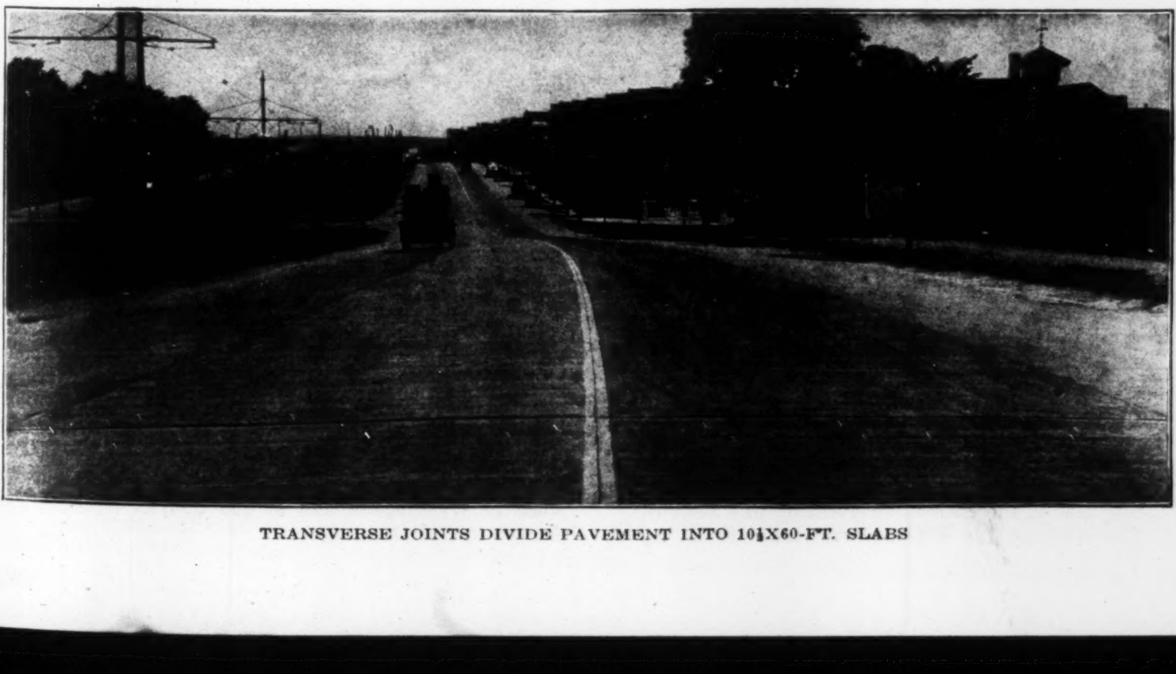
By John J. Murphy
Engineer, Park Department, Boston, Mass.

A 42-FT. concrete road has recently been constructed in four strips on a portion of Commonwealth Boulevard in Boston. This road carries practically all of the traffic between Boston and western Massachusetts and the pavement was made wide and thick and was heavily reinforced. Its construction was remarkably simple, only two trips of the paving mixer being required to build the four 10½-ft. strips. The 4-ft. gutters are granite block and make the road 50 ft. wide between curbs. Altogether 3,300 ft. of road were constructed.

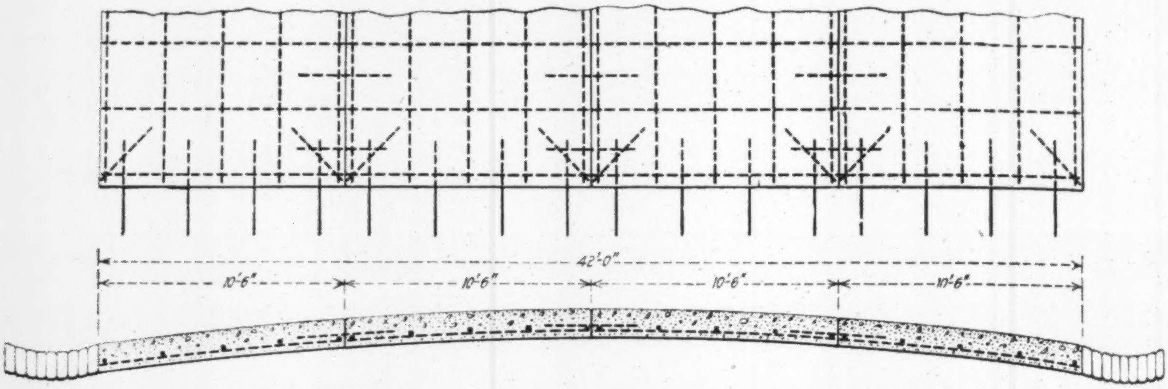
The original road was crushed stone macadam with a Telford base and had a crown varying from 18 to 20 in. This excessive crown kept the motorists in the middle of the road with disastrous results to the central portion. It was decided to reduce this extreme crown so that the full width of the road could be used with comfort and no danger. Cutting down of the crown to 8 in. was accomplished by excavating at the center of the road and filling at the sides. This was a very difficult task on account of the Telford base, which it was desired to keep intact as a foundation for the new concrete road. It was accomplished with a shallow-cutting steam shovel which loaded into motor trucks. When shaped and rolled the old construction gave for the new concrete road a foundation of Telford and crushed stone with enough sand distributed on the stone to fill the surface voids.

The concrete was 7 in. thick at all points and was a 1:2:4 mix, using washed sand as a fine aggregate and washed gravel ¼ in. to 2½ in. for a coarse aggregate. The pavement was divided into four longitudinal strips, each 10 ft. 6 in. in width. These longitudinal strips were laid in alternate pairs. The mixer traveled on the subgrade and laid a strip on each side as it advanced. When the further end of the road was reached, the mixer was brought back and, traveling on the surface of one of the strips already in place and cured, laid the remaining two sections. The concrete was first screeded with a templet of wood, covered with tin, after which it was rolled with a light metal roller and them belted with a canvas belt. After the initial hardening had taken place, the surface was scored with brooms in order to roughen it and afford a better grip for traffic.

As the drawing shows in detail, the road was reinforced with ½-in. square steel rods, 2 ft. 6 in. on centers, both longitudinally and laterally. These rods were all placed in the bottom of the slab. They were made up in mats, all wired together, the transverse rods 10 ft. 2 in. in length, and the longitudinal rods 12 ft. in length. One-half inch square dowels 4 ft. long were placed in the center of each slab, 3 ft. apart, at the transverse and longitudinal joints. One-half of the dowel was left rigid in one slab and the other half was painted with asphalt. A ½-in. square rod 3 ft. long was placed in each corner and at the top of each slab. These corner rods were placed at 45 deg. to the joints. At each transverse joint elastite joint filler ½ in. thick and 8 in. wide was used. The transverse joints were placed 60 ft. apart. The faces of the first concrete strips poured were



TRANSVERSE JOINTS DIVIDE PAVEMENT INTO 10½X60-FT. SLABS

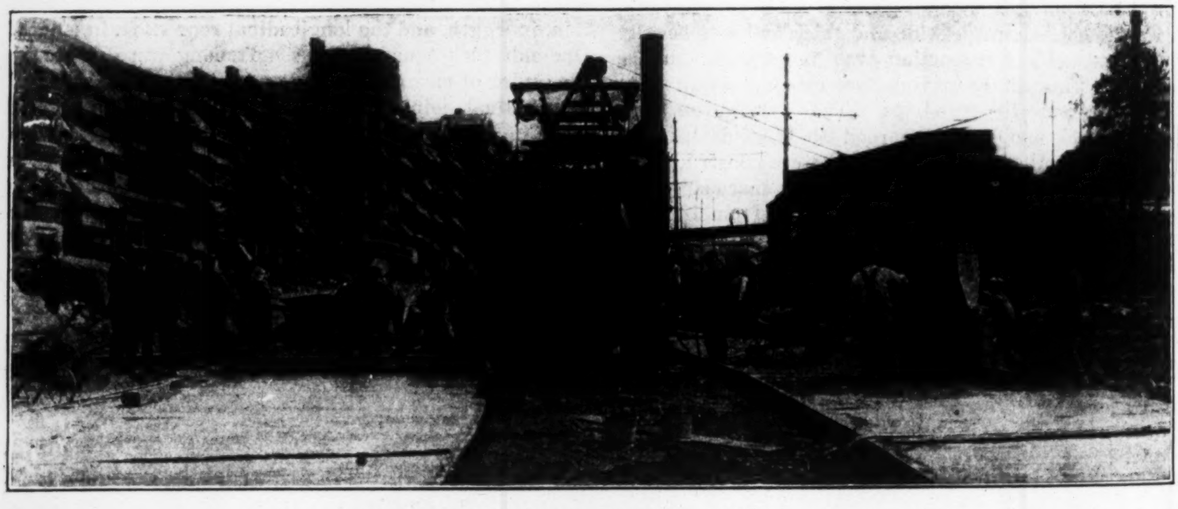


SECTION AND REINFORCEMENT PLAN OF FOUR-STRIP CONCRETE ROAD

painted with asphalt before the final two strips were poured. After being placed the concrete was protected by canvas and thoroughly covered with earth, which was kept moist for a period of ten days after laying, when this covering was removed. The road was finally opened for travel two weeks after the last section was poured.

A two-bag paving mixer was used and a day's run consisted of laying two parallel strips each 10 ft. 6 in. wide and 240 ft. in length, totalling 109 cu.yd. Metal forms were used throughout the work.

The road has been banked at one curve and the gradient at this curve is 7 per cent. This required considerable revision of old grades and much excavation in order to change the excessive crown to a banked section.



FOUR-STRIP PAVEMENT UNDER CONSTRUCTION

The result obtained is a very even riding surface, the pavement having riding qualities of remarkable excellence. The lowering of the crown, the elimination of crowns and depressions at intersecting streets and the banking of the sharp curve has made this section of the boulevard for its entire width, not only safe against skidding but pleasant to the man who drives a car.

The cost of the concrete road surface was as follows:

Concrete, per sq.yd.	$2.71
Steel, per sq.yd., 8 lb. at $0.05½	.44

The cost of the entire improvement was $74,000.

The contract for the improvement was let by the Boston Park Department to A. G. Tomasello & Son of Boston. The work was started May 10, 1923, and the road was opened for travel August 2, 1923.

Investigates Power on Green River, Wyo.

Recent investigations of the water power resources of tributary streams to the Colorado River by the Department of the Interior have included detailed studies of the possible power site on the largest tributary, the Green River, which has its source in glaciers and glacial lakes on the west coast of the Wind River range near the Continental Divide. The investigations show that probably nine of these lakes, having a combined storage capacity of more than half a million acre-feet of water, may be utilized as reservoirs for irrigation or power generation. The basin of the river above the town of Green River, Wyo., covers about 18,000 sq.mi. of land in the southwestern corner of the state, ranging in elevation from a mile to 13,800 ft. above sea level. Some of this land is already irrigated, and about 400,000 additional acres may be brought under irrigation. The report, which contains maps and photographs, shows the physical features and the meteorological conditions in the basin and describes ten possible power sites. Copies of it are on file in tha Geological Survey office in Washington and at the district office of the Survey in Salt Lake City.

Reconstruction of Hell Gate Dam to Eliminate Silt

Silt Deposits from Montana Smelter and Mines Controlled by New Low-Level Sluice Gates—Replacing Eroded Wall Difficult—Mat Protection Placed in Front of Wall

PONDAGE silt back of the Hell Gate dam of the Missoula, Mont., Light & Water Co., had by 1919 reduced the storage capacity, in the dozen years the hydro-electric plant had been in operation, to such an extent that the peak-load carrying steam auxiliary was being called upon more and more frequently. Four large sluice gates were installed to draw water from the river-bed level in 1919 by means of which the silt deposit could be eroded away during flood periods. The concentrated flow and eddy currents from the gates led to serious undermining of a timber crib training wall between the tailrace and the gate discharge. Reconstruction of this wall in three sections was completed early in 1923. The difficulties encountered in maintaining the old crib wall from base erosion, and finally replacing the crib with a concrete wall and mat protection of the rock in front of the wall have kept the operating officials of the power plant and a consulting engineer busy almost continuously for the past three years.

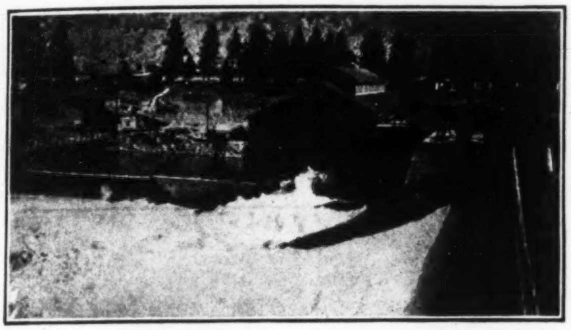


FIG. 1—HELL GATE DAM WITH NEW SLUICE GATES AND WALL

Back eddies from discharge several times undermined old crib wall between river and tailrace. Finally new concrete wall was constructed and base rock protected by thick mat of concrete in front of wall.

The hydro-electric plant and dam is located just below the confluence of the Hell Gate and Blackfoot Rivers. The Butte copper mines and the Anaconda Copper Mining Co.'s smelter are located 120 miles upstream on the Hell Gate River. Mine-pump and wash-water discharge from these mines, tailings from the smelter together with soil eroded from the bed and banks of the river, nearly displaced the reservoir water capacity. The intakes ahead of the trash racks had become so clogged as to seriously cut down the flow of water to the turbines. In 1919 the company decided to undertake measures for disposing of this silt accumulation and keeping it down.

The mountainous nature of the drainage area above this dam and the heavy snowfall at high elevations result in occasional heavy spring flood discharges of long duration. On one or two occasions the discharge has been known to reach 9 or 10 ft. over the crest of the dam, approximately 35,000 sec.-ft. The dam is of timber construction with a spillway length of 274 ft., the crest of which is fitted with 6-ft. hinged flash gates.

Sluice Gates—It was decided to install in this dam four sluice gates 9 ft. wide and 14 ft. high, at the end nearest the power house where the gates would be accessible and one gate could draw its supply from in front of the trash racks. These gates with their supporting walls took up 53½ ft. of the spillway length, leaving a clear spillway of 220½ ft. Under a normal static head of 31 ft. the gates and the spillway were found ample to take care of flood waters. The gates discharged approximately 13,000 sec.-ft. and proportionally more as the head increased. The spillway under 10-ft. flood discharged approximately 28,000 sec.-ft. The full requirement of the prime movers is 1,600 sec.-ft.

The plans and photographs indicate the general type of construction of the gates. The right-angle turn given the intake for Gate 1 was for the purpose of drawing its supply directly from in front of the trash racks. The upper end of the opening leading to this gate was closed off with a wall built from the top down to within 14 ft. of the floor, thus producing a current at the bottom for clearing silt and débris from in front of the racks. The other three gates draw their supply directly from the pond.

The procedure for wearing down the deposit over the ¾-sq.mi. area of the pond contemplated the use of these gates at intervals, when the accumulations warrant their use, during high river discharge periods only. The operation of these gates for silt cutting is as fol-

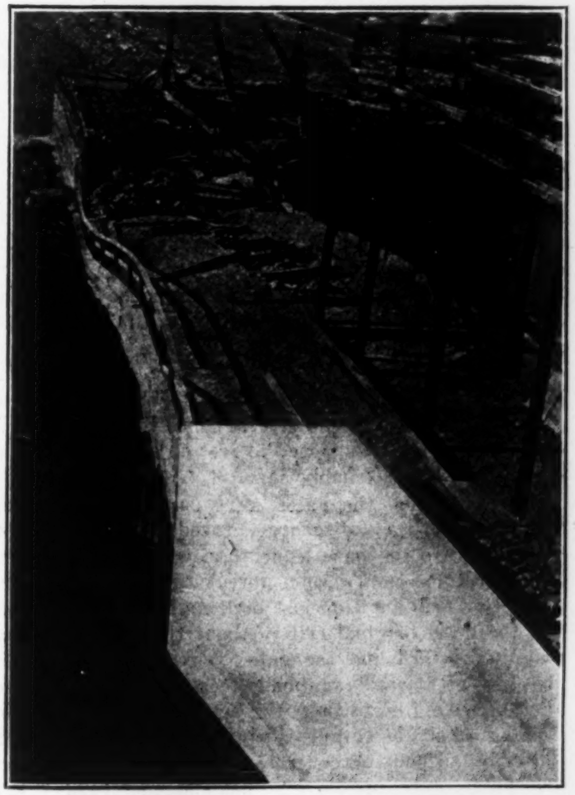


FIG. 2—CRIB WALL PROTECTED BY SHEET-PILING UNDERMINED

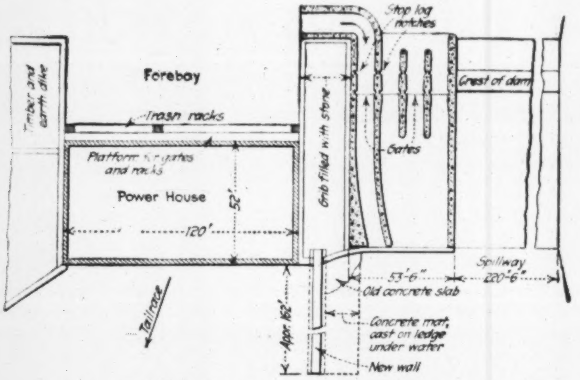


FIG. 3—TIMBER CRIBS AND NEW DIVERSION WALL

lows: Water in the pond is drawn down as quickly as possible to within a few inches of the silted surface, by dropping the hinged flash gates on the dam crest and opening the sluice gates. By manipulating the gates the pond surface can be brought to a ripple or to a high velocity over the silted area which tends to wear down the silted surface. This procedure lowers the head on the prime movers some 6 ft. for the time and during peak-load hours may call for the use of the steam auxiliary.

New Diversion Wall—Due to the location of the power house so far out in the river it was necessary to construct a diversion wall of some size to separate the tailrace from the river. This wall consisted of timber cribs, bolted together and filled with rock and gravel, and was supposed to rest on rock ledge, although no plans of its construction were on file. The crib had been repaired or rebuilt several times in the past fifteen years. About two years prior to the installation of the gates the second crib based on the native ledge was built alongside the original one on the river side. The new crib was filled with heavy rock, some of which weighed several tons, extending well above the surface.

In locating the gates at the power house end of the dam it was expected that the discharge might eventually dislodge a part of the new crib, although the discharge from the gates, due to the design of the guiding walls below the gates, was partially directed toward the middle of the river. Since the original crib diversion wall was supposed to rest on solid rock it was believed to be reasonably safe.

The first time the gates were used for the sprin flood in 1920, their discharge proved to be much mor destructive to the base ledge than was expected. Th severe return eddies soon tore out the heavy stone protection crib addition last built and began undermining the main original crib. About this time the flood waters subsided and the gates were closed. Later in the year an attempt was made to stay temporarily further undermining, due to the action of the eddies, by driving steel sheetpiling along the river face of th old crib and pouring concrete back of the piles. Whe the gates were opened the next spring (1921) thi sheeting was soon undermined by the ledge disintegrating and letting the water work up under the old crib. The gates were closed and a decision was reached that all further work should be of a permanent nature. As diamond drilling was deemed too expensive, it was decided to proceed with the work of unwatering the site and then accommodate the designs of the new concrete wall to the conditions found. From soundings the rock was found to be stratified and easily broken, but no knowledge was gained as to the thickness of its strata or its homogeneity. The water depth taken 40 to 50 ft. downstream from the gate apron and 10 ft. out from the old crib was 32 ft., and 4 ft. below the gate apron it was 16 to 21 ft. The old crib had a width of 32 ft., its top was 10 ft. above normal river level and its base 16 to 18 ft. below water level.

The designs called for a wall about 162 ft. long with an 8-ft. base, battered to 5 ft. at the top, and about 30 ft. high, on the assumption that the base ledge was 17 ft. below normal water level. The wall was to be cast in 33-ft. sections, separated by expansion joints and reinforced with steel bars partially for temperature strains but chiefly for surface protection from the pounding of logs. Due to the probability that the underlying ledge would prove insufficiently hard to resist the wearing action of the water, the original designs of the wall contemplated the use of reinforced precast concrete piles 10 in. in diameter, varying in length from 8 to 14 ft. and spaced 6 to 8 ft. on centers, located on the river side of the center line of the wall base. Holes 12 in. in diameter were to be drilled in the base ledge and the piles dropped and grouted into

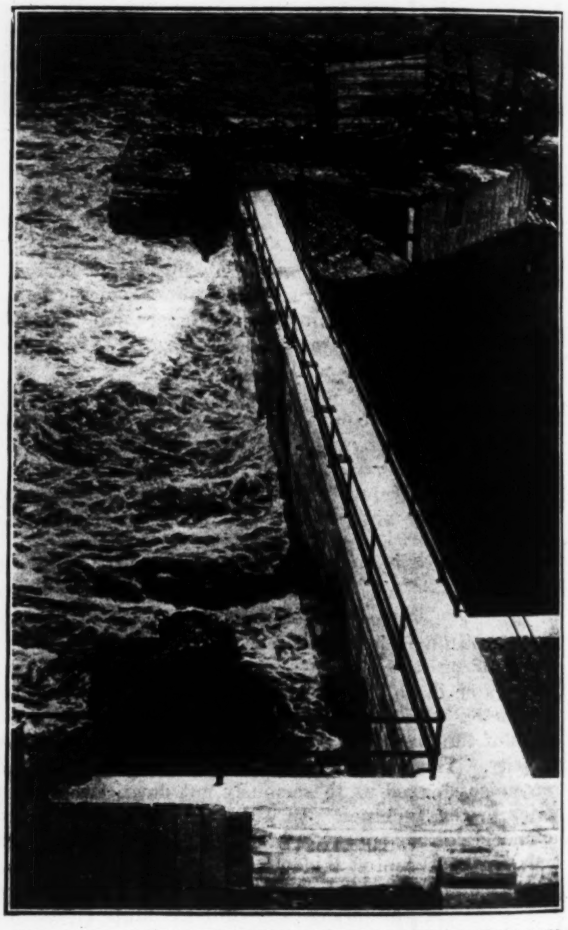


FIG. 4—NEW CONCRETE WALL WITH BASE PROTECTION

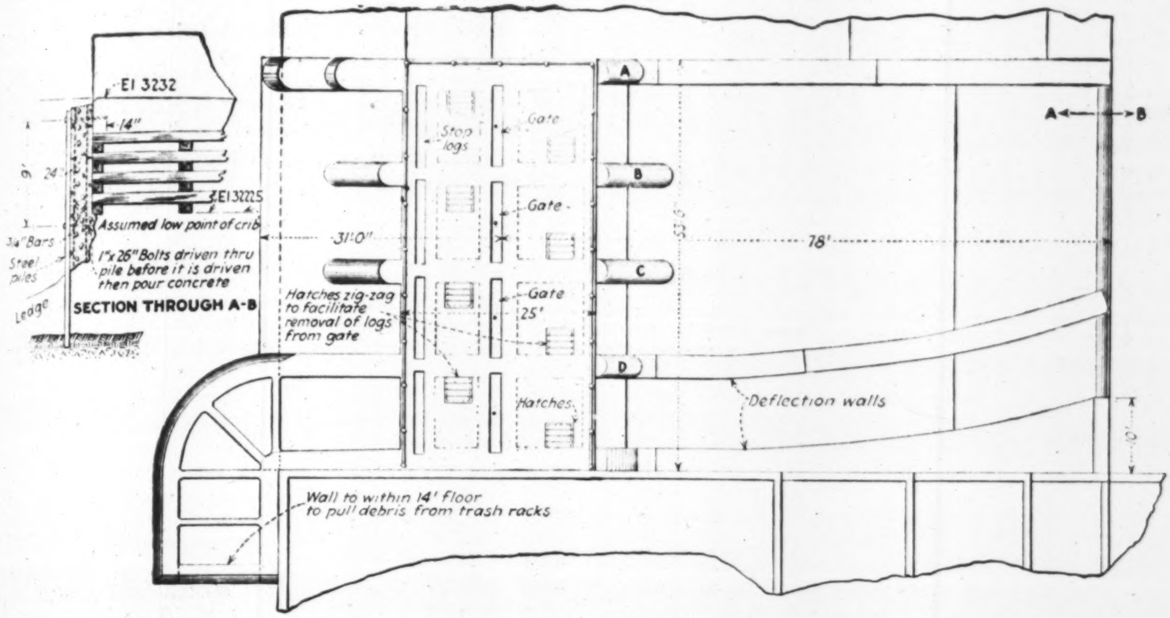

El 3232
14"
9'
24"
El 3222.5
Assumed low point of crib
3/4" Bars
Steel piles
1"x 26" Bolts driven thru pile before it is driven then pour concrete
Ledge
SECTION THROUGH A-B
A
B
C
D
Stop logs
Gate
Gate
Gate
25'
Hatches
31'-0"
53'-6"
78'
A
B
Hatches zig-zag to facilitate removal of logs from gate
Deflection walls
10'
Wall to within 14' floor to pull debris from trash racks

FIG. 5—NEW SLUICE GATES IN HELL GATE DAM

place, their function being to support the wall in case of partial undermining. Conditions at that time indicated that the river side of the wall base would be located about 8 ft. back from the edge of the rock ledge sloping rapidly downward toward the river. Should the rock prove to be of a nature easily disintegrated, the piles would render the wall stable until a concrete facing against the base ledge could be laid. The plan of using the piles was found to be impractical. No drilling in the base rock was done, but cores were provided in the wall itself from base to top, through which at a later date, if necessary, drill holes could be made and the piles used.

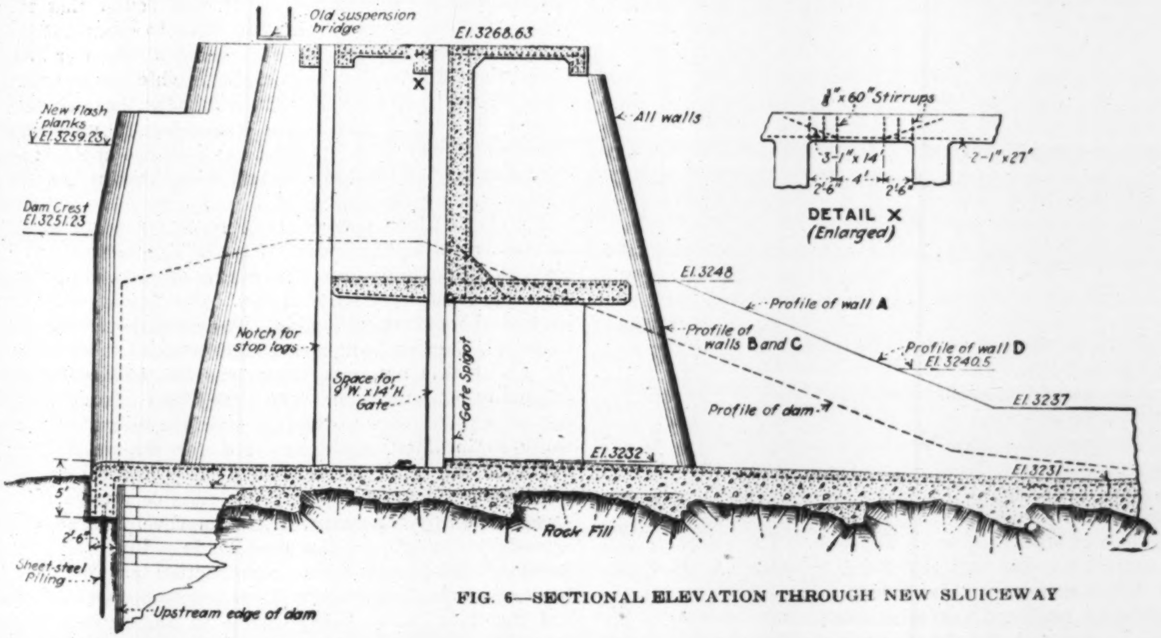

Old suspension bridge
El. 3268.63
X
New flash planks
El. 3259.23
Dam Crest
El. 3251.23
All walls
1/8"x 60" Stirrups
3-1"x 14'
2-1"x 27'
2'6"
4'
2'6"
DETAIL X
(Enlarged)
El. 3248
Profile of wall A
Notch for stop logs
Profile of walls B and C
Profile of wall D
El. 3240.5
Space for 9' W. x 14' H. Gate
Gate Spigot
El. 3237
Profile of dam
El. 3232
El. 3231
5'
2'-6"
Rock Fill
Sheet-steel Piling
Upstream edge of dam

FIG. 6—SECTIONAL ELEVATION THROUGH NEW SLUICEWAY

In the building of the new wall, three serious factors in its construction could be anticipated: (1) The old crib was in the way. (2) It was sure to be difficult to get through the crib to the base rock and exclude the water in the meantime. (3) Security must be provided against further underwash after the wall was completed.

The first section of the new wall was started about 50 ft. downstream from the end of the dam apron. The old crib at this point was torn down to river level. The steel caisson was now started, using 14-in., 42-lb. steel piling, driven with a heavy steam hammer. On the tailrace side of the old crib, this piling was driven in the open water outside of the crib. On the river side of the crib and at the two ends of the caisson it was driven through the crib timbers, bolts, rocks and slabs of concrete. Much of the piling had to be withdrawn in a badly battered and twisted condition and repaired, greatly retarding the work. One 10-in. horizontal-shaft and one 6-in. vertical-shaft pump were installed, driven by 75- and 50-hp. motors, respectively. As the driving and excavation proceeded it was found necessary to drive another row of sheetpiling on the river side, outside of the old crib. This added resistance to the water for the time enabled the pumps to keep the water down inside the caisson.

This first section of wall was hardly completed when a flood came down and the gates were opened for a few days. Before the flood subsided it was discovered that the base ledge had been eroded up to and immediately under the new wall section. The gates were closed.

The second (down-river) section of wall was now undertaken. When excavation had reached a point about 10 ft. below water level, leakage under the two courses of caisson steel piling on the river side became so great that the pumping capacity was inadequate, and about 1,000 cu.yd. of gravel was deposited on this side which greatly improved the situation, until the second section was finished.

For the third and longest (up-river) section the progress was slow and tedious, due chiefly to slabs of old concrete 2 to 10 ft. in thickness imbedded in the old crib. It was too close to the power house and dam to permit the use of explosives, consequently "bull points" and picks were used in wearing down the old slabs, which slowed up the work. Little difficulty was experienced with water.

For protection of the base ledge from erosion a concrete mat was laid under water along the base of the wall as a permanent protection. The bedrock was first thoroughly cleaned with a clamshell bucket and a high-pressure water jet. A wall of steel sheetpiling was anchored 20 ft. out from the wall for shutting out all river currents and stilling the water for submerged concrete casting. A wall of sand-filled bags 3 ft. high was laid 15 ft. out from the concrete wall to stop the outward flow of concrete. A mixture of 1½ per cent calcium chloride was used with the cement to hasten its initial set. The concrete was heated to a high degree and a tremie was used for deposition, as the depth of water varied from 18 to 32 ft. Work was commenced at the upstream end so that the laps, if any, would lie with the direction of the water eddies, and was prosecuted vigorously day and night until finished. This mat averaged 5½ ft. thick at the base of the wall and from 3½ to 4 ft. thick 15 ft. out. It was tied to the wall by reinforcing bars previously cast in the wall for this purpose.

The work was done by the Missoula Light & Water Co., of Missoula, Mont., for which C. H. Christensen is general manager. The gates were installed under the field superintendence of H. L. Bickenbach, superintendent of street railways, Missoula. The concrete wall construction was superintended by John A. Hedlund, of Minneapolis, and Mr. Huwe, power station superintendent, rendered valuable assistance through his familiarity with the old structures. The gates and wall were designed by the Power Engineering Co., consulting engineers, Minneapolis, and all construction procedure was carried out under their instructions.

Why Reclamation Costs Differ from Original Estimates

Facts Suppressed in Secretary Work's Comparison of Estimated and Present Costs—Projects Extended on Plea of Land Owners

IN A PARALLEL-COLUMN statement of original estimated cost and construction cost to the present year of the various federal reclamation projects, just issued by Secretary Work of the Department of the Interior, present costs are shown to be far in excess of the original estimate. The statement implies that engineering planning and management of reclamation have been grossly at fault. Inquiries directed to competent authorities indicate that the statement is seriously misleading, and that it suppresses facts which are essential to a proper understanding of the cost figures. The facts as to cost are therefore briefly reviewed here, on the basis of what these authorities have said.

Secretary Work's entire statement is based upon the assumption, which he uses throughout and evidently intends the reader to believe, that the original estimated cost is for the identical structures included in the column of net construction cost. This is not true in the case of any project.

Originally the Reclamation Act was intended to apply to the construction only of such projects and features or parts of projects as were too expensive and difficult for private enterprise. It was assumed and generally promised that the projects benefited by the construction of such large features as reservoirs and main canals would build their own canal systems and distribution systems.

In many instances they already had these systems, and enlargement and extension to adapt them to the new conditions were to be made by the water users themselves. In some cases this was made a specific requirement of the contract. It was found that the water users were unable or unwilling to carry out the extensions and enlargements expected of them or even to acquire title to the canal systems which were necessary for utilization of the water. Under these circumstances the government was requested to undertake large additional work, and did so, with the approval of the Secretary of the Interior and sometimes by his own initiative.

The Salt River project is a typical case in point. In this case Secretary Work lists the original estimated cost at $5,650,000 and the net construction cost to June 30, 1923, as $10,548,119.28. The figure given for estimated cost is questionable. The estimated cost of the Roosevelt dam as built was $3,850,000 and it was built for about this amount. This was the only structure originally contemplated. The valley had a large number of canals which, though poorly constructed and badly maintained, could be used for the delivery of water to the lands already cultivated, and the people were supposed to be able, when a reliable water supply was secured by the reservoir, to improve, enlarge, and extend the canals to the new lands. But while the Roosevelt dam was under construction a great flood washed out the water users' diversion dam 40 mi. below, and the water users being unable to finance its reconstruction, made urgent appeals to Secretary Hitchcock to rebuild it and offered to co-operate in acquiring canals that could use it. Of his own motion, without recommendation from the Reclamation Service, Secretary Hitchcock determined to purchase the canal systems dependent on this dam and rebuild the dam and enlarge and extend the canal systems.

The contract for the reservoir had been drawn in such way as to cover any work the Service might do, and give the Secretary of the Interior the authority to determine the cost, and the water users' association on its part was required to contract to repay to the government such part of the construction cost as the Secretary should assess against its shareholders, thus leaving him in a position to take in some public land and assess a portion of the cost to that and the balance to the private lands which were in the association. This proviso was made the basis of contract on practically all of the early projects, and under it additional work often was taken up, on urgent and persistent pressure from the project people, without a new contract. The various systems of canals in Salt River Valley were purchased for cash and greatly enlarged, improved, and extended to cover new lands.

The original estimate included only the storage works, which were all that were contemplated at the time the project was undertaken. According to the 11th annual report of the Reclamation Service, page 51, these have cost $3,802,897.06, while the other expenses, not included in the original estimate, but built on urgent requests from the water users' association and landowners, amount to 6 or 7 millions and include the following items:

Power system	$2,491,593.04
Granite Reef diversion dam	622,784.04
North side canal system, construction	1,102,005.52
South side canal system, construction	696,541.03
Pumping plants	126,548.64
Real estate purchased	32,028.05
Telephone system, construction and betterments	68,892.49
Roads, construction and maintenance	603,941.03

Yet Secretary Work's statement carries the impression, as it evidently is intended to carry it, that the same works that were estimated to cost $5,650,000 have really cost about double this amount. This is absolutely false.

All the other projects are similarly affected. On two of those projects, the Boise and the Yuma, this identical question has been the subject of protracted and hard-fought litigation, and in both cases the court was convinced that statement of the original cost did not apply to the project that was built because of the great extensions made. For example, on the Boise project, the Arrowrock Dam was not contemplated and never mentioned; in fact, it was not even conceived at the time the contract was entered into with the water users and the canals were built. But it was built as an extension at the urgent request of the water users, who made strenuous efforts to secure the largest reservoir they could induce the government to build. On the Yuma project, the result of the litigation was exactly the same. These two lawsuits occupy such a large portion of the files, in correspondence, briefs, and decisions which were handed down, that it would be impossible for any one examining the files of the Service to overlook them.

The Salt River case and the Uncompahgre case have been so much discussed and the files contain such complete statements that it is equally impossible for the real facts to have been overlooked in these cases. The additional work on the Salt River project was dealt with in the public hearings in 1913, and presented in Congressional hearings at a later date.

In the later years, with the approval of Congress, on a large number of projects drainage works have been carried out which were never contemplated in the original estimates.

As time passed, however, the Reclamation Service learned that those upon the projects desiring to escape their payments were prone to use the same words that Secretary Work has here used to deceive the public by speaking of the original estimates of the "project" and the ultimate cost of the "project" as though they applied to the same works and the identical project, using this argument to prove waste and to discredit the Service and thus escape their payments. Partly for this reason the policy was adopted of requiring a new contract for each additional feature the government was requested to undertake, so that in many cases the additional work is represented by separate, additional contracts. This statement would apply to more than half of the projects. The new work being represented by different contracts, it can not be confused with the works contemplated by the original contract; but Secretary Work's statement does so.

Statements of discrepancies between the estimated and the actual costs widely published by an official as high in responsibility as the Secretary of the Interior (and attributed at least by implication to extravagance, waste, and graft) will encourage those who advocate repudiation of payments. It will tend to diminish the chances of recovery of the cost of the projects.

The Secretary says in his statement on costs: "This intensive study of reclamation as a business is the first ever made. It should have been made ten years ago." The fact is that the Reclamation Service has been under investigation nearly half the time since it began operations, by several Congressional committees, including the Appropriations Committee, and many inspectors from the Secretary's office and from the Treasury Department. In 1910 it was thoroughly investigated by a board of army engineers, which among other things reported that "In its inspection the Board was impressed with the ability of the employees occupying positions of responsibility and desires to record its appreciation of the assistance rendered by them." The most exhaustive examination of all was made by a series of boards of review instituted by Secretary Lane in 1914. Reports by these boards were passed upon by a central board of review consisting of Dr. Elwood Mead of the University of California, Gen. W. L. Marshall, ex-Chief of Engineers, U. S. A., and I. D. O'Donnell, a successful irrigation farmer. Nearly a year was spent in this investigation, and it eliminated two items of cost charged on the books, one from the Salt River project and one from the Uncompahgre project. Yet, in spite of this adjudication, the Secretary asks for authority to reopen all these cases and "make adjustments" between the government and the projects.

Strength of Limestone in Tension

Tension tests on samples of Indiana limestone recently made at the Bureau of Standards, in connection with the design of lifting devices for hoisting large blocks of stone, showed values ranging from 300 to 715 lb. with an average of 535 lb per square inch.

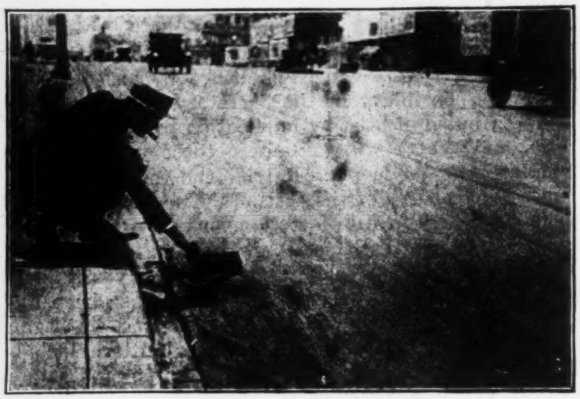
Chicago Heavy-Traffic Street Tests Asphalt Mixtures

Stiff Mixture Stands Up Under Traffic of 16,000 Vehicles a Day While Softer Mixture Ruts and Rolls Badly

By Hugh W. Skidmore
Consulting Engineer, Chicago Paving Laboratory, Chicago, Ill.

TWO distinct mixture designs were employed in street asphalt pavement laid on Michigan Boulevard in Chicago, in 1919 and in 1920. One design failed and the other was a success. As the comparison was unusually fair, these results warrant analysis. Also the conditions represent about the maximum of density of street traffic—that of the famous "link" over the Chicago River and connecting "north" and "south" Michigan Avenue.

Both traffic and foundation conditions are identical over the entire length of this pavement. The traffic is fully as dense as on any pavement in the world. As high as 60,000 vehicles per day pass over the pavement. These are by no means all swift-moving pleasure cars; a large number of heavy motor buses ply back and forth night and day. The former tends to roll or wave the pavement transversely, while the latter tend to form longitudinal ruts in the surface. Both of these types of defect are very much in evidence in that portion of this pavement which was laid in the spring and early summer of 1920.



TWO TYPES OF FAILURE—RUTS AND WAVES
Note the seriousness of these waves, also the ruts toward the center in the line of travel of light vehicles. The mixture plainly shows its excess of bitumen.

A comparatively small portion of the pavement being considered was laid in the late summer and fall of 1919. The wearing surface mixture was especially designed to overcome any tendency toward distortion under traffic. The mixture was designed for a maximum density, comparatively "dry," i.e., with absolutely no excess of bitumen, and with what was considered by some entirely too much mineral filler. The penetration of the asphalt cement was set as low as was considered entirely safe from the standpoint of cracking, viz., 30 to 35. An analysis of the mixture was as follows:

	Per Cent
Bitumen, by weight	10.6
Mineral passing 200	18.0
Mineral passing 80	26.8
Mineral passing 40	31.7
Mineral passing 10	10.7
Mineral passing 4	2.2
Penetration at 77 deg. F.	33

The maximum amount of bitumen in a large number of samples tested was 10.8 per cent and the minimum was 10.1 per cent; the majority showed about 10.5 per cent. The minimum of filler passing the 200-mesh screen in these samples was 17 per cent while the maximum was 20 per cent; the maximum penetration was 35 and the minimum 31.

No rutting has developed in this portion of the pavement, and the only evidence of any forward displacement occurs to a slight extent at a corner where the heavy motor buses have come to a sudden stop, on a slight down-grade. Even this is as yet of minor consequence and is thoroughly localized. No cracks have occurred, except in one or two instances of surface reproduction of contraction cracks of portland cement concrete base, which appeared during the first winter. It is altogether possible that these also might have been largely overcome by traffic, were it not for the fact that this portion of the work was closed against traffic during the first few months after it was laid. One of the most striking and significant things in this entire stretch of pavement is the joint between the work laid in 1919 and 1920. The softer mixture of 1920 can plainly be seen rolling down over the more stable 1919 work

The character of mixture laid in 1920 is radically different from that of 1919 in two fundamentals; first it carries on the average more than 10 per cent more bitumen by weight, i.e., where the 1919 contained an average of 10.6 per cent, the 1920 mixture showed an average of 11.7 per cent; second, the average penetration of the asphalt cement used in 1920 was over 40, in fact ranged from 36 to 46 with the average at 41. Also the average amount of 200-mesh filler was slightly less than in 1919. All of these things combined to produce a much softer and consequently much less stable mixture than was produced by the 1919 design. The great increase in bitumen content was undoubtedly the principal factor. An average analysis follows:

	Per Cent
Bitumen, by weight	11.7
Mineral passing 200	17.0
Mineral passing 80	27.5
Mineral passing 40	35.2
Mineral passing 10	8.1
Mineral passing 4	0.5
Penetration at 77 deg. F.	41

Numerous samples showed more than 12 per cent and one more than 13 per cent bitumen; and in several samples the content of 200-mesh mineral was 12 to 14 per cent. The variation in these two very important items was much wider than in 1919.

To the careful student of asphalt mixtures, it will be immediately apparent that 12 per cent is entirely too much bitumen for such a severe traffic condition, regardless of the penetration. The low penetration of the asphalt will not cure the tendency to distort under traffic, unless it is accompanied by a proper relation between fine mineral and bitumen. Low penetration in such cases most certainly assists, but it does not alone accomplish the result, in fact it is considerably secondary to the bitumen content in its relation to the filler. During recent extensive repairs to the section laid in 1920, pieces of the original pavement plainly showed an excess of bitumen.

It is not known why the radical departure from the 1919 design was made. Possibly some official may have been unduly alarmed at the foundation cracks which appeared during the winter of 1919-1920, thinking the asphalt was too hard. It is now certain that the change which was made spoke failure for the altered type of mixture. It is also of interest to know that this failure was predicted by those who were most instrumental in the design of the 1919 work. Signs of the coming rutting and rolling were evident only a few months after the pavement was completed.

There is no question but that the real predominant cause of the extensive rolling and rutting of the 1920 work is the very decided excess of bitumen in the sheet mixture, assisted by a penetration which was at least 10 points higher than it should have been. Bitumen content of not to exceed 10.5 per cent accompanied by a filler content of from 16 to 22 per cent would have prevented this disturbance. The movement of this pavement has been confined to the sheet top, at least in the beginning, and until waves were sufficient to produce an ever-increasing impact sufficient to distort the binder course as well as the top. During the recent repair work, the old pavement from a number of the badly affected areas was carefully examined and no evidence of binder movement could be noted.

Many large cities have examples of pavement disturbance under dense traffic. The remedy is an easy one, but it must divorce entirely the old ideas of asphalt mixtures that were in vogue before the day of extensive motor traffic. The standard sheet asphalt specifications of the city of Chicago have for many years called for 11 to 13.5 per cent of bitumen, with a maximum of 15 per cent of mineral passing the 200-mesh screen Michigan Avenue is only one of several examples of failures that will continue, unless the standards undergo a very decided change.

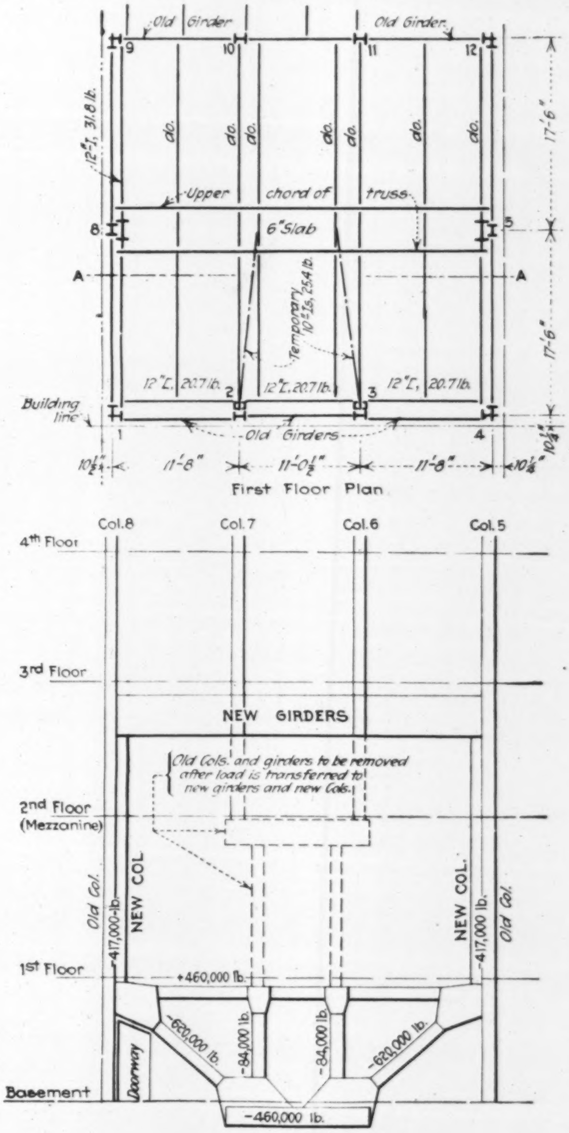
Truss Maintains Equilibrium in Load on Footings

Load Carried to New Outside Columns for Wide Opening—Transferred Back to Old Footings by Truss

By CHARLES CARSWELL
Philadelphia, Pa.

AN UNUSUAL structural problem, involving the removal in the first two stories of the intermediate columns of one bent, and the transfer of the loads the columns had supported through a new system of steel work to the same foundation on which the columns had rested, is a feature of alterations now being completed on the office building formerly known as the Penn Square Building in Philadelphia. These alterations are part of the extensive changes being made in the building including the addition of two stories, the construction of an entire new front, and interior alterations to link up the building with the Finance Building, adjacent to it on the west, of which the altered structure becomes a part.

The Penn Square Building was a twelve-story structure, built in 1900, and first known as the Levy Building. The two new stories are added without any extensive alteration of the old steelwork, a feature made possible by a change in the building requirements of the city of Philadelphia. The old building was designed for a live-load of 100 lb. per square foot, whereas the present requirement as established by the law of 1919 is for 60 lb. per square foot. The possible increase of load under this condition is therefore about 480 lb. per square foot, which would be approximately equivalent to the load requirements for three floors. The present design is based upon a dead-load of 95 lb. and the live-load of 60 lb. per square foot for all floors from the second to the fourteenth; the first floor is designed for 110 lb. dead load and 120-lb. live load per square foot.


Old Girder
Old Girder
9
10
11
12
12" I, 31.8 lb.
do.
do.
do.
do.
do.
do.
do.
17'-6"
Upper chord of truss
6" Slab
8
5
A
A
Temporary 10" Is, 25.4 lb.
17'-6"
12" I, 20.7 lb.
12" I, 20.7 lb.
12" I, 20.7 lb.
2
3
Building line
1
4
Old Girders
10½"
11'-8"
11'-0½"
11'-8"
10½"
10½"
Col. 8
Col. 7
Col. 6
Col. 5
4th Floor
3rd Floor
NEW GIRDERS
Old Cols. and girders to be removed after load is transferred to new girders and new Cols.
2nd Floor (Mezzanine)
Old Col.
-417,000-lb.
NEW COL
NEW COL.
-417,000 lb.
Old Col.
1st Floor
+460,000 lb.
-620,000 lb.
-84,000 lb.
-84,000 lb.
-620,000 lb.
Doorway
Basement
-460,000 lb.

First Floor Plan

Section A-A

FIG. 1—PART PLAN AND SECTION

The frontage of the building is 36 ft. 1 in., and its framework comprises wall columns and two intermediate rows of columns inside the building, making four columns to each bent. The interior columns are spaced 11 ft. ½ in. apart, and are symmetrical about the center line of the building, except in the second bent. In this particular bent the same arrangement is followed above the second floor level, but in order to secure a better arrangement of store space in the first floor, the two interior columns, in the basement and first tier, were each set 2 ft. nearer the center line of the building, making them 7 ft. ½ in. apart. At the second floor level,

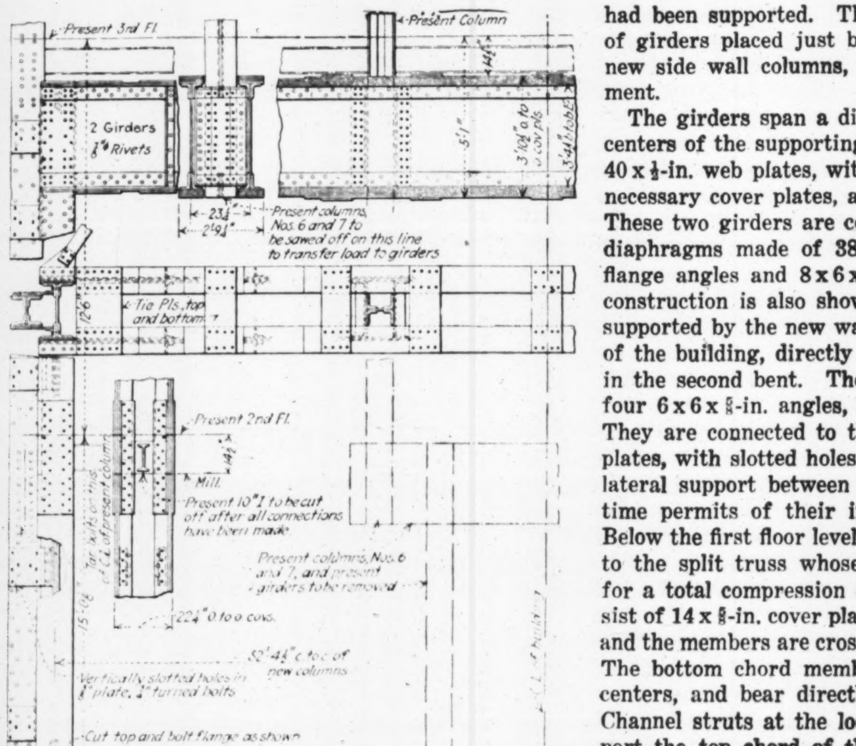

Present 3rd Fl.
Present Column
2 Girders
⅞" Rivets
14½"
5'1"
3'10½" o. to o. cov. pls.
3'4¼" to be
23¼"
2'9¼"
Present columns Nos. 6 and 7 to be sawed off on this line to transfer load to girders
Tie Pls., top and bottom
12'6"
Present 2nd Fl.
14½"
Mill.
Present 10" I to be cut off after all connections have been made
Tar bolts on this C.L. of present column
Present columns, Nos. 6 and 7, and present girders to be removed
22¼" 0. to o. cols.
15'0⅛"
32'4½" c. to c. of new columns
Vertically slotted holes in ⅜" plate, ¾" turned bolts
C.L. of building
Cut top and bolt flange as shown
Symmetrical about C.L.
C.L. of truss
Splice pl. on present col.
A
Finished 1st floor on line of cols. Nos. 6 and 7
5"
15½"
2'1"
⅞" Rivets
15" ⊏, 33.9 each side
Present cols. Nos. 6 and 7, cut off on this line
11'-4⅛" c. to c. chords
C.L. of present column
C.L. of new column
12'8"
12"
620,000 lb. compression (Total)
840,000 lb. compression (Total)
3'6¼"
⅜" pl
B
B
Present basement fl.
20" o. to o. cover plates
460,000 lb. compression (Total)
A
Present 12" I's
Present 12" I to be cut off after all connections have been made
13¼"
Column base milled
Present Col. Section B-B
C.L. of truss = C.L. of cols. Nos. 5 and 8
Lacing ⅜ L
4'1" c. to c. of chord sections
42" x ⅜" pl. at top and bottom
Present 20" I's
Section A-A

FIG. 2—DETAILS OF THE COLUMNS, TRUSS AND GIRDERS

a girder was connected to the tops of these two columns, and extended out on each side to support the upper tiers at the 11 ft. ½ in. spacing.

In the remodeling it was desired to do away with the second floor in the front portion of the building from the front wall to the third bent of columns. This requirement made necessary the removal of the intermediate columns of the second bent up to the third floor, and for this purpose a system of steelwork was designed to support the columns above that level and to carry the loads to the same foundation on which the columns had been supported. The steelwork consists of a pair of girders placed just below the third floor lever, two new side wall columns, and a split truss in the basement.

The girders span a distance of 32 ft. 4½ in. between centers of the supporting columns, and are composed of 40 x ½-in. web plates, with 6 x 4 x ¾-in. flange angles and necessary cover plates, as noted in the detail of Fig. 2. These two girders are connected to the old columns by diaphragms made of 38 x ½-in. plates with 4 x 4 x ½-in. flange angles and 8 x 6 x ½-in. connection angles. This construction is also shown in Fig. 2. The girders are supported by the new wall columns placed on the inside of the building, directly alongside the old wall columns in the second bent. The columns have 20 x ½-in. webs, four 6 x 6 x ⅝-in. angles, and two 14 x ½-in. cover plates. They are connected to the old columns by ⅜-in. batten plates, with slotted holes. This type connection secures lateral support between the columns, and at the same time permits of their independent action as columns. Below the first floor level the new columns are connected to the split truss whose diagonal struts are designed for a total compression of 620,000 lb. They each consist of 14 x ⅝-in. cover plates with two 6 x 6 x ⅝-in. angles, and the members are cross-laced with 3 x 3 x 5/16-in. angles. The bottom chord members are spaced 4 ft. 1 in. on centers, and bear directly on the old column grillage. Channel struts at the location of the old columns support the top chord of the truss and the loads of the first floor.

Erection—The new steelwork was erected complete before the old columns were removed. The truss in the basement was erected first, and the new side wall columns were then erected on it and connected to the old columns. The diaphragms for connecting the columns to the girders at the third floor, were next riveted in place on the old columns. The two girders were brought in on the second floor of the building through the windows and riveted to the diaphragms and to the new side wall columns. These connections made the new steelwork complete, ready to support the column loads. The old columns were sawed off at the bottom of the new girders, sawing being used instead of burning in order to transfer the load gradually.

When the supporting steelwork was in place, the floor beams of the second floor were removed. Removal of these beams made too great an unsupported length in the intermediate columns of the front wall so they were each reinforced by a new section composed of two channels extending from above the first floor to the bottom of the third floor steel, and placed on the inside of the old columns and riveted by ⅜-in. batten plates.

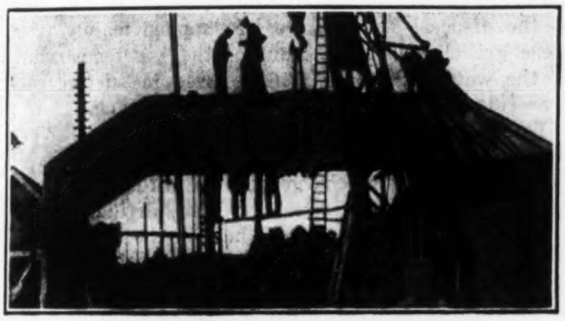
The building is owned by the Finance Company of Pennsylvania. The architects are the Hoffman-Henon Co. of Philadelphia, and Percival M. Sax is engineer.

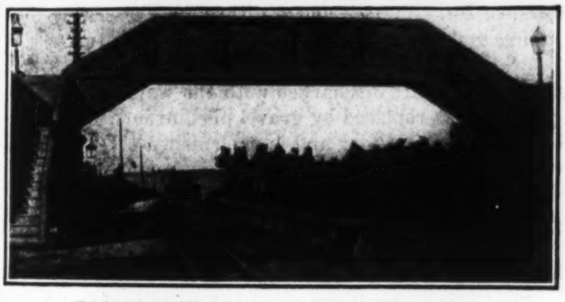
From Job and Office

Hints That Cut Cost and Time — For the Contractor and the Engineer

Precast Concrete Units Used for English Footbridge

IN THE recent rebuilding of a footbridge over the tracks at a country station of the Southern Ry., England, a novel design consisting of precast concrete units was adopted. This is shown in the accompanying view. The two 38½-ft. girders have their 7½-ft. end panels inclined downward to carry stairways, and the girders are seated on four-post braced towers, the tops of which form landings for stairways parallel with the tracks. Floor beams fit into sockets on the bottom chords of the girders and upon these are laid the floor slabs. The lower stairway girders rest on the towers and the stairs rest on the lower chords of these girders. The units were made at Exeter, where the railway has a yard for the manufacture of various concrete articles. All the girders were cast on their sides. The units were erected by a locomotive crane.





FOOTBRIDGE BUILT OF CONCRETE UNITS
Above: Locomotive crane erecting one of the 38½-ft. girders.
Below: completed structure.

Demolition of the old wooden bridge was commenced at midnight on a Saturday and completed by 6 a.m. next morning. The erection of the towers, girders, stairs and other parts was interrupted occasionally by the necessity of clearing the tracks for trains, but the entire work was completed by 7 p.m., except for the grouting of some connections. The cost is said to be less than that for a steel structure, even including the forms, which will be used for similar bridges.

The designs were prepared under the direction of A. W. Szlumper, chief engineer, and the structure is described in the *Railway Gazette*, London, by W. H. Shortt, district engineer.

Sightly Construction Gallery Protects Sidewalk in Chicago

THE UNUSUALLY elaborate sidewalk gallery shown in the accompanying view is not a permanent arcade but is erected simply for the convenience and protection of the public during the construction of the 32-story Straus Building at Jackson St. and Michigan Ave., Chicago. Since it was felt by S. W. Straus & Co., the owners of the building, that the usual rough timber gallery or shelter would not be in harmony with the building or its surroundings, the architects were instructed to provide a sufficiently artistic structure and the design was submitted to the South Park Commissioners for consideration. Arches and ornamental railings are placed in the openings between the posts which support the working deck over the sidewalk, and an

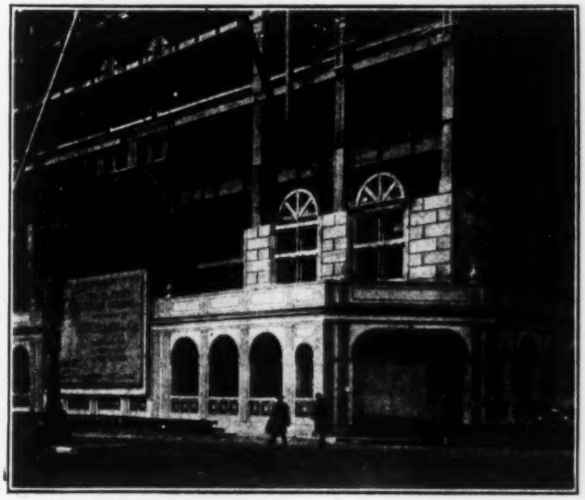


FIG. 1—SIDEWALK GALLERY AT STRAUS BUILDING, CHICAGO

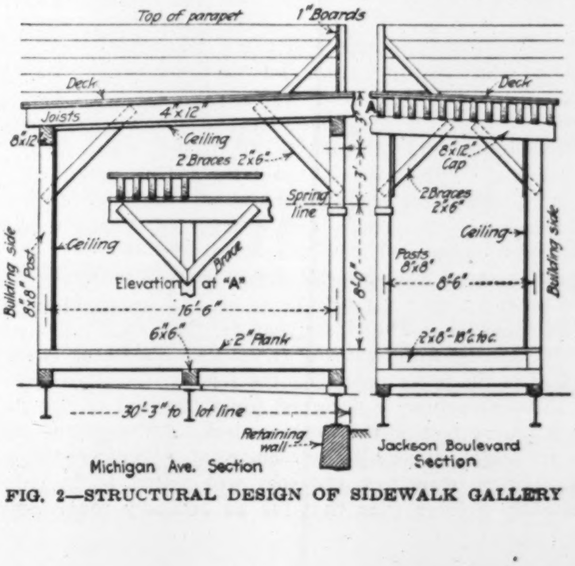

Top of parapet
1" Boards
Deck
Deck
Joists
4"x12"
A
8"x12"
Ceiling
2 Braces 2"x6"
8"x12" Cap
3'
Spring line
2 Braces 2"x6"
Ceiling
Building side
8"x8" Post
Ceiling
Brace
Elevation at "A"
Posts 8"x8"
8'-6"
Building side
8'-0"
16'-6"
6"x6"
2" Plank
2"x8"-18" c. to c.
30'-3" to lot line
Retaining wall
Michigan Ave. Section
Jackson Boulevard Section

FIG. 2—STRUCTURAL DESIGN OF SIDEWALK GALLERY

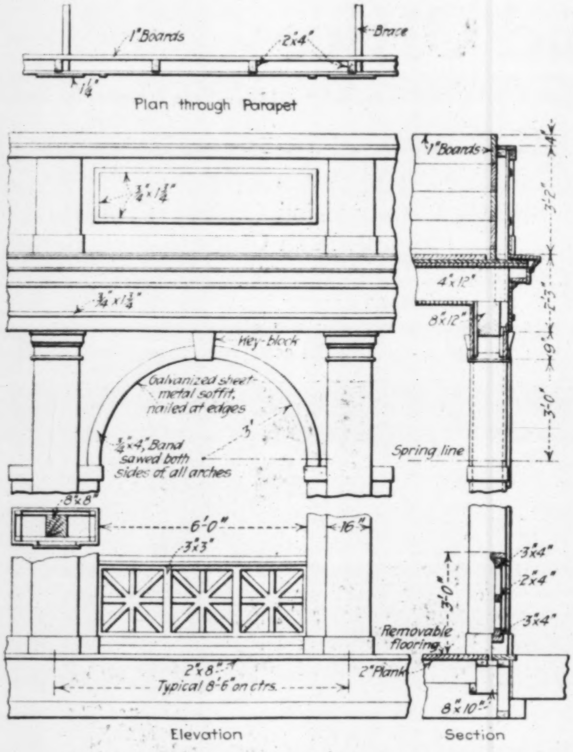


FIG. 3—ORNAMENTAL FEATURES OF GALLERY

ornamental parapet surrounds this deck. The structure is painted in two shades of light buff or stone color, and on each street face there is a large panel with a reproduction of the architect's design for the completed building. At first the floor was above the sidewalk level and was reached by two steps, but this floor was removed after completion of the permanent sidewalk.

In its structural design, shown in Figs. 2 and 3, the gallery consists of two rows of 8x8-in. posts spaced 8½ ft. c. to c. on the Jackson St. side and 16½ ft. for the wider Michigan Ave. sidewalk. Longitudinally the spacing is about 8½ ft. c. to c., with archway openings of 6 ft. clear width, but at the corner and at the contractor's driveway entrances the clear width is 15 ft. On the Michigan Ave. side the posts carry two lines of 8x12-in. stringers on which are transverse 4x12-in. joists spaced 10 in. c. to c., but on the Jackson St. side the posts carry 8x12-in. transverse caps with longitudinal joists of the same size and spacing as above. Knee braces are attached to the joists in the former case and to the caps in the latter. The deck which slopes down towards the building, consists of two courses of ⅞-in. boards with a layer of roofing paper between them and 2-in. plank battens on top. The posts rest on 8x10-in. sills carrying 2x10-in. joists, 18 in. c. to c., with a single layer of 2-in. plank to form the sidewalk. The 42-in. parapet has four rows of 1-in. boards, with braces at intervals. Sheathing is applied to the posts and under the joists.

This structure is designed for a live-load of 500 lb. per square foot on the working deck. Although the design might appear to be somewhat expensive for a temporary structure, the cost was found to be only slightly greater than that for an ordinary rough and unpainted shelter or gallery. The general contractor is the Thompson-Starrett Co., and the architects are Graham, Anderson, Probst & White, Chicago.

From Job and Office

Hints that Cut Cost and Time

Device Removes Sand from Gravel Wells

By C. K. Calvert
Assistant Sanitary Engineer, Sewage Disposal Plant, Indianapolis, Ind.

In finishing wells which will supply water for the new sewage disposal plant at Indianapolis the old air-lift idea to clear them of sand was used but the operators became disgusted with the hand-operated discharge valve and a home-made automatic control was devised. Condenser water for the main power plant of the disposal works is to be supplied mainly from these gravel wells on account of the low temperature of the water. Since it will be used in surface condensers, it must be reasonably free from sand.

The sand is removed by air-lift as follows: When the pump pit excavation is completed, an air-lift is installed with its discharge passing through a special flange which makes the casing head airtight so that pressure may be built up and held in the casing. Air is delivered to the ejector head continuously. Manipulation of a valve on the discharge line causes periods of pressure to alternate with periods of pumping. The pressure forces water and air through the screen, dislodging and agitating the sand and gravel, and on release the water rushes back into the casing, carrying sand which the air-lift discharges with the water. The sand so removed is replaced by gravel piled around the casing on the excavation floor and is replenished after settling.

Extensive tests determined the optimum duration of pressure and pumping periods. Operation of the ordinary gate valve on the air-lift discharge line is time consuming, and a quick-opening valve was substituted. As hand operation was erratic and not dependable, the

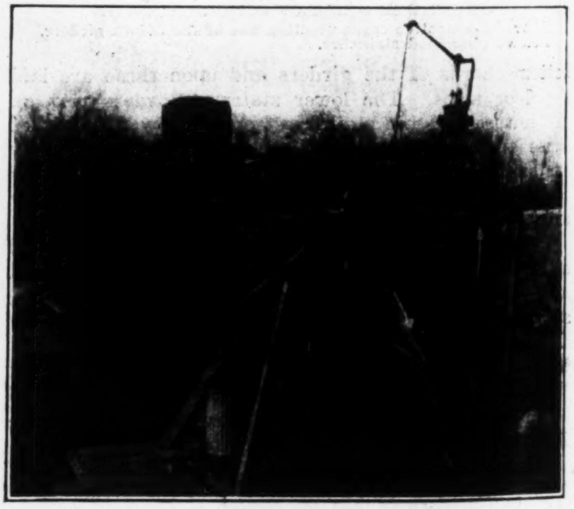


FIG. 1—HOME-MADE VALVE CONTROLLER
Bucket on right end of lever arm up and receiving a portion of water from sand tank.

From Job and Office

For Contractor and Engineer

automatic valve control shown in the illustration was devised to reduce the time of sand pumping and eliminate the cost of an operator.

On starting the air-lift, the mechanism is in the position shown in Fig. 1, the counterweight on the left of the arm is down. This holds the water bucket on the right up and in position to receive water from the sand tank overflow. The rod on the right end of the arm holds the air-lift discharge valve open.

Water now flows through the sand-tank overflow line, a controlled part of it going to the water bucket. When the counterweight is overbalanced, the water bucket falls, clearing the stream of water which filled it, and closing the air-lift discharge valve. During this period the water and air rush out of the casing through the screen and disturb the sand and gravel. This position, shown in Fig. 2, is maintained until the water in the bucket runs out through a bottom valve. In this position the air pressure is released, the water, carrying the fine sand, rushes back through the screen into the casing and is raised to the sand tank by the air-lift. The operations are repeated as long as air is supplied to the air-lift.

By manipulation of the valve into and out of the water bucket, the time of filling and emptying, and consequently the period of pumping and pressure on the well, may be varied widely. When adjusted to any rate, the operation is constant and needs little attention.

The sand tank is baffled and provided with a cone bottom which facilitates sand removal. It is usually removed and measured once in 24 hours.

The installation has proved satisfactory. It clears the well of sand in the shortest possible time and gives an opportunity to observe the rate of sand removal and its total volume.

FIG. 2—SECOND POSITION OF VALVE CONTROLLER

Bucket full descends and angle coupling diverts discharge away from bucket. Rate of flow from pipe in side of bucket near bottom determines the interval before light-colored bucket (left) and counterweight lifts empty bucket and opens valve.

How Dynamite Is Used in Ice Blasting

By N. D. Rand

Technical Division, Atlas Powder Co.

DURING THE winter months ice forms so quickly that at times shipping is bottled up. To relieve icebound boats a channel must be opened and the most practical and quickest way, as well as the least expensive, is to blast the channel out with explosives.

There are two methods of opening up a channel: (1) by placing light charges along the edge of the ice the width of the desired channel and (2) by placing charges along the center line of the channel. The former will break the ice into small cakes, and the latter must contain charges heavy enough to break the ice the entire width of the channel. An experiment in both methods will determine which is the better for the particular conditions encountered.

In order to open a channel holes should be cut through the ice with an ice spud, a splicer bar, or a crowbar. These holes should be from 6 in. to 1 ft. in diameter and cut through the ice to the water beneath.

A good blast does not throw ice and water high up into the air. If that happens, the next charge should either be decreased or lowered further into the water. Distance apart at which to place holes can be determined from the area broken, though the usual distance is from 15 to 25 ft. If there is a current sufficient to carry out the ice charges may be so placed as to break the ice into large cakes. Where no appreciable current exists, ice must be broken into small sizes.

In preparing a charge a rule-of-thumb method which will be successful calls for the use of three times as many cartridges as the thickness of the ice is in feet, and a depth below the ice of one-twelfth of the diameter of the area to be broken. The required number of cartridges should be tied together after having primed one with a waterproof electric blasting cap and smeared a waterproofing compound over the hole where the cap enters the cartridge in order to exclude water from the powder. The cord used to tie the cartridges together should have a free end long enough to lower the charge to the required depth. To hold the charge at the proper depth, tie the free end of the cord to a stick of wood placed across the top of the hole. Dependence should not be placed upon electric blasting cap wires to hold the charge in place. The following table indicates the quantity of explosive to be used and the depth under the ice at which it should be placed for best results in ice of varying thicknesses:

TABLE OF CHARGES

Thickness of Ice in Feet	Number of Cartridges of 40% Gelatin Dynamite	Depth Below Ice in Feet	Diameter of Area Broken in Feet
½	1	1½	20
1	3	2	25
1½	4	3	35
2	6	4	50
3	10	5	60
4	20	6	70

Charges should be fired electrically as it enables several charges to be fired at the same time, the combined force of which will break up more ice than if each charge is fired independently.

Large cakes of floating ice may be broken by laying a large charge of dynamite on top of the cake and priming with cap and fuse. The amount of the charge may be determined after a few trials, starting with one or two cartridges. The following table shows the approximate number of 1¼x8-in. cartridges of 40 per cent strength necessary to break cakes of varying thicknesses:

Thickness of Ice in Feet	Number of Cartridges
½	1
1	2
1½	4
2	6
2½	8
3	10

If it is impossible or unsafe to get on the large cake of ice in order to place the explosive, the dynamite may be tied to a stone or stick of wood, the fuse lighted and the charge thrown upon the cake of ice in such a manner that it will land as near the center as possible. Such charges are primed with cap and fuse, the fuse being lighted just before dropping the explosive to the ice, and of a length sufficient to permit the cake of ice to float away before the charge detonates. Safety fuse burns at an approximate rate of 2 ft. per minute. Therefore, it should be cut to a length corresponding to time it is desired to fire the charge after lighting.

Another use to which dynamite may be put is in breaking up ice jams at bridge abutments or narrowed river channels, etc. Under such circumstances timely action may prevent considerable damage to construction work. The size of charge is dependent upon the thickness of the ice piled up. In this class of work it is advisable to use a blasting machine and electric blasting caps because of their greater safety. If the ice has piled between piers of a bridge the explosive charges should be placed in the ice midway between piers and all charges fired simultaneously with a blasting machine. Place the charge as near the front of the jam as possible, because there is where the cakes have become locked. If the ice does not break at the first charge successive heavier ones should be used until it starts to move. Where gorges have formed to a considerable thickness making it difficult to dig a hole through the ice with the tools at hand, a small hole can be cut into the ice as far as possible and one or more cartridges exploded to cut the hole deeper. This operation can be continued until a hole is cut either through the ice or to the desired depth.

To prevent the formation of a gorge where it is liable to appear every year at the same point, begin at a short distance downstream and honeycomb the ice all the way upstream by successive charges. When the thaw comes the broken ice will go out in a body with less likelihood of jamming.

Explosives have also been used on occasions to cut through deep snow drifts and to start snow slides on hillsides.

The proper explosive to use for ice blasting when the charge is placed beneath the ice is a low-freezing, strong, fairly quick acting explosive not readily affected by water. Low-freezing extra dynamite and low-freezing gelatin dynamite are well adapted for the purpose. If the charge is placed on top of an ice floe, a quick-acting explosive should be used, either low-freezing straight nitroglycerin dynamite or non-freezing dynamite of 50 per cent strength or sometimes stronger. Unless a non-freezing explosive is used, particular care should be exercised to see that the dynamite is not frozen. A low-freezing dynamite will not freeze during the short time that it is in the water, but if it is previously frozen it must be thawed before being used.

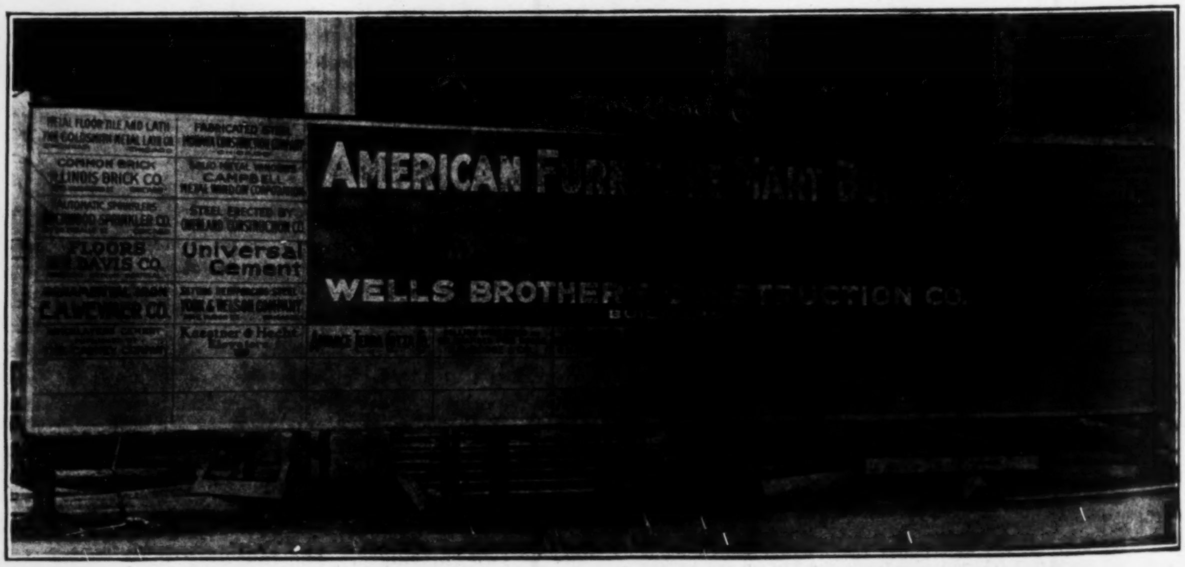
The materials for ice blasting can most conveniently be carried over the ice in a box fastened to a sled. Full instructions for priming a charge, either by the cap and fuse method or by the electric blasting cap method, may be obtained from literature published by any explosive manufacturer.

From Job and Office

Hints that Cut Cost and Time

Contractor's Sign at Large Building

On extensive construction works, especially on building erection, it is becoming general practice to display large signboards bearing the names of contractors and sub-contractors. In this way adequate publicity is given, while the unsightly appearance of numerous individual signs of various sizes and styles is avoided. A combination sign of this kind, erected by the Wells Brothers Construction Co. at the new Fur-



SIGN ON CHICAGO STRUCTURE DURING ERECTION LISTS ARCHITECTS AND CONTRACTORS

From Job and Office

For Contractor and Engineer

niture Mart Building, Chicago, is shown in the accompanying view. It is about 8x30 ft., built up of sheet-metal panels. As a rule, these signs are made and placed by the contractor, but in the case of the Furniture Mart a sign company made an offer to the contractor to erect a satisfactory electrically-lighted sign and as the price was considered favorable this offer was accepted.

In arranging for this sign, the contractors knew that not all of the sub-contractors wished to have their names posted, but on the basis of the expected number the cost was divided between architect, contractors and sub-contractors on a pro-rata basis according to the space used. One form letter was addressed to all sub-contractors telling about the proposed sign and asking them to forward copy if they desired to participate. No further solicitation was used. It is believed that this plan accomplished the desired end satisfactorily, with less trouble to the contractors and no greater expense to any of the participants than if the sign had been made in the usual way. Any method which requires or compels sub-contractors to take space is evidently undesirable. The cost of a large sign is no small item and logically it should be paid for by those who desire to benefit from it.

Construction of a 9-ft. Pipe Line Six Miles Long

THE OAK GROVE hydro-electric project of the Portland Railway Light & Power Co., now under construction on the Clackamas River in Oregon, has a 9-ft. pipe line six miles long. This line will supply the first of three 35,000-hp. generating units which will operate under an effective head of 860 ft., the static head being 925 ft. When the other units are added a second pipe line 11.5 ft. in diameter will be laid paralleling the one now being built. Work on the project is advancing rapidly and the pipe line is expected to be completed by February, 1924, about two months before the plant is scheduled to go into service. A note on the general features of this development appeared in *Engineering News-Record,* Aug. 2, 1923, p. 197.

The distance between intake gates and turbine is 36,334 ft. traversed as follows: 32,900 ft. of 9-ft. steel pipe, which is kept below a controlling hydraulic grade of 2 ft. per 1,000; 2,150 ft. of concrete-lined tunnel, and 1,300 ft. of penstock down a steep incline, the pipe diameter here varying from 8 ft. at the top to 6 ft. at the bottom.

The steel plate for the pipe, varying from 9/32 to 11/16 in. in thickness, was produced at Sparrow Point, Md. and delivered by water to Portland where it was formed into pipe sections 40 ft. long. These sections, weighing about 9 tons each, are transported on flat cars to unloading stations established on the construction railroad at convenient points along the pipe-line grade. Most of these unloading stations are at higher level than the pipe grade and sections are snubbed to the grade on skids with the aid of a cable. On all plate thicknesses of ½ in. or less the pipe is reinforced by outside stiffener rings made of 5x3x3/8-in. angles spaced 2 ft. 9 in. apart. These angles have been of material assistance in making the pipe rigid for handling.

Laying the Pipe—In the construction program as planned at first, overhead cableways were to be used for moving the sections along the grade from unloading station to final destination. This plan was abandoned in favor of a gantry traveler that would straddle the pipe line and move sections along the grade as required.

The device built for this purpose and shown in the accompanying picture is a structural steel frame mounted on wheels set for track of 11 ft. 8-in. gage. It has a wheel base of 16 ft. and is 12 ft. 8 in. high. The operator's station is on the "upper deck" where the motor, cable drums, etc. are located. Power is supplied by a 50-hp. gasoline motor taken from a 5-ton truck and this is geared down so that a maximum speed of about 250 ft. per minute is made along the track.

When a pipe section arrives on the grade it is rolled between the gantry rails; the gantry moves over it and the section is picked up by cable slings from drums directly overhead. To facilitate rapid handling of the pipe without danger of damage, pieces of old automobile tire casings are fastened to the wood stops over the pipe-way in the traveler to serve as cushions. On delivery the gantry does no exact setting in place, but leaves the section in its approximate position on the grade.

GANTRY CRANE PICKING UP 40-FT. SECTION OF PIPE

The riveting gang uses a traveler similar to the one already described except that power is supplied by a 7x10-in. steam donkey mounted on top of the steel frame. With this traveler the pipe section is lifted by slings from a boom that can adjust the position of the section as may be required.

With this plan of operation, as many as 16 pipe sections have been placed in 8 hours. The traveler crew consists of five men in addition to which are the crew that snubs sections down from the railroad and the gang that picks up and re-lays track. Track is moved ahead by the gantry and is set by use of the two booms shown in the picture. The rails, in 20-ft. pieces, are spiked to 8x16-in. timbers of the same length, no cross-ties being used.

The pipe distribution is being done by the Hurley-Mason Co., of Portland, who are the general contractors on the project. The J. G. White Engineering Corp., New York, are the consulting engineers. H. A. Rands is construction engineer for the Portland Railway Light & Power Co.

Letters to the Editor

This department aims to be a forum for the discussion of the views of engineers and contractors. The range of interest should be as wide as possible. Contributors are, therefore, asked to make their letters short.

Should Concrete Swimming Pools Be Emptied in Winter?

Sir—In replying to the question, "Should Concrete Swimming Pools Be Emptied in Winter?" asked by Adams & Ruxton Construction Co., in *Engineering News-Record*, Nov. 22, p. 858, the editor advised that, so far as his experience went, such pools were always emptied. While the usual custom is to empty concrete pools, we do not believe it is necessary to do so, and in fact we know of three such pools, located in cold climates, that are not emptied and no trouble has resulted.

If concrete pools are allowed to stand empty and without protection throughout the winter, we suppose that it is done to protect the walls from the horizontal pressures which a sheet of ice on the surface is presumed to exert. We say "presumed to exert" as there seems to be little or no conclusive evidence or positive knowledge as to whether such pressures actually develop in comparatively large bodies of still water contained in rigid walls, and if so, how much pressure actually develops.

As suggested by Adams and Ruxton, we are inclined to believe that a penetration of frost through an unprotected concrete floor slab into a more or less saturated subgrade to a depth of 4 ft. or more would be likely to cause some displacement of the slab with a possible injury to it.

The vertical walls of a pool are designed to resist the normal pressures of the soil when the pool is empty, but they are not designed to resist pressures of frozen earth as the knowledge of such pressures is inadequate for accurate design. A discussion of the formation of ice may shed some light on this interesting problem.

When freezing weather comes, ice forms first around the edges of the pool and as the sheet of ice builds out toward the middle, the thickness at the edge increases. Finally a closure is formed at the middle of the pool and the sheet of ice increases in thickness by building downward. Each additional inch of ice formed on the bottom of the ice sheet displaces approximately 0.1 in. of water. The displaced water finds relief through the path of least resistance which in this case is upward through the sheet of ice, causing it to bulge up slightly at the middle. Thus, if ice were formed with a uniform thickness of 10 in., it would be bulged up into a slight dome shape by approximately 1 in. of displaced water over the surface of the pool. The maximum horizontal pressures against the sides of the pool will be limited by the strength of the slab of ice in resisting the uniform load imposed by the upward pressure of the water. Now if the pool has a minimum width of 25 ft. and the ice a thickness of 12 in. the sheet of ice may be considered as an unreinforced flat slab 12 in. thick with a 25-ft. span uniformly loaded by the upward pressure of the water. If we assume that ice has a tensile strength of 150 lb. per square inch, a slab 12 in. thick having a span of 25 ft. would resist pressure of only 46 lb. per square foot. The increased pressure against the sides of the pool would be approximately equal to that of an additional 9-in. depth of water.

In view of the above considerations, we believe that there is less probability of injury to a well designed pool having minimum dimensions of 20 ft. or more where it is left filled with water to a depth of 1 ft. below the normal level than where it is completely drained for the winter.

A pool at Garden City, Kan., 218 x 345 ft. in plan, with three sloping walls and one vertical, has been allowed to freeze with no apparent damage. A rectangular pool at Abilene, Kan., 60 x 120 ft., with four vertical walls, has been allowed to freeze every winter since 1914 without damage. Some winters the ice was more than 18 in. thick on this pool. A 63 x 155-ft. rectangular pool with all walls vertical, at York, Neb., has been allowed to freeze several times without injury.

Experience and observations of other engineers and managers of pools would add to the knowledge on this subject. Most assuredly, if it is possible to utilize concrete swimming pools as winter skating rinks, such use should be made of them, thereby adding several months per year to the period of their utility.

C. D. Hale,
Civil Engineer.

Chicago, Ill.,
Dec. 4, 1923.

Shoddy Building Work Briefly Reviewed

Sir—I have just read in the morning's paper of the dismissal of three of the four indictments which grew out of the collapse of the American Theater building in Brooklyn on Nov. 29, 1921, and am prompted to suggest that this item of news affords an opportune occasion for your paper to review the conditions which preceded and surrounded this conspicuous illustration of the ineffectiveness of existing methods of controlling building operations, in the interest of elementary public safety right here in Greater New York.

The following quotations from statements published in the Brooklyn *Eagle*, reporting actual court testimony, ought to prove illuminating in this connection and help to keep alive an interest in all efforts made to improve the underlying conditions responsible for this disaster.

The architect is quoted as testifying that he had employed a relative of the Superintendent of Buildings "to draw up the plans for the steelwork and facilitate the passing of the plans by the Building Department." He is also quoted as testifying that these first steel plans were not used in construction, but that plans made by the steel contractor were later substituted. The architect's connection with the work, however, apparently ended with the furnishing of plans.

The plan examiner in the Department of Buildings is quoted as testifying that he had made 21 objections to the plans submitted by the steel contractor, and that the changed plans were not finally approved until Nov. 2, 1921, a date about two weeks later than the date sworn to by the steel erector as that on which he completed his work. In other words, the steelwork had been erected about two weeks at the time the steel plans were approved.

The steel erector is quoted as saying that he had no working plans, but erected the work "just by putting things where they seemed to fit," and after being shown the approved plans said they were not followed in the work.

The same erector is reported as testifying that he knew the main column was not plumb, that the base plate was too small and that he had forced wedges under it "to take up the slack," and, further, that an excavation was made alongside the column footing and where jacks were used to force the column into an upright position.

The Superintendent of Buildings is reported to have said, "No permit had been issued and I did not know that the building was in course of construction until I received news of the collapse."

The iron inspector of the Department of Buildings is quoted as saying, "I don't think there is an exception in the whole borough where the theater has not been allowed to go ahead before the steelwork has been approved."

Much more of the same sort could be quoted, but the whole situation is well summed up in the memorandum filed by the presiding judge as follows: "There was no architect in charge of the work. There was no competent supervisor. There was no responsible engineer. There was no approved plan for the steelwork. There was no official permit allowing its erection." In spite of all this it has proved impossible to fix responsibility for the loss of life, and the incident will probably be forgotten until the next similar disaster recalls it to attention.

J. B. French,
Consulting Engineer.

New York, Dec. 7, 1923.

Bending Action in Bascule Bridge Counterweight Failures

Sir—Your article of Nov. 29, p. 872, on two accidents to bascule bridge counterweights attributes these failures to the excessive distortion developed in the members of the steel frame of the walking-beam. The distortional or so-called secondary stresses in the members of this frame are undoubtedly very high, but it seems equally probable that the cause of these failures may be due to the design of the truss members embedded in the concrete counterweight.

This trussing is relied on to pick up all the weight of the concrete by its adhesion to the steel which is embedded in the concrete. The members of this trussing are only designed to take direct stress, and therefore all the adhesion must take place at the panel points or in a plane parallel with the members, if bending in them is to be avoided. The former is of course impossible without developing infinitely high adhesive or bearing unit stresses, and it seems very doubtful if the latter condition can be fulfilled for all the positions of the counterweight. The stiffening effect of the concrete on the embedded members, to enable them to take cross-bending, cannot be effective if the steel is not capable of taking shear in itself, which is the condition here.

Should excessive bending be developed in the embedded members of the counterweight trusses adjacent to their connection to the walking-beam frame, they in turn must exert a moment in the connection, which would produce a tearing action on the chords of the walking-beam and cause them to break at the same point where they would be most severely strained by distortional strains of the walking-beam trussing itself.

Another point to consider is the excessively high range of unit stress in the embedded trussing. It seems questionable whether concrete can permanently adhere to steel that has a frequent strain range of 20,000 to 30,000 lb. per square inch.

The nature of the break at the Lachine bridge would seem to indicate a progressive failure of the bond between the concrete and steel near the point where the trusses deliver their loads to the walking-beam frame. The bond between the concrete and steel being a maximum at the outer edge may have broken down and the fracture continued to spread every time the bridge was operated and the stresses reversed, until this part of the steel frame which had lost the stiffening effect of the concrete was overstressed and failed. The adjoining views show the break in the embedded truss connection which first gave way. It will be seen that the break occurred at the point in the member where it is weakest to resist local cross-bending.

Taking off the side plates on the two bridges should not have weakened the structure, as the bolts passing through these plates and the concrete were not designed or constructed to take any shear, and the value of any adhesion between these plates and the concrete could not be relied on. It was generally thought at the time of the first accident that, if the plates did partly support the counterweight, the eccentric position of the plates was a real danger to the structures and may have contributed to the cause of the break in the chord.

The correct analyzing of the stresses in the counterweight trussing is a most confusing and complicated problem, and until it is clearly understood the causes responsible for these failures cannot be decided. **Bridge Engineer.**

Dec. 4, 1923.

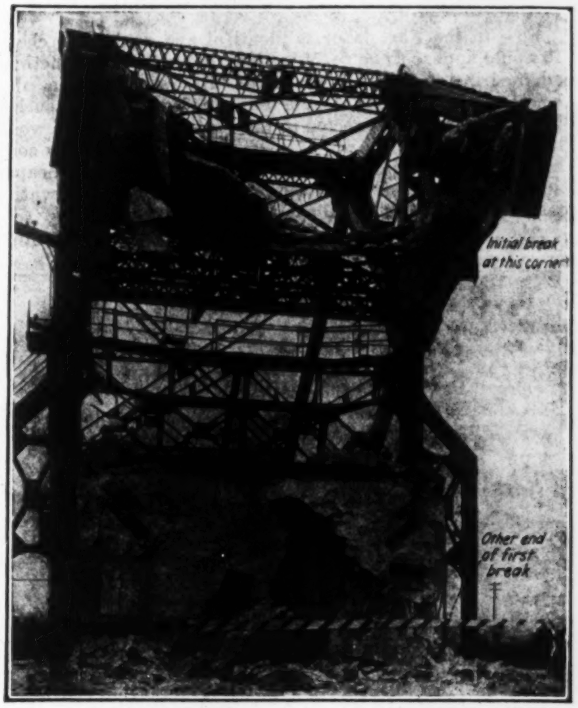
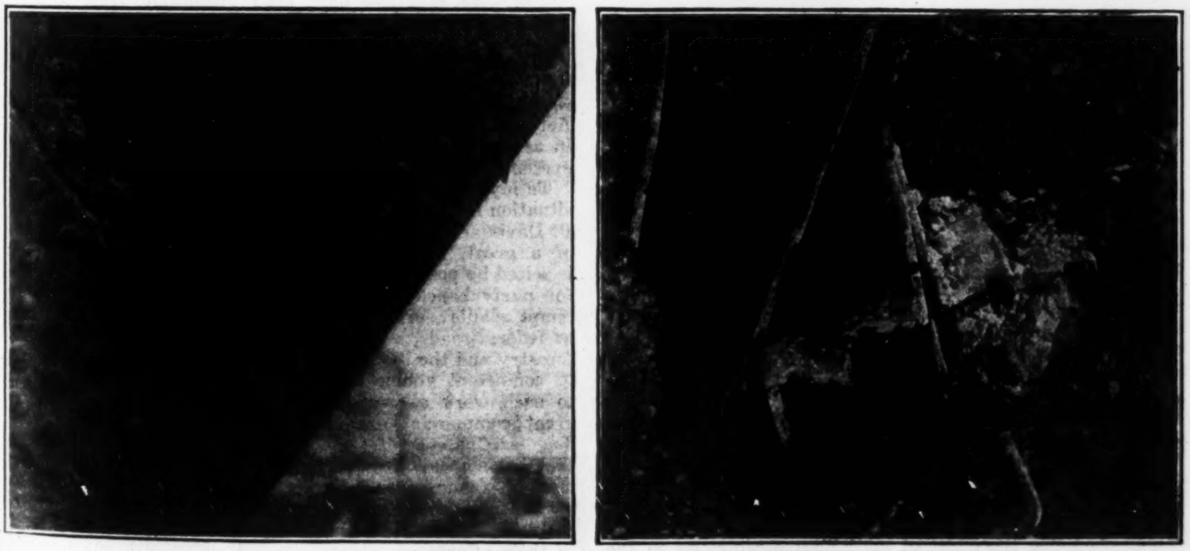


FIG. 1—LACHINE CANAL BASCULE SEEN FROM BACK OF COUNTERWEIGHT AFTER FAILURE

Rear edge of counterweight lies on ground, front end is at top. Right hand side was place of initial failure.

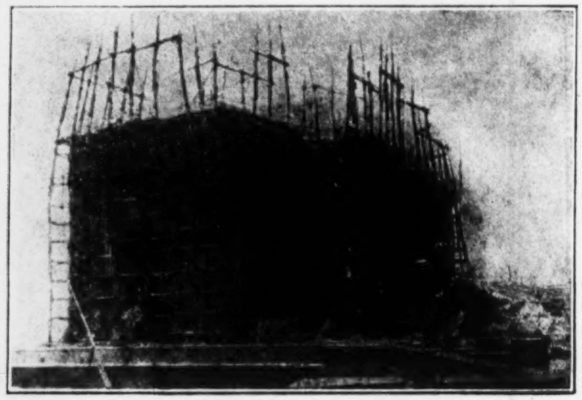


FIGS. 2 AND 3—CLOSE-UP VIEWS OF INITIAL BREAK AT TRUSS AND COUNTERWEIGHT ENDS

Construction Methods in India

Sir—In the East labor is plentiful and said to be cheap. It would appear to be so, if we may judge from the methods adopted in the construction of the "Gateway of India" now being erected on the Apollo Bunder, Bombay. If such a building were being erected in the West, a large crane would have been placed in a suitable position, and worked by some kind of power. But in India, no! Man-power is cheaper, and the contractors follow the primitive method of elevating material by means of pulleys and ropes.

About twenty men hold the rope, and pull up the stone a short distance, chanting a kind of sing-song all the time. There are several men stationed on the bamboo scaffolding to direct the course of the stone as it steadily rises to the top of the building. It seems curious that modern methods of hauling should not more quickly be adopted in India.



BUILDING THE "GATEWAY OF INDIA"

Hassan, India, "AJAX."
Oct. 2, 1923.

Providing for Secondary Stresses

Sir—Your editorial of Nov. 29, p. 872, in regard to the danger of failure from secondary stresses, seems to me to be very timely and likely to be very useful. American structural practice in the last 25 years has developed more and more the use of large riveted joints instead of the pin joints used in earlier designs. Probably this tendency has been due partly to the pneumatic hammer, which drives a good field rivet so cheaply. Partly also it has been due to the great increase in stiffness secured by using rivets instead of pins for joint connectors.

We have all known that in some way the structure pays for that increase of stiffness. But there are two considerations which offset a loss of ultimate strength due to secondary stresses in a bridge truss: (1) Impact or vibration is reduced by the increased stiffness, and girder action reduces the stresses from truss action. The total direct stress on the members is thus relieved. (2) The induced secondary stresses before causing failure tend to relieve themselves by permanent bends in the members. The second consideration taken at its face value would seem to indicate that no member could pass the elastic limit from direct and secondary stress alone.

There is a third consideration however, that should make us fearful of the repetitive effect of strong secondary stresses on compression members. Suppose that under a severe loading the given member has such bending from secondary stress that some fibers pass the elastic limit. The member will then take a permanent bend. Under the next application of the same loading the stress from secondary action will not be so large as before, but there will be an increase of eccentricity in the member which might cause the stress in the same extreme fibers again to pass the elastic limit, and cause a further bending. Relief of secondary stress by the bending of heavy tension members might overcome the effect of additional eccentricity in the compression members, but we should not cheat ourselves into security by maintaining that secondary stresses can never cause failure.

It seems very clear that the exact computation of secondary stresses in minor structures cannot be undertaken or recommended. We have progressed to the point of regarding them in large structures, and even of attempting to remove by initial bending those caused by dead-load. We might, by introducing initial eccentricities in the large compression members, perhaps halve the secondaries from dead-load. In minor frames, if the designer understands secondary stresses and keeps them in mind in laying out his structure and in designing its members, he can keep their effects to a minimum without going through long and tedious calculation. He should make the compression members as shallow in the plane of the truss as other design considerations will permit. He should make gusset plates as small as possible.

Many of us cannot help feeling that a wide gusset plate strengthens a structure. Even in mill-building trusses where a stout kneebrace must take nearly all the wind stress, a big gusset plate riveted into the column makes the structure look more secure. There is no reason, however, why the coming generation of structural engineers should not have the advantage of a clear mental picture of secondary stress action and an understanding of the factors which influence it.

"Modern Framed Structures," Vol. II, contains considerable data from computation of secondaries. Maney's short cut of the slope-deflection method is the most rapid method I have seen in print, but that is not generally available for class-room use. Nevertheless the instructor in structural engineering could send his men out fairly well prepared to analyze secondary stresses or to minimize them in design, if it were not for the chorus of successful graduates of the middle ages, who tell the young engineer, "we never compute them." In late years, this has been somewhat overcome by the publicity given the secondary stress computations on several large bridges, and the interest that the design offices of large bridge companies are showing in the subject.

Your editorial and more discussions in the future will do much to help the instructor who is trying to make a class look upon secondary stress calculations not as advanced drill in calculus trigonometry and algebra but as a fundamental for men who are going to make structural design their life work.

ALBERT SMITH,
Chicago, Dec. 13, 1923. Consulting Engineer.

Public Service Discouraged

Sir—I have been reading with a great deal of pleasure the articles that you have been presenting from time to time relative to the irrigation problems of the West, and more particularly with reference to the present "business attitude" of the Secretary of the Interior in his dealings with the Reclamation Service. As I have devoted much time in the past to the passage of the original Reclamation Act, and served thereunder for a term of years, and live in arid America, I am, of course, keenly interested in the present situation.

To my mind, the most serious aspect of this Reclamation situation lies in the fact that if high-grade men like Arthur P. Davis and F. H. Newell can be utilized for the creation of a great, meritorious organization, which subsequently is seized by politicians to be operated as a part of a machine for party benefit, then it is basically discouraging to attempt similar organization efforts with such institutions as federal roads, swamp reclamation, harbor improvements, forestry and the like. This discouragement not only applies to competent young men entering the public service, but to such work as we are endeavoring to do through our great commercial organizations. For instance, the Los Angeles Chamber of Commerce has very active committees that are endeavoring to build up legitimate public sentiment in favor of such projects as the Colorado River development, and when they are confronted with a situation such as has been developed, they naturally are discouraged in their efforts.

For these and other reasons, I think that you are fully

justified in using the great influence of your paper in persistently and vigorously condemning any such action on the part of public authorities. J. B. LIPPINCOTT,
Consulting Hydraulic Engineer.

Los Angeles, Calif., Dec. 5, 1923.

Ethics and Success

Sir—Your editorial, "An Experiment Worth Trying," of some weeks ago prompts certain reflections.

Probably the yet-to-be-unearthed Tel-el-Amana clay tablets, or the picture writings of prehistoric races, will on deciphering be found to contain well-meant advice to the aged engineer and architect, on how to get a job honorably, and the high ethical standards that ought to prevail in securing it.

The doctor, the lawyer, the dentist, all would starve to death if they lived according to the old theory of occupying a chair in their office and patiently waiting for customers. The practising engineer is in the same category: he must *get* the business.

Assuming "fitness" and "character," he must *make friends*, not alone those of family and boyhood, for rarely can they be counted upon; but the friends made through personal worth and their willingness to introduce, where introduction is of value, and in some cases even personally provide the start.

Competition is the keynote of the day, and that is inevitable throughout every year of the engineer's life, but there can be proper competition and *indecent* competition, and engineers have themselves most to blame for the latter.

A municipal board awakens to the need for an improved water plant, sewage works, refuse disposal system, modern pavements, etc. A local engineer may be quite worthy and even competent, but at the last election he worked for Councilman Jones, so as said Jones is in the minority, Mr. Engineer is out of it. Informal word goes out through the press and the board is swamped with letters from 1,000-mile range, "Me"—"Our Firm"—"My Esteemed Friend"—"We will be glad to advise you briefly without charge"—"Our experience is superlatively beyond that of all our confreres"—etc., ad nauseum.

What happens? The board is drowning; some active member says, call for engineering proposals; and that there may be a semblance of fairness, they do so upon a "Specification of Needs." And what a specification!

Then the deluge; every good-for-naught engineer (and unfortunately a few good) files his proposal and supporting data, and begins his drive to secure votes in the board. The board, usually an unremunerated body, has neither knowledge nor time for real investigation of merits, and with the fear of voters at the next election, if attention is given to other than the lower bidders, either throws up the job, or selects chiefly on the basis of insistent nerve and cheapness, thereby failing often to secure the competent man, and in the long run, putting the community to much greater gross expense.

This is no fancy picture, but a common occurrence.

The writer offers no cure, though absolutely out of sympathy with the method, which possesses no redeeming feature.

If engineering is to be considered a profession, and if the engineer is to be looked upon as one worthy to give, and charge for, advice, such practices must end.

The card in technical journals, papers before professional societies, experiments made and written up, attendance at and participation in engineering meetings, all help, but do not bring much bread and butter.

Membership and active service in civic organizations, appearances before municipal bodies, for other than self-exploitation, are excellent.

Letters of introduction to parties having work in charge, or responsibility for it, are perhaps the most powerful aids to landing the job, while in absence of such possibility a frank request for interview, or dignified offer of services and simple statement of qualification, with a few names for reference, may sometimes bring a reply and once-in-a-while land a job.

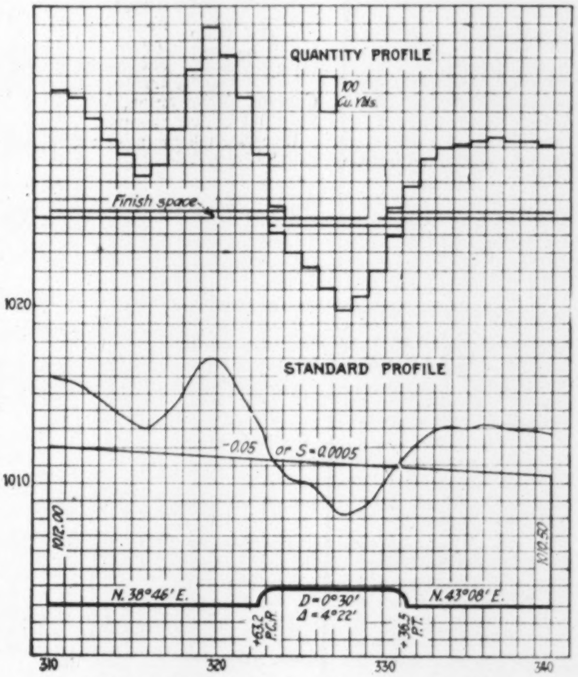
One piece of work well done usually leads to others.

In closing, at the risk of the senile charge, let the writer say, while much unfortunate fact exists as to contrary practice: "Ye cannot serve two Masters."

New York City, LOUIS L. TRIBUS,
Dec. 20, 1923. Tribus & Massa, Engineers.

Quantity Progress Profiles

Sir—The disadvantages of showing monthly progress of railroad or canal construction in colors or hatching on the standard profile platted on either plates "A" or "B" are well known. The distorted relation between elevation and volume, necessity of showing "finishing" as well as bulk movement of material, different methods of construction under different conditions, irregularity in application of force in different months, and the different free-hand styles or personal equations of the various resident engineers who compile the progress are the most conspicuous of these.



QUANTITY PROGRESS PLATTED SEPARATELY

Some fifteen years ago when the writer was in Idaho he was shown a progress profile in use on irrigation construction, of which the enclosed is a rough sample, made from memory. The system used was different hatching for each month's progress on the upper or quantity profile, made on transparent paper. Prints were taken from this, as required.

It seems that the quantity profile will give a more accurate view of progress than to hatch or color the lower profile; that the method is feasible for use on canal construction, and on plate "B" is adapted to railroad construction on light grades and not to irregular ground, but for mountain work would be impractical or would require the full width paper instead of the usual half width.

It is also evident that the quantity profile could not be platted until after the quantities had been computed and that probably considerable extra work and expense are involved.

In some twenty years of construction experience, the writer has never seen a satisfactory progress profile using the standard platting, and would like to learn from actual users their ideas on the "quantity profile" and whether the benefits from this same have warranted the additional trouble before putting it to actual use.

Nov. 24, 1923. Cope Rand Means Co., Engineers.
San Francisco, Calif., H. S. MARTIN,

News of the Week

CURRENT EVENTS IN THE CIVIL ENGINEERING AND CONTRACTING FIELDS

News Brevities

The Municipal Docks and Terminals of Jacksonville, Fla. will earn a net profit of $80,000 this year according to an estimate made by the general manager.

The Annual Convention of the County Commissioners of Ohio will be held at the New Southern Hotel, Columbus, Feb. 5 and 6. This meeting will be followed by the convention of the Ohio Engineering Society, which will be held at the same hotel Feb. 7 and 8.

Col. Frederick Stuart Greene, New York State Superintendent of Public Works, it is understood will advocate in his recommendations to the legislature a tax on the sale of gasoline, which it is estimated would provide a fund of $20,000,000 yearly which could be used for maintenance of state and county highways, and render unnecessary legislative appropriations.

Report From the Contractor's construction camps at the Moffat Tunnel in Colorado stated that on Dec. 4 a total of more than 1,000 ft. had been driven in the two headings. The pioneer heading at the west portal had been advanced 654 ft. and the pioneer heading on the east end 400 ft. At the west end the bore is now in hard rock and since passing the point where timbering was necessary much more rapid progress had been made.

A Resolution Adopted by the Senate provides for extending the scope of the special deeper waterway committee of the Senate so as to provide for House participation in its membership. The resolution authorizes such a joint committee to continue the work already done by the Senate committee in investigating the problem of the 9-ft. channel from the Great Lakes to the Gulf of Mexico. Included in the proposition is the matter of the navigability of the Ohio and the Missouri rivers.

The Presidential Nomination of George K. Burgess to be director of the Bureau of Standards was confirmed by the Senate on Dec. 18. The Senate also confirmed the nomination of C. L'H. Ruggles to be assistant to the Chief of Ordnance with the rank of brigadier-general and of John W. Joyes to be assistant to the Chief of Ordnance with the rank of brigadier-general, and of Samuel McRoberts and John R. Delafield to be brigadier-generals in the Officers Reserve Corps.

The Spavinaw Water Project under construction to furnish water from the Ozark Mts. to Tulsa, Okla., is 70 per cent complete. The gravity concrete dam of 55 ft. maximum height on the Spavinaw Creek is nearly finished, the 10,000-ft. 84-in. tunnel will be completed by Feb. 15, 1924, and the 53 miles of 54- and 60-in. reinforced-concrete pipe line and pumping station at the end of pipeline should be completed in May, according to W. R. Holway, engineer in charge of the construction.

Accident on London Tube Subway Stops Traffic

In enlarging the diameter of the City & South London R.R., one of the first of the "tube" subways of London, England, an old storage well or cistern was pierced, causing an inrush of sand and water. This flow of material caused a great cavity to form, so that water and gas mains and electric conduits were broken. The gas finally exploded and blew up a section of the street, Newington Causeway, about 30 x 20 ft., but no harm was done before the broken main was shut off. The 18-in. tunnel enlargement was being carried on while traffic was maintained in the original tube, but after the accident all traffic stopped, arrangements being made to handle the passengers on adjacent bus lines.

Traffic was also interrupted temporarily on the Southern Ry., which crosses the street at this point, in order that the bridge foundations might be inspected, but it was found these had not been disturbed by the slide or the explosion.

Philadelphia Sesqui-Centennial Plans Suspended

Work for the sesqui-centennial exhibition in Philadelphia has been definitely suspended until after Jan. 1, 1924, when the new city administration in Philadelphia goes into office. Col. John Price Jackson has resigned as executive director of the Exhibition Association, and the salaried personnel has been reduced to three persons. Suspension of all work came during the unsatisfactory campaign to raise $5,000,000 by popular subscription, in addition to the $1,000,000 previously subscribed. It was precipitated by Mayor Moore's opposition to the plans of the Association. The mayor declared that the Association's plans (*Engineering News-Record* of Sept. 6, 1923, p. 403) though modified from the original proposals for an exhibition, were still too elaborate and extensive. Mayor-elect Kendrick has intimated that he is favorable to the sesqui-centennial exposition.

Agreement Makes New Construction Possible at New Orleans

By an agreement with the City of New Orleans the Louisville & Nashville R.R., has ceded to the Dock Board property along the levee at St. Joseph St., which has been the subject of dispute as to title for a number of years. In return, the railroad company receives assurance of undisputed rights to the land which it occupies back of St. Louis St., upon which it will now erect a storage warehouse at an estimated cost of $750,000.

The New Orleans Dock Board will erect a wharf and shed along the levee property which it has acquired, and which is expected to cost about $1,000,000.

New Hudson River Bridge Project For New York City

Plans for a highway bridge across the Hudson River in the upper part of New York City have been submitted to the Port of New York Authority by Governor Silzer, of New Jersey. The project was developed by O. H. Ammann, formerly deputy chief engineer of the New York Connecting R.R. It provides a single-span suspension bridge at Fort Washington Point, on a line lying between 178th and 179th St., New York, reaching the New Jersey bank at Fort Lee. The main span is 3,400 ft. long and the side spans each 700 ft. Double eyebar chains are the carrying members. They are spaced 90 ft. apart and provide for a roadway width of 80 ft. on the main deck, with footwalks outside. This main deck is assigned to highway use, and accommodates eight lines of vehicles. Four electric-railway tracks are placed on four narrow cantilever lower decks formed by bracketing out to either side of the posts in both stiffening-truss planes. The truss depth is unusually small, being only 35 ft.; the top chord is at the level of the main deck and the bottom chord at the level of the lower edge of the trolley brackets.

Mr. Ammann estimates the cost of the structure at $30,000,000 and its time of construction at four years. He claims that it will give quicker relief to cross-river traffic than any other crossing proposed. In conjunction with the existing Washington Bridge across the Harlem River it will provide a direct connection between New Jersey and the Westchester and New England regions without carrying the traffic through the congested midtown section of New York. Tolls are estimated to be sufficient to pay fixed and operating charges even in the first year after completion.

Kansas Engineering Society Holds Convention at Wichita

Outstanding features of the annual convention of the Kansas Engineering Society held in Wichita, Dec. 11-13, were an address by P. L. Brockway, city engineer of Wichita and president of the association, and a talk on aerial photography by Major L. B. Roberts. Mr. Brockway urged greater participation in civic affairs by engineers, asserting that engineering was closer related to business than any of the professions. Major Roberts explained in detail the use of aerial photography in reconstructing existing maps. Another interesting speaker was Clark Jacoby whose discussion of flood protection was directed mainly to rivers near Wichita.

The first day of the convention was devoted to various officers' and committee reports. Committee reports occupied most of the morning and afternoon sessions of Dec. 12. A highway symposium was the principal feature of the third day's session.

Dr. Elwood Mead Returns From Extended Trip Abroad

Returning from a nine-months trip to Australia and the Holy Land where he served as reclamation consultant for the British Government, Dr. Elwood Mead of Berkeley, California, noted irrigation engineer. began to serve Dec. 20 as a member of the special advisory committee appointed by Secretary of the Interior Work to study government reclamation.

Dr. Mead arrived in New York Dec. 19 from Jerusalem and went to Washington the next day, calling upon Secretary of the Interior Work before joining the committee. Dr. Mead was employed by the Australian Government for many years to organize the settlement activities on its irrigated lands and during his recent trip served on a British Commission to investigate the difficulties that have developed in connection with Australian reclamation. He also spent a month in Palestine where at the request of the Zionists he traveled over the country with a view of passing on the advisability of reclamation projects in the Holy Land.

Dr. Mead left Dec. 20 for Berkeley where he is a professor of rural institutions of the University of California and will join the special advisors when its members begin next month a tour of a number of reclamation projects in the West. Following this visit of the committee he will return with them to Washington and assist in the preparation of the final report of the committee that will be made to the Secretary of the Interior to be later submitted to the President and to Congress.

Convict Road Force of 102 Men Moved to New Job

The California Highway Commission on Dec. 5 and 6 moved 102 prisoners several hundred miles from a road camp on the Klamath river in Siskiyou county to Briceburg on Merced river where the convicts will begin a two-year job in building the state highway through the rugged Merced river region into Yosemite National Park.

The men and their equipment were moved from their Klamath river camp in trucks to the railroad station where two day coaches and two baggage coaches were waiting on a siding. Baggage, camp equipment and commissary were loaded into these cars which were then attached to a regular Southern Pacific train about noon. At Merced they were transferred to the Yosemite Valley R.R. arriving at their destination on the afternoon of the second day.

To Eliminate Grade Crossings

Following a joint conference between the state highway commissioner, the governor of Alabama, and officials of practically all railroads operating in Alabama, an agreement has been reached where the highway department will inaugurate a grade-crossing elimination program, in which the state will pay 50 per cent and the railroad 50 per cent of the cost. The agreement require only the formal approval of the chief executives of the railroads before it can be put into effect.

Minnesota Metropolitan Planning Commission Scheme

Progress on the formation of a Metropolitan Planning Commission for Minneapolis, St. Paul, and vicinity was made at a second meeting devoted to the subject held on Dec. 13 under the leadership of the Northwestern Section of the Am. Soc. C. E. With G. H. Herrold as acting chairman, the meeting on Dec. 13 arranged for two committees, one on organization and one on a tentative boundary line for the district, the latter consisting of E. H. Hewitt, Minnesota Chapter, A.I.A., A. M. Best, assistant to the vice-president, N. P. Ry., representing the Northwestern section, Am. Soc. C. E., and James T. Elwell, president, Minneapolis City Planning Commission. The plan is to have Metropolitan Planning Commission self-organized, but with a view to getting legislative legalization of the commission and its work.

Highway Traffic Officer

This is one of the Pennsylvania State Highway Department's motorcycle patrolmen. The innovation of detailing a special highway police force under the highway and not the police department, has but recently been established.

Milwaukee Zoning Ordinance Upheld by State Court

The constitutionality of the zoning ordinance of Milwaukee, Wis., was upheld by the State Supreme Court on Dec. 11. The decision upholds zoning as an exercise of the police power and denies that it results in taking private property for public use in such a way that compensation should be paid. The plaintiff sought to compel the building inspector of Milwaukee to grant a permit for a dairy building in a residence district from which business is excluded by the zoning ordinance. The opinion in part, was as follows:

"If, in the prosecution of governmental functions, it becomes necessary to take private property, compensation must be made, but incidental damages to property resulting from governmental activities or laws passed in the promotion of the public welfare is not considered a taking of the property for which compensation must be made.

"This is no new idea, although it has but recently taken the form of legislation. Everyone who has observed the haphazard development of cities, the deterioration in the desirability of certain residential sections by the encroachment of business and industrial establishments upon and into such sections, resulting in the consequent destruction of property values and in the ultimate abandonment of such sections for residential purposes has appreciated the desirability of regulating the growth and development of our urban communities.

"Fresh air and sunshine add to the happiness of the home and have the direct effect upon the well being of the occupants. It cannot be denied that a city systematically developed offers greater attractiveness to the house seeker than a city developed in a haphazard way. The one compares to the other as a well ordered department store compares to a junk shop."

ArmyEngineers Report Adversely on Tombigbee Deepening

Washington Correspondence

An adverse report has been made by army engineers on the project to deepen the Tombigbee River in Alabama and Mississippi and connect it by a canal with the Tennessee River. As a result of a preliminary survey made in accordance with the rivers and harbors act of 1922, the engineers have reported to Congress that the project would be costly, that 63 locks would be required, thus making it cumbersome, and that the proposed waterway would practically parallel the Mississippi River without material benefit to commerce.

While the item for the survey was included in the rivers and harbors act on the suggestion that commerce would be benefitted by the improvement, one of the other suggestions put forward by advocates of the project was that by connecting the Tombigbee and Tennessee rivers a means of relieving floods in the Mississippi River would be provided as flood waters from the Tennessee could be diverted to the Gulf through the canal. No mention of this subject is made in the engineers' report.

Work Progresses on Camden Terminal of P. & R.

Company Officials Confident New Terminal Will Be Ready for 1924 Seashore Season

Special Correspondence

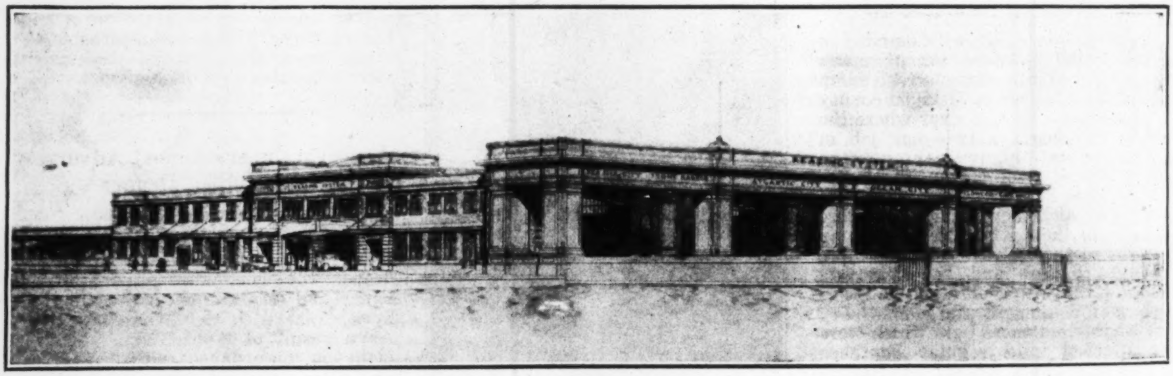
Rapid progress is being made on the construction of the new Camden, N. J., terminal of the Philadelphia and Reading Ry.'s seashore lines. Work on the laying of tracks, construction of the fill-in, the piling, erection of steelwork, used in connection with the terminal, signal tower and battery house to be butterfly shelters, and building of the has progressed so satisfactorily that officials of the company are confident the terminal will be ready for service by the opening of the seashore season in 1924.

The new terminal will be a thoroughly modern two-story structure of steel frame and brick with stone trimmings, on a concrete foundation built on piles. It will house the electrically-operated ferry slips, the trainshed containing 14 tracks, a concourse 328 ft. long and 105 ft. wide, waiting rooms for men and women, a restaurant, and the offices of the Delaware River Ferry Co. and of the Philadelphia and Reading Ry.'s seashore lines. The office building, on the land side of the terminal, will be a two-story structure 115 ft. long and 42 ft. wide. A brick power house is located at the opposite end of the concourse.

The hydraulic fill of 319,388 cu.yd. under the station proper, and the fill of 30,000 cu.yd. at the Jackson Street end of the terminal are now practically completed. Most of the creosoted wood piling used in the ferry slips is in place. All of the structural steelwork over the concourse has been erected, and a portion of the steelwork over the headhouses has been erected. All tracks, both those in the train shed and those in the yard adjacent, have been laid, and work has been completed on the intricate switches where the terminal tracks converge. The butterfly shelters over the train platforms are well under way.

The signal tower and battery house, which will be the largest on the Reading system, is about 50 per cent completed. It will be a three-story building of brick and concrete, 53 ft. long and 17 ft. wide. The first floor will be used for the storage of signal equipment and for the heating plant. On the second floor will be the generator and battery racks, the relay racks, and the general working apparatus of the tower. The third floor will be occupied by the lever room containing 75 lever frames which will control all of the traffic in and out of the terminal.

The ferry slips at the foot of Chestnut Street, on the Philadelphia side of the river, have been electrified in anticipation of the opening of the new terminal.



ARTIST'S SKETCH OF PHILADELPHIA & READING $3,000,000 CAMDEN TERMINAL FOR SEASHORE LINES

Wheeling, W. Va., Accepts Balmer Refuse Incinerator

The 70-ton garbage and refuse incinerator of the Balmer type, the first of the kind in the United States, has been accepted by the city authorities of Wheeling, W. Va. Some weeks before acceptance the plant was tested by H. L. Campbell, city engineer, and G. R. Kress, of Clark & Kress, a local engineering firm. In the report on this test it was stated that during a trial extending through a period of five or six days 14.84 tons were burned in 8 hr. or at the rate of 44.5 tons in 24 hr. —against the guarantee of 70 tons. The report contained no recommendation as to acceptance. Between the time the contract was let and the test made a city election resulted in a change of administration, including the mayor, at least a majority of the city council, and subsequent to the election, the city manager and city engineer. This change was considered locally to be unfavorable to the incinerator but, as stated, the plant has been accepted by the city.

Right to Double Wanaque Water Development Granted

The right to develop the Wanaque water supply storage to its full capacity of some 100 m.g.d., doubling the original amount, has been granted to the North Jersey District Water Supply Commission by the New Jersey Board of Conservation and Development. The commission has built the foundations for a dam at Midvale designed to store water to give 50 m.g.d. and work is well along on a contract for an 8-mi. tunnel to form a part of the conduit from the reservoir to Newark, for which city the Commission is carrying out the work. Recent decisions of Paterson and other municipalities to join the Wanaque project led to the application for the enlarged development just granted.

Drainage Congress Announces Program for Meeting

Papers listed for the program of the National Drainage Congress, at St. Louis, Jan. 16-17, are numerous and of varied character, as shown by the following partial list: "Drainage of Horicon Marsh," E. R. Jones, University of Wisconsin; "Drainage in Iowa," C. C. Ayers, Iowa State College; "Future Work in Louisiana," A. T. Dusenbury, New Orleans; "Results in North Carolina," Dr. J. H. Pratt; "Drainage Development in Relation to Rainfall and Wild Animal Life," E. V. Willard, Minnesota Commissioner of Drainage; "Adapting the Method of Reclamation to the Land," J. T. Stewart, St. Paul; "Expansion of Farming Area," Dr. L. C. Gray, U. S. Dept. of Agriculture; "Improved Methods of Long Term Financing," H. C. Wallace, Secretary of Agriculture; "Relation of Colonization to Reclamation," F. H. Newell, Washington, D. C.; "Cost and Cost Finding," L. S. Hidinger, Memphis, Tenn.; "What Drainage Has Accomplished," S. H. McCrory, U. S. Dept. of Agriculture; "Crops on Peat and Muck Lands," G. R. S. Elliott, University of Minnesota; "Fluctuation of Ground Water Level," S. A. Norling, Denmark; "Outlet Drainage," E. R. Jones, University of Wisconsin; "Land Reclamation and Game Reserves," C. H. Young, Muscatine, Iowa; "Wing Dams and Levees in the Mississippi Valley," Col. Potter, Mississippi River Commission; "Oil Engines for Dredges and Draglines," Geo. B. Massey, Chicago; "Drainage Legislation," R. B. Oliver; "Progress in the Everglades," F. C. Elliott, chief engineer, Okeechobee Project; "The Policy of the Interior Department in Regard to Western Reclamation," D. W. Davis, Chief of Bureau of Reclamation; "Value of Reclamation to the Railroads," Wm. Sproule, president, Southern Pacific R.R.

Highway Course in Tennessee

A short course in highway engineering for highway engineers is to be held at the University of Tennessee Jan. 7 to Feb. 2. The course is to be given under the joint auspices of the university and the state highway department. The course will include mathematics, computation and drawing, highway surveying, materials testing, a general course in highway engineering, highway economics, transportation, and highway organization.

Demolition Contracts Awarded for Delaware River Bridge

Award of four contracts for demolition work was made by the Delaware River Bridge Joint Commission at its meeting in Philadelphia on Dec. 21. Three of the contracts will be performed at a total cost to the commission of $17,863, while the fourth contract is on a basis that the contractor will pay the commission the sum of $2,812, making the net cost of the four contracts, $15,051. The demolition is to prepare the sites of the approaches for the bridge on the two sides of the river. Bids were received on nine sections, four being on the New Jersey side of the river and five on the Philadelphia. Three of the Philadelphia bids and two of the Camden bids were rejected, and these portions of the work will be readvertised for bids to be received on Jan. 16, 1924.

Sacramento's New Water Filters To Be Started Dec. 31

Sacramento's new 48-m.g.d. water filtration plant is to be put in operation New Year's Eve. President Coolidge will press a button in the White House connected by wire with the control board at the filter plant. A three-day celebration in Sacramento will follow.

Engineering Societies

Calendar

Annual Meetings

FEDERATED AMERICAN ENGINEERING SOCIETIES. Washington, D. C.; Annual Meeting, Washington, D. C., Jan. 10-11, 1924.

AMERICAN ROADBUILDERS' ASSOCIATION, New York City; Annual Convention, Chicago, Jan. 14-18, 1924.

AMERICAN SOCIETY OF CIVIL ENGINEERS, New York City; Annual Meeting, New York, Jan. 16-18, 1924.

ASSOCIATED GENERAL CONTRACTORS OF AMERICA, Washington, D. C.; Annual Meeting, Chicago, Ill., Jan. 21-24, 1924.

ENGINEERING INSTITUTE OF CANADA, Montreal; Annual Meeting, Montreal, Jan. 22, and Ottawa, Jan. 23, 24, 1924.

AMERICAN CONCRETE INSTITUTE, Detroit, Mich.; Annual Meeting (20th anniversary), Chicago, Ill., Feb. 25-28, 1924.

AMERICAN RAILWAY ENGINEERING ASSOCIATION, Chicago, Ill.; Annual Meeting, Chicago, March 13-15, 1924.

AMERICAN WATER WORKS ASSOCIATION, New York City; Annual Convention, New York City, May 19-21, 1924.

The **Minnesota Federation of Architectural and Engineering Societies** will hold its third annual convention Feb. 1 and 2, 1924 at Duluth.

The **Dayton, Ohio, Section of the** American Society of Civil Engineers has elected the following officers: J. H. Kimball, president, for one year; and J. K. Grannis, vice-president, for two years. C. D. Putman, vice-president, and C. H. Eiffert, secretary-treasurer, remain in office for another year. At this meeting, E. W. Lane, who has just returned from three years' work in China, gave an interesting talk on "Flood Problems on the Huai River."

The Engineers' Club of Trenton, N. J., announces the opening of its new headquarters in the Stacy-Trent Hotel, Trenton. H. G. Acock is secretary of the club.

The Engineers Subdivision, Chicago Association of Commerce, Dec. 19, elected the following officers: J. L. McConnell, chairman, and Frank D. Chase, vice-chairman.

The South Dakota Engineers' Society will hold its annual meeting at Huron, So. Dak., Jan. 9 and 10. The annual dinner and some of the sessions will be held jointly with the Associated Contractors of South Dakota. R. E. Bragstad, Aberdeen, So. Dak., is secretary of the engineers' society; H. Rettinghouse, of Sioux Falls, is president.

Personal Notes

RIVERDALE CONSTRUCTION CO. announces change of address from 1440 Broadway, New York City, to 2511 Grand Central Terminal, New York City.

IVAN E. GOODNER, Olympia, Wash., chief engineer of the department of conservation and development in the state of Washington, has resigned to go into private practice in California, and his resignation also severs his connection as chief engineer of the Columbia Basin state survey. Mr. Goodner has served as chief engineer of the Paradise Irrigation District in California, assistant division engineer of the Miami Conservancy District, Dayton, Ohio, and chief engineer of the Columbia Basin irrigation project in Washington.

ALLEN CLARDY has been appointed county road engineer for Christian County, Kentucky, with headquarters at Hopkinsville, Ky. He succeeds J. H. Dillman who had been county engineer for a year.

D. W. COLE, formerly of Marietta, Ga., who was in the U. S. Reclamation Service from 1904 to 1919, is now connected with the engineering department of the Electric Bond & Share Co., New York City. In the U. S. Reclamation Service, Mr. Cole was engineer on the construction of the Shoshone Dam in Wyoming, engineer in charge of the Truckee-Carson irrigation project and construction of the Lahontan Dam in Nevada, and senior engineer and resident manager of the Boise project, at which time he was senior engineer of the Western district of the Reclamation Service. He has also been engaged in various municipal water-works and in power developments.

P. F. AUER, who is now located in Little Rock, Ark., as resident engineer for James Stewart & Co., general contractors, changed to this work from being field engineer for the St. Louis Coke & Chemical Co.

CLAIR A. INSKEEP has changed location from county maintenance engineer of Logan County, Ohio, to civil engineer on surveys and construction for the Biscayne Engineering Co., and his new address is Miami, Florida.

JAY J. MORROW, Corps of Engineers, has been made a brigadier general in the Engineer Officers' Reserve Corps. General Morrow is governor-general of the Canal Zone. He has served as chairman of the Alaska Railroad Commission, and as chief engineer of the First Army, A. E.E F., in France.

QUINCY B. NEWMAN has been appointed chief engineer of the U. S. Coast Guard, and his appointment was confirmed by the Senate on Dec. 19.

LEWIS E. ROBERTS, formerly resident engineer on levee and drainage work with T. N. Jacob of St. Louis, Mo., has gone into private engineering practice in Peru, Ind.

JAMES H. RYAN is now bridge design engineer for the Missouri State Highway Department. He was formerly structural draftsman with the Shoemaker Satterthwait Bridge Co. at Pottstown, Pa.

CHARLES H. OSBORNE, builder and consulting engineer, has been appointed building inspector for Baltimore by Mayor Howard W. Jackson. Mr. Osborne held the same position several years ago. He succeeds J. Frank Crowther.

J. H. BRAY, recently assistant engineer for Red River County, Texas, has been appointed county engineer of Van Zant County, at Canton, Texas.

Obituary

JAMES FINLAY, for many years erector superintendent of the Dominion Bridge Co., in Canada, died in Vancouver, B. C., Dec. 11. One of Mr. Finlay's most notable achievements was the placing of the two large spans of the Canadian Pacific Ry. bridge over the St. Lawrence River at Lachine, Que., in 1913.

LIEUT.-COL. GEORGE E. GIBSON, engineer, Albany, N. Y., died at his home in that city Dec. 19, aged 43 years. Colonel Gibson served through the war as engineering instructor at Madison Barracks.

JAMES E. HOOD, Mack, Colo., general manager of the Uintah Railway Co., Colorado, died Dec. 16 from an accident received on the line Dec. 13. Mr. Hood was born in Pennsylvania in 1869 and was a graduate of Allegheny College, Pittsburgh. His early service was in the engineering department of the Erie R.R., for which road he was rataed division engineer. He entered the service of the Great Northern Ry. and worked on the construction of that line into Spokane and Seattle from Havre, Mont. In 1910 he was appointed superintendent of the Chicago, Milwaukee & St. Paul Ry. During the war he was commissioned a lieutenant, going to Siberia where he was promoted through the various grades to major. He was made general manager of the Uintah Ry. in 1921.

From the Manufacturer's Point of View

A Point of Contact
Between Maker and User of
Construction Equipment and Materials

Income Tax Returns Show Size of Various Industries

Corporation returns to the Bureau of Internal Revenue show that 356,397 concerns made tax returns in 1921. Of that number, 171,239 had a net income of $4,336,047,813. On that amount they paid a total tax of $701,575,432. There were, however, 185,158 of the corporations reporting that had deficits rather than income. The aggregate of those deficits was $3,878,219,134. Detailed figures for certain industries related to the engineering field are as follows:

Industry	No. of Corporations	Net Income	Total Tax
Chemicals:			
Paints and varnishes	664	$7,591,201	$1,217,053
Quarrying:			
Stone	493	5,955,125	894,934
Clay, sand, gravel	720	5,428,312	920,448
Stone, clay and glass:			
Cut building stone, etc.	1,495	28,304,171	4,724,338
Brick, tile, terra cotta	1,600	20,300,342	3,586,023
Glass and glass products:			
Plate and window	552	20,423,723	3,611,746
Combinations, of stone, clay and glass manufacture	34	738,263	109,521
Rail transportation:			
Steam railroads	609	291,113,607	29,650,857
Electric railroads	458	33,843,158	3,847,446
All other railroads	394	30,861,445	3,816,544
Total rail transportation	1,461	355,818,210	37,314,847
Other public utilities:			
Electric light and power companies	1,900	61,207,294	7,754,355
Gas companies	569	22,008,381	3,173,271
Telephone and telegraph companies	3,949	113,040,515	12,912,536
Waterworks	1,459	11,827,922	1,193,438

The gross income of corporations in the various groups is shown by the following:

Industrial Groups	Total No. of Corporations Reporting	Gross Income
Mining and quarrying	17,660	$3,888,876,370
Transportation and other public utilities	19,105	9,000,656,163
Chemicals	5,924	3,878,880,302
Stone, clay and glass	3,681	953,756,897
Metal and metal products	15,536	9,805,138,797

Lumber Standardization Adopted By Unanimous Action

The national conference on lumber standards. held in Washington, D. C., Dec. 12 and 13, agreed to a generally satisfactory compromise on the vexed questions of the dressed thickness of standard boards and dimension. It was unanimously voted to set up a standard of $\frac{25}{32}$ in. for standard boards, with $\frac{26}{32}$ in. as extra standard; and a standard of $1\frac{5}{8}$ in. for dimension and $1\frac{3}{4}$ in. for extra standard dimension.

The recommendations of the Central Committee on Lumber Standards provided for a minimum standard. The adoption of the "extra standards" was made to meet the views of the retailers who favored $\frac{26}{32}$ in. as the single standard for boards and $1\frac{3}{4}$ in. for dimension. Secretary Hoover characterized the action taken as "the greatest forward movement in the direction of public service ever made by the lumber industry."

The remainder of the Central Committee's recommendations were adopted with minor changes and the committee was instructed to proceed with the consideration of the question of short and odd lengths, rough-dry sizes, box lumber, mouldings and other subjects and report again next May.

Big Output of Motor Vehicles

Production reports totalling 325,125 cars and trucks made in November, submitted at the directors meeting of the National Automobile Chamber of Commerce Dec. 6, bring the 11 months output to 3,717,709 which indicates that the year's total will reach 4,000,000. This will be a gain of more than 50 per cent over 1922, which was in itself a record year.

Register Trade Marks Abroad, Commerce Dept. Urges

It has been one of the regrettable features of American trade abroad, according to the Department of Commerce, that until recently insufficient attention has been given to the means of protecting and reserving to the original owner the value attaching to a brand mark. Under the United States law a right in a trade-mark is obtained simply through continued use, without any further steps on the part of the originator of the trade-mark. In the majority of foreign markets, however, the right is regarded as being vested in the first person who makes public claim to the mark through registration with the local patent office.

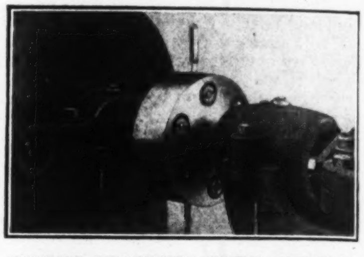
Even in those countries where consideration is given to the fact of prior use, and infringements may be contested under common law, the simple and relatively inexpensive process of registration of a trade-mark is a desirable thing, since it creates prima facie evidence of ownership in case of dispute and affords a basis for obtaining damages from infringing concerns. Trade-mark registration is decidedly less expensive than trade-mark litigation, and there should be included, as part of every enlightened export program, an examination of the means for protecting the value of the trade-mark in the new markets just as soon as the article begins to show promise of appreciable sales in the particular country.

Lining Up Turbine-Driven Pumps To Kill Vibration

Practical Suggestions Made for Leveling Bed-Plate and Securing Even Bearing of Coupling Faces

GEARED turbine-driven centrifugal pumps now used for supplying cities with water are less heavy than reciprocating pumps, and as they contain no unbalanced reciprocating masses they are also less apt to produce vibration, generally requiring less costly foundations. Because of their high rotational speed, however, great care must be applied to insure correct alignment. The following notes on testing for alignment embody practice recommended by the De Laval Steam Turbine Co., Trenton, N. J.

In handling a large bed-plate for the support of a geared turbine-driven centrifugal pump care should be taken to avoid distortion by shock in handling. Although the bed-plate may have ample depth and rigidity for its purpose when properly supported, cast-iron, like all other metals, is flexible and will distort appreciably under stress. It may even receive a permanent set so that it will be difficult to pull it back into its original alignment. It is therefore advisable to keep the machine on the skids on which it was originally shipped until it is placed on its foundation.



LINING UP UNITS WITH "FEELER" BETWEEN COUPLING FLANGES

LEVELING THE BED-PLATE

An easy way to level the bed-plate on its foundation is to place small steel plates with taper wedges under the edge of the bed-plate, driving up on the wedges until the proper alignment and level are obtained. These wedges should be placed from 12 to 15 in. apart on small machines, and 24 to 30 in. apart on large machines. The planed surfaces of the bearing brackets may be used as leveling pads after removing the bracket caps. After the leveling has been completed, however, tests should be made for correct alignment by examining the two halves of the flexible coupling to see that their faces are parallel and that the center lines of the shafts coincide. The couplings used in De Laval pumping units, as shown in the accompanying photograph, are accurately finished on the periphery and on the inside surface by means of a grinding machine at the factory so that they run perfectly true and can be depended upon in correcting alignment.

CHECKING COUPLING ALIGNMENT

When checking the alignment of a coupling the bolts can be removed so that the two halves are entirely free. First insert a leaf-gage or feeler between the two halves at a number of points; the space should be uniform around the circumference or should not vary more than 0.002 in. A steel straight-edge can then be placed across the two coupling halves and should have an even bearing on their surfaces. This checking by means of a straight-edge should be done at not less than four points evenly spaced around the circumference. If the coupling is not in correct alignment, it will not operate satisfactorily at high speeds, and will tend to produce vibration and strain in the bearings and shaft. Excessive wear of coupling pins or bearing is an indication of poor alignment.

When the alignment has been completed the bed-plate should be filled partly or wholly with cement grout in order to maintain alignment and prevent distortion by piping or other strains. Foundation bolts are not necessary, but may be advisable to assist in maintaining alignment. After the grouting has set the alignment should again be checked, as in rare cases the swelling of the cement causes a slight distortion.

In attaching piping to the pump care should be taken to see that the flanges fit properly. If they do not come parallel and do not meet they should not be pulled up with flange bolts, as this may strain the pump casing, bedplates and piping, and will invariably result in distortion, with possible vibration or breaking of pump casing or piping.

Business Notes

The Little Red Wagon Co., Omaha, Neb., announces that it has purchased the business of Stroud & Co. and will continue the manufacture of the Stroud line of road-making machinery, including elevating and blade graders, scrapers, dump wagons, plows and road drags.

Smith Engineering Works, Milwaukee, has opened a branch office at 50 Church St., New York in charge of Donald D. Barnes, formerly district manager in Chicago. Mr. Barnes is an engineer with wide experience in design of quarry and gravel plants. The Chicago office will be continued in the Old Colony Building under management of Victor H. Jones, formerly associated with American Blower Co.

C. B. Adams and **S. P. Holmes** have incorporated under the name C. B. Adams & Co., Chicago, to represent the Union Iron Works of Erie, Pa., manufacturers of steel water-tube and fire-tube boilers; the Erie Engine Works, of Erie, Pa., manufacturer of slide-valve engines; and the Sims Co. of Erie, Pa., manufacturer of water-heating apparatus.

Barber Asphalt Co. has installed a new power plant at its works in Maurer, N. J., to supply steam, electricity and compressed air to its three manufacturing units, the roofing plant, oil refinery and asphalt plant. The new building is 115 ft. long with boiler room 75 ft. wide and engine room 41 ft. wide. There are five 520 hp. boilers, and a 300 and a 500 kw. turbine. While the boilers are stoker equipped all but one unit are fitted for burning fuel oil, one of the company's products. Lockwood, Greene & Co. were engineers for the plant.

Seattle Machine Works announce that experiments on the Johnson airless injection Diesel engine have been completed. The company is now preparing to manufacture these machines for marine service, electric generating sets and contractors' equipment.

Equipment and Materials

New Heavy Duty Hoists

A new heavy-duty hoist, adaptable to cableways, tail rope systems and general haulage, has been added to the line of the Treadwell Engineering Co., Easton, Pa. The equipment is operated by electric motor and special attention has been given to the elimination of cast iron in the brake mechanism.

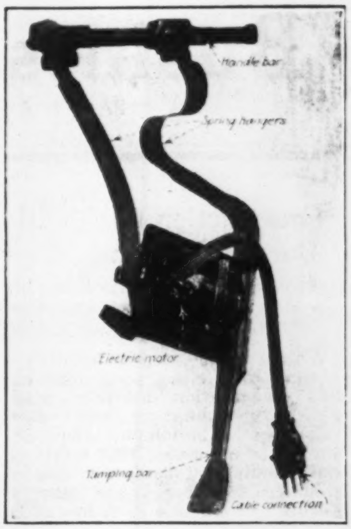
The frame is a gray-iron box type casting with motor and intermediate shaft bearings mounted on it, thus insuring perfect alignment. Bearings are of cast iron, of the pedestal type, and bearing caps are machined at the joints. All bolts are provided with lock-nuts. To insure absolute rigidity the bearings and pedestals are provided with machined tongues which fit into grooves in the frame. Gears are either of semi-steel or cast steel, with cut teeth.

The friction clutches are of the single-face cone type operated by a screw thrust. The drum consists of two heads or flanges bolted to and supporting a cylindrical shell of cast iron. Each drum is provided with one or two brakes, as ordered, of the differential type. For ordinary service hardwood blocks are used as the brake lining, but for heavy duty asbestos-treated blocks are substituted.

These hoists are built in four sizes equipped with electric motors of 100, 150, 225 and 300 hp. respectively, these ratings being based on a rope speed of 400 ft. per minute.

Electric Tie Tamper

The latest form of the Jackson electric tie-tamping machine, made by the Electric Tamper & Equipment Co., Chicago, delivers about 60 strokes per second, each stroke having a force estimated at 600 lb. This tamper is said to work well in stone, gravel, sand and cinder ballast. The revolving element of the motor is mounted on a nickel-steel shaft running in ball bearings and having at one end an unbalanced weight which revolves at 3,600 r.p.m. and sets up powerful vibrations in that end of the motor casing to which the tamping bar is bolted. The handle is attached to the motor casing by spring plates.



In moving, the tamper is not lifted but is dragged, its weight being carried on the curved spring. Current is furnished by a portable plant having a 5-hp. gasoline engine belted to a 1½-kw. 110-volt motor. This power unit, weighing about 500 lb., will operate four tampers and such other track tools as bond drills and rail saws. With a 250-ft. electric cable work can be done for a distance of 500 ft. with one set-up of the power unit, but longer cables may be used.

Publications from the Construction Industry

Revolving Car-Dumper — **Wellman-Seaver-Morgan Co.**, Cleveland, has issued an illustrated 8-p. bulletin on its revolving dumper for unloading railway freight cars of all sizes and capacities. The equipment consists of a cradle which, after the car has been clamped within it, revolves, dumping the contents in only a fraction of the time that would be required by other means of hand or mechanical unloading. The car-dumpers are designed for a normal capacity of 20 cars per hour.

Track Drainage—**W. S. Dickey Clay Mfg. Co.**, Kansas City, Mo., has issued a 60-p. booklet on the use of vitrified pipe for ordinary drainage of railway track, roadbed and yards, and also for the elimination of wet spots which make maintenance expensive. Numerous installations are illustrated. Incidentally the pamphlet deals with the use of this pipe for culverts, pile protection, well casing and small septic tanks at shops and stations.

Railway Station Heating—**American Radiator Co.**, Chicago, has issued a 16-p. illustrated pamphlet on the Ideal-Arcola boiler, radiator and hot-water circulating system specially designed for small railway stations which have no basement for a heating plant and where the agent is the only attendant. This system is applicable also for signal and interlocking towers and other small structures.

Business Side of Construction

FACTS AND EVENTS THAT AFFECT COST AND VOLUME

Construction Possibilities During the Coming Year

Probable Extent of 1924 Building Shown —Also Value of Plumbing, Heating, Lighting and Painting Jobs

With a $6,000,000,000 building year drawing to a close, some idea of the 1924 construction prospect may be gained from the figures shown herewith.

Commercial buildings formed 30 per cent of the estimated 1923 total; industrial buildings 9 per cent; residential buildings, 28 per cent and other engineering construction exclusive of buildings, 33 per cent.

Based upon the above percentages, the probable extent of 1924 construction in the classes mentioned, will be as follows:

Streets and Roads	$1,250,000,000
Industrial building	350,000,000
Commercial building	1,350,000,000
Residential building	550,000,000
Other construction	1,500,000,000

The money values of possible jobs in the estimated 1924 program will be as follows:

	Industrial Building	Commercial Building
Plumbing	$1,750,000	$27,000,000
Heating	12,600,000	67,500,000
Lighting	9,695,000	47,250,000
Painting	11,060,000	27,000,000

Present New York Building Wage Scale To Hold During 1924

The Building Trades Employers Association of New York City has decided to maintain during 1924 the same wage scale and bonus paid throughout 1923. A higher wage scale would perhaps hinder and in many cases block construction that is now needed. Present indications point toward intensive operations for the coming year. With increased activities in the construction lines ahead, there does not seem to be any likelihood of non-employment.

The United States Bureau of Labor reported in September that the cost of living this year was 75.4 per cent higher than 1914.

A table of wage increase over a period of nine years will show how this cost of living has been met and also how it has affected construction costs. The per cent increase in each trade since 1914, is shown as follows:

Kind of Labor	Daily Wage 1914	Daily Wage 1923	Per Cent Increase
Cement masons' laborers	$2.62	$7.50	186.2
Cement masons	5.00	10.00	100.
Bricklayers' laborers	3.00	8.00	166.6
Bricklayers	6.00	12.00	100.
Engineers, hoisting	6.00	12.00	100.
Carpenters (Bronx, Brooklyn, Queens)	4.50	10.00	122.2
Plasterers' laborers	3.25	8.50	161.5
Plasterers	5.50	12.00	118.1
Stone masons	4.80	12.00	150.
Derrickmen and riggers	4.00	9.50	137.5
Sheet metal workers	5.00	10.00	100.
Plumbers	5.50	10.00	81.8
Steamfitters	5.50	10.00	81.8
Tile layers	5.50	10.00	81.8

Large Contracts Let During Week

Among the week's announcements of contracts awarded in Construction News, pp. 347 to 356, are the following:

Power Station, Sumner, Wash., to Stone and Webster, Inc., $1,060,000.

High School, Brooklyn, N. Y., to Turner Constr. Co., $2,045,000.

Current Freight Rates Compared With 1921-22

Due almost entirely to reductions in freight rates, made both voluntarily and by order of the Interstate Commerce Commission, the freight bill of the people of this country was approximately $431,000,000 less during the first eight months this year than it would have been if the rates existing during the corresponding period of 1921 had remained in effect.

Compared with the rates in effect during the first eight months of 1922, the freight bill this year represents to the shippers of this country a reduction of approximately $282,750,000 due to the voluntary reduction on agricultural products that became effective on Jan. 1, 1922, to the general rate reduction of 10 per cent effective on July 1, 1922, and to a number of individual readjustments in freight rates.

These estimates, which are made by the Bureau of Railway Economics from reports filed by the carriers with the Interstate Commerce Commission, are based on the freight traffic transported by the carriers from Jan. 1 this year to Sept. 1, which has been the heaviest in history.

Business Briefs

Call money steady at 4¾ per cent as of Dec. 21.

Time money market dull with rate at 5 per cent.

Commercial paper rate 5 per cent with very little in the market.

Foreign exchange declines. Sterling, $4.34⅜; last week, $4.36⅞; year ago, $4.64⅜. Franc, $0.0510½; last week, $0.0530½; year ago, $0.0743¾. Lira, $0.0431½; last week, $0.0435; year ago, $0.0512½.

Bids Wanted on Big Jobs

Among the projects on which bids are either asked or will soon be called for in Construction News, pp. 347 to 356, are the following:

Hotel, Minneapolis, Minn., Calhoun Beach Holding Co., $1,300,000.

Apartment, New York, N. Y., I Kraft, $1,500,000.

Recent Unit Bids Throughout the Country

The accompanying table gives the accepted prices of materials and operations in various parts of the country taken from contracts awarded during the last month.

The unit bids form an index of construction costs in outlying districts. A thorough knowledge of cost conditions may be had by reviewing the bid prices published weekly in the Construction News section of *Engineering News-Record.*

UNIT BID PRICES ON MATERIALS AND OPERATIONS FROM RECENT CONTRACTS AWARDED

Where Located	E.N.R. Issue	Nature and Extent of Job	Unit Bid Price
Ala., Fayette	Nov. 22	Digging 2 mi. ditch 10 ft. wide	$147,000.00
Ark., Walnut Ridge	Nov. 29	236,000 cu.yd. excav. drain. ditches, per cu.yd.	0.415
Ark., Russellville	Nov. 29	1 mi. grading and conc. surfacing	25,000.00
Ark., Little Rock	Dec. 6	3 in. asphalt top, per sq.yd.	1.44
		6 in. conc. base, per sq.yd.	1.35
Ark., Mena	Dec. 6	16 mi. grading and gravel surfacing	90,000.00
California	Dec. 20	460 tons, 70 lb. rails, per ton	52.50
		325 tons high T rails, per ton	59.43
		Joint plates, per cwt.	4.42
Calif., Stockton	Nov. 22	2,900 cu.yd. grading, per cu.yd.	.50
		5,390 tons gravel, per ton	2.25
Calif., Oakland	Dec. 6	52,500 sq.ft. grading, per sq.ft.	0.05
		50,400 sq.ft. 2 in. Warrenite bitulithic on 6 in. conc. per sq.ft.	0.30
		15,982 sq.ft. oil macadam pave., per sq.ft.	0.11
		7,022 sq.ft. cement walks, per sq.ft.	0.16
Calif., Oakland	Dec. 20	15,088 lin.ft. 8 in. vitr. sewer	34,500.00
Colo., Denver	Nov. 22	Excavation and grading, per cu.yd.	1.60
		Removing old soil and replacing with new, per cu.yd.	2.50
La., Bastrop	Nov. 29	25 mi. 8 in. gas pipe line	25,000.00
Michigan	Nov. 22	34,946 cu.yd. excav., per cu.yd.	0.55
		74,760 sq.yd. 8 in. rein. conc. pave., per sq.yd.	1.60
		29,742 cu.yd. excav., per cu.yd.	0.38
		54,393 sq.yd. gravel surface, per sq.yd.	0.625
Minn., St. Paul	Nov. 22	27 tons asphalt, per ton	22.66
		5,000 lb. solder, per cwt.	22.20
Nev., Lovelock	Dec. 6	336,495 cu.yd. excav., per cu.yd.	0.1375
O., Akron	Dec. 6	26,000 cu.yd. grading, per cu.yd.	0.60
		3,400 sq.yd. brick gutter, asphalt filler, per sq.yd.	2.35
		16,800 sq.yd. asphalt willite pave., plan B, Trinidad, per sq.yd.	1.85
Oregon	Dec. 13	75,000 cu.yd. com. excav., per cu.yd.	0.37
		35,000 cu.yd. solid rock excav., per cu.yd.	1.15
		2,170 lin.ft. 12 in. corrugated galv. i. pipe, per lin.ft.	1.25
Tex., Center	Nov. 22	22,290 sq.yd. conc. pave., per sq.yd.	2.65
Tex., Ft. Worth	Dec. 13	7,500 cu.yd. gravel, per cu.yd.	1.60
		7,900 gal. Texaco macadam binder, per gal.	0.06

Foreign Projects of Interest to Americans

A number of foreign construction projects which should be of interest to American engineers, contractors and manufacturers has been reported by the United States Department of Commerce. They are noted here, further information being available at the Bureau of Foreign and Domestic Commerce or its district co-operative offices, when a reference number in given.

Pipe Line company's official now in New York relative to the purchasing of supplies. American firms interested may secure this official's New York address and other information concerning the Colombian Concession. Reference No. Colombia 35XA.

Bids for railway construction is desired by South American country. The line is to connect two important cities. Bids close Jan. 20, 1924. Reference No. 113,170.

American contractor's service desired in Japan by the owner of a large building property. Contractors already at work in Japan may be interested. Reference No. 113,181.

Sugar mill to be constructed in a Brazilian State. The project will involve an expenditure of about $200,000.

Canning factory for South American country. The machinery to be installed is to come from America, about $60,000 worth. This may be a forerunner to an extensive outlay.

Wire nail factory for American branch house in Mexico. The president of the firm in question is desirous of receiving quotations on nail machinery of 2-ton per day capacity and information concerning nail-polishing machine. Reference No. 113,166.

Enlargement of waterworks and public building in Rumania. The municipal engineer of a city in Rumania is quoted in part as follows: At present the city would grant to an American contractor not only the constructing of the waterworks and canalization (sewage), but the building of the public market hall, the development of the electric plant and of the management of all this works. Reference No. 111,822.

Cold-storage plant for Brazil. The name of the company and the city where this plant is to be erected is available for interested American firms.

Public works planned by city in China as follows: street building, waterworks system, electric light and power plant. Finances of the municipality reported sound. Reference No. 815X.

Paving Brick Shipments Remain High

Considering seasonal influences, shipments of vitrified paving brick for November ran considerably above normal,—64 per cent of the industry's tonnage reporting total shipments of 21,689,000 according to a report just made to the U. S. Department of Commerce by the National Paving Brick Manufacturers Association. In October 66 per cent of the industry's tonnage reported shipments of 34,287,000.

Unfilled orders on hand declined from 64,531,000 for October to 54,535,000 for November. For the first time since last spring the total number of brick manufactured for the month ran greatly in excess of shipments indicating that companies are manufacturing for stock in anticipation of late winter and early spring shipments.

Future Transportation Needs

That the future transportation needs of the country have been thoroughly studied, is shown by recent reports of the Transportation Conference's Committee on Governmental Relations to Transportation. The committee reports that in the next ten years the freight volume will be one-third more than at present; passenger traffic one-fourth more. In order to meet this demand, there must be 38,350 additional miles of track; 13,200 more locomotives; 725,000 freight cars; 12,300 passenger cars. These additions will cost approximately $5,339,874,000.

(Continued on p. 1080)

Recent Unit Bids on Large Bridge Contract

Bids were opened by State Highway Comm. at Trenton, N. J., Nov. 27, for a bridge over the Raritan River between Perth Amboy and South Amboy, N. J. (a) Stillman, Delehanty, Ferris Co., 1 Exchange Pl., Jersey City, (awarded contract); (b) F. Snare Corp., 114 Liberty St., New York; (c) P. McGovern, 50 East 42nd St., New York. This is Federal Aid Project No. 20, the main bridge consisting of 1,536 lin.ft. steel plate girder spans carried on concrete piers, supported on pile and faced with granite, and 360 ft. span. The unit bids are as follows:

	A	B	C
Necessary clearing of right-of-way, etc., complete (lump sum)	$4,973.00	$14,000.00	$28,000.00
3,418 cu.yd. excavation, roadway cut, north approach, including grading	3.50	2.00	6.25
62,119 cu.yd. earth fill, north approach, including grading	3.00	1.60	5.00
72,950 cu.yd. earth fill, south approach, including grading	3.50	1.60	5.00
5,310 cu.yd. excavation, piers 1 to 9 and ret. wall, north approach	5.00	7.00	5.45
14,495 cu.yd. excavation, piers 10 to 12 and 16 to 28 inclusive	8.00	15.00	12.40
12,593 cu.yd. pneumatic excavation, piers 13, 14 and 15	23.00	17.00	32.50
556 cu.yd. pneumatic rock excavation, piers 13, 14 and 15	120.00	40.00	56.25
8,287 cu.yd. excavation, piers 29 to 55 incl., drainage ditches, etc.	5.00	9.00	8.65
2,040 lin.ft. piles 30 ft. length	2.85	.75	.50
9,270 lin.ft. piles 40 to 49 ft. length	2.24	.90	.50
23,777 lin.ft. piles 50 to 59 ft. length	1.74	.80	.55
61,072 lin.ft. piles 60 to 69 ft. length	1.77	.90	.70
58,204 lin.ft. piles 70 to 79 ft. length	1.61	1.00	.70
44,940 lin.ft. piles 76 to 78 ft. length (creosoted)	1.32	1.50	1.65
98,998 lin.ft. piles 80 to 89 ft. length	1.59	1.10	.85
34,567 lin.ft. piles 90 to 95 ft. length	1.45	1.20	.90
3,491 cu.yd. 1:2½:5 plain concrete, piers 1 to 9 and 29 to 55, inclusive, and retaining walls	12.00	18.00	15.50
6,509 cu.yd. 1:2½:5 plain concrete, piers 10 to 12 and 16 to 28, inclusive	15.00	33.00	15.25
9,024 cu.yd. 1:2½:5 plain concrete, piers 13, 14 and 15	20.00	40.00	12.50
888 cu.yd. 1:2:4 plain concrete, piers 2 to 9 and 29 to 54, inclusive	20.00	20.00	17.00
3,750 cu.yd. 1:2:4 plain concrete, piers 10 to 12 and 16 to 28, inclusive.	25.52	34.00	17.00
4,608 cu.yd. 1:2:4 plain concrete, piers 13, 14 and 15	18.70	40.00	14.25
1,250 cu.yd. 1:2:4 concrete, retaining wall, north approach, including straps	21.61	20.00	25.00
1,990 cu.yd. 1:2:4 reinforced concrete, cols. beams and piers	28.40	24.00	34.00
1,569 cu.yd. 1:2:4 reinforced concrete, piers 10 to 13 and 15 to 28	15.00	24.00	34.00
3,853 cu.yd. 1:2:4 reinforced concrete, girders, slabs, etc.	30.00	32.00	29.00
2,450 cu.yd. 1:2:4 reinforced concrete, roadway and sidewalk slabs, etc.	25.00	30.00	22.00
1,520 cu.yd. 1:2:4 reinforced concrete, sidewalks, earth fill	30.00	20.00	18.25
272 cu.yd. 1:2:4 reinforced concrete, railings and posts	93.00	60.00	79.00
826 cu.yd. 1:2:4 plain concrete around conduits	15.00	12.00	19.00
2,019 cu.yd. 1:3:5 plain concrete roadway pavement, etc.	10.00	12.00	19.00
5,205 cu.yd. 1:1½:3 reinforced concrete roadway pavement, south approach	15.60	15.00	24.00
56 cu.yd. 1:3 cement mortar protection coat	82.81	40.00	23.40
390 cu.yd. 1:3 cement mortar waterproofing protection coat	71.26	10.00	19.40
90 cu.yd. 1:3 grout for ballast	11.70	15.00	13.00
115 cu.yd. 1:2 cement mortar for fascia girders, etc.	51.18	80.00	61.00
1,843 cu.yd. rock faced granite, piers 10 to 12 and 16 to 28	76.00	93.00	62.90
399 cu.yd. rock faced granite, piers 13, 14 and 15	73.50	93.00	62.90
16,850 cu.yd. back fill around piers, abutments and retaining walls	.77	.50	.50
370 cu.yd. ballast on concrete viaduct	4.16	3.00	5.00
251 cu.yd. broken stone for drains	4.16	3.00	5.60
6,501 gal. bituminous cement	.44	.50	.30
14,685 sq.yd. waterproofing	1.05	1.00	1.30
17,140 sq.yd. 2½-in. asphalt block	2.50	2.80	2.55
1,520 sq.yd. 2 in. asphalt block	2.50	2.60	2.30
40,725 lin.ft. 4 in. fiber conduit	.18	.20	.25
106,089 lin.ft. 3 in. fiber conduit	.17	.15	.22
1,350 lin.ft. 2 in. fiber conduit	.17	.15	.20
658 lin.ft. 4 in. v.t. pipe	.96	1.50	.50
690 lin.ft. 12 in. v.t. pipe	2.12	4.00	4.20
895 lin.ft. 15 in. v.t. pipe	2.69	5.00	4.60
611 lin.ft. 18 in. v.t. pipe	2.16	7.00	5.30
446 lin.ft. 8 in. c.i. pipe	2.25	6.00	5.10
52 lin.ft. 10 in. c.i. pipe	2.82	12.00	6.70
62 lin.ft. 16 in. c.i. pipe	5.36	18.00	12.00
36 lin.ft. 18 in. c.i. pipe	6.56	25.00	14.00
2,000 sq.ft. cobble gutter	.13	.50	.50
211,000 sq.ft. grassing and top soil	.06	.05	.30
11,000 lin.ft. wooden railing	2.48	.60	2.50
415,225 M.B.M. lumber for fenders, etc.	162.00	120.00	120.00
11,513 lb. copper flashing	.37	.80	.60
1,540 lb. sheet lead	.19	.30	.10
1,322,500 lb. steel reinforcement	.075	.06	.05
52,980 lb. clinton wire cloth	.075	.10	.07
214,000 lb. galvanized steel fabric	.055	.10	.08
4,935,000 lb. structural steel for girder spans	.0528	.0567	.055
2,163,000 lb. structural steel for draw span	.0728	.077	.0775
132,720 lb. ornamental steel for hand railing	.1483	.17	.12
234,406 lb. curb angle guard including bolts	.0433	.07	.045
79,754 lb. miscellaneous steel	.0988	.10	.06
84,950 lb. cast steel for girder bearing	.1446	.14	.12
84,830 lb. cast iron for scuppers	.07	.10	.08
31,340 lb. miscellaneous cast iron	.16	.10	.10
283,000 lb. machinery for draw span	.24	.216	.215
145 pull boxes	28.00	60.00	25.00
63 draw boxes and manhole covers	64.00	80.00	50.00
Operator's and gatemen's houses (lump sum)	4,200.00	7,000.00	7,500.00
Bronze name plates and brackets	4,300.00	4,000.00	1,500.00
84 wood lighting poles	125.00	50.00	58.00
Lighting system complete (lump sum)	36,000.00	24,000.00	50,000.00
Electrical equipment for draw span (lump sum)	19,850.00	20,000.00	25,000.00
Extended totals	$3,702,922	$3,778,645	$3,862,847

Future Transportation Needs

(Concluded from p. 1079)

Motor trucks and buses have been recognized as legitimate supplements to railroad facilities and as such have been figured in the program to meet the country's future transportation needs. This will permit the railroads to discontinue a service which is not profitable and which can be more easily handled by motors.

Water transportation was also studied and is a part of the problem to be worked out.

Some figures which are of general interest has come from the work of this conference.

In 1921, the railroads paid $277,000,000 in taxes and during this same period expended $756,000.000 on maintenance. Electric railways paid $92,000,000 in taxes and expended $101,000,000 on maintenance for the same year.

If the motor trucks are to meet the requirements of the future, the states must see that highways are suitable for such traffic. The sources of the money used for the 1921 highway program was studied and the committee summarized the situation as follows:

Bonds	$417,817,20
General state and local taxation	381,091,54
Miscellaneous	88,919,15
Gasoline tax and registration	107,154,22
Federal and forest road aid	76,679,89
Total	$1,071,662,031

The work of this conference has pointed the way to improvements in the present transportation system but back of it all—the idea—the country's good and need.

Weekly Construction Market

THIS limited price list is published weekly for the purpose of giving current prices on the principal construction materials, and of noting important price changes on the less important materials. Moreover, only the chief cities are quoted.

Valuable suggestions on costs of work can be had by noting actual biddings as reported in our Construction News section.

The first issue of each month carries complete quotations for all construction materials and for the important cities. The last complete list will be found in the issue of Dec. 6; the next, on Jan. 3.

Steel Products:	New York	Atlanta	Dallas	Chicago	Minneapolis	Denver	San Francisco	Seattle	Montreal
Structural shapes, 100 lb.	$3.64	$4.00	$4.40	$3.30	$3.55	$4.20	$3.60	—$3.85	$4.25
Structural rivets, 100 lb.	4.40	4.75	4.90	3.75	4.25	5.30	5.00	—4.05	6.00
Reinforcing bars, ¾ in. up, 100 lb.	3.54	3.50	3.38	3.20	3.45	3.85	3.65	+4.25	4.00
Steel pipe, black, 2½ to 6 in. lap, discount	44%	40%	43%	47%	53–5%	36%	33.2@42.2%	35%	47.43
Cast-iron pipe, 6 in. and over, ton	61.60@63.60	54.75	61.00	57.20@60.20	60.50	66.00	—57.00	62.00	60.00
Concreting Material:									
Cement without bags, bbl.	2.50@2.60	2.35	2.05	2.10	2.42	2.84	2.61	2.90	2.25
Gravel, ¾ in., cu.yd.	2.00	1.75	2.38	2.00	1.85	1.90	2.15	1.25	1.50
Sand, cu.yd.	1.25	1.20	2.00	2.00	1.25@1.50	1.00	1.50	1.25	1.25
Crushed stone, ¾ in., cu.yd.	1.75	1.90	2.83	2.00	2.00	3.50	2.15	3.00	1.90
Miscellaneous:									
Pine, 3x12 to 12x12, 20 ft. and under, M.ft.	—58.00	37.00	54.75	55.50	44.75@46.00	41.75	38.00	+30.00	42.00
Lime, finishing, hydrated, ton	18.20	23.00	20.00	20.00	25.50	24.00	22.00	24.00	21.00
Lime common, lump, per bbl.	3.00@3.25	1.50	1.85	1.50	1.50	2.70	2.10	2.80	9.50
Common brick, delivered, 1,000	23.65	11.00	11.60	11.00	16@18	12.00	15.50	15.00	16.50
Hollow building tile, 4x12x12, per block	Not used	.10	.11	.0724	.075	.065	.....	.11	.11
Hollow partition tile 4x12x12, per block	.1179	.10	.11	.....	.....	.065	.108	.11	.....
Linseed oil, raw, 5 bbl. lots, gal.	.95	+.97	+1.07	.94	1.01	1.10	1.03	1.15	1.38
Common Labor:									
Common labor, union, hour	.75	.35	.....	.....	.....	.50@.55	.55	.62½	....
Common labor, non-union, hour	....	.30	.30@.50	.82½	—.40@.45	.35@.50	.50	.62½	.30

Explanation of Prices—Prices are to contractors in carload lots unless other quantities are specified. Increases or decreases from previous quotations are indicated by + or — signs. For steel pipe, the prevailing discount from list price is given: 45-5% means a discount of 45 and 5 per cent. Charge is 15c. per 100 lb. for cutting reinforced steel into 2-ft. lengths or over.

New York quotations delivered, except sand, gravel and crushed stone, alongside dock; common lump lime, in 280-lb. bbl. net, and hydrated lime f.o.b. cars; tile "on trucks"; linseed oil and cast-iron pipe f.o.b.

Labor—Concrete laborers' rate, 93¾c.; building laborers (pick and shovel men) 75c. per hr

Chicago quotes hydrated lime in 50-lb. bags; common lump lime per 180-lb. net. Lumber delivered on job.

Minneapolis quotes on fir instead of pine. Brick, sand and hollow tile delivered. Cement on cars. Gravel and crushed stone quoted at pit. We quote on brown lime per 180-lb. net; white is $1.80 for Kelly Island and $1.70 for Sheboygan. Common labor not organized.

Denver quotes on fir instead of pine. Cement "on tracks"; gravel and sand at pit; stone on cars; lime, brick, hollow tile and lumber on job. Tile price is at warehouse. Linseed oil, delivered, in iron bbl. Common lump lime per 180-lb. net.

Atlanta quotes sand, stone and gravel per ton instead of cu.yd. Common lump lime per 180-lb. net.

Dallas quotes lime per 180-lb. bbl. Steel, cement, cast-iron pipe and crushed stone f.o.b. cars, other materials delivered.

San Francisco quotes on Heath tile, size 5½ x 8 x 11½. Prices are all f.o.b. warehouses except C. I. pipe, which is mill price plus freight to railway depot at any terminal. Common lump lime per 180-lb. net. Lumber prices are to dealers in yards at San Francisco, for No. 1 fir, common.

Seattle quotes on Douglas fir (delivered) instead of pine. Lump finishing lime per 180-lb. net. Hollow building tile delivered. Hydrated lime in paper sacks. Sand and gravel at bunkers.

Montreal quotes on white pine lumber, free on cars at mill. Sand, stone, gravel and lump lime per ton. Cement, lime and tile are delivered; sand, gravel and stone on siding; brick f.o.b. plant; steel and pipe at warehouse. Hollow tile per ft. Cement price is in Canadian funds (the Canadian dollar stands at 97.50). Bag charge is 80c. per bbl. Discount of 10c. per bbl. for payment within 20 days from date of shipment. Steel pipe per 100 ft. net; 3-in., $47.43; 6-in., $119.

Weekly Review of the Market

Except for the usual holiday activity, a somewhat slower pace is noticeable in business, generally. A slight decrease in employment is reported among basic industries and a decline in freight loadings indicates the lessened volume of merchandise being handled. The slowness of pig-iron buying is just an instance of the attitude of buyers, who show a tendency to defer important commitments until the new year.

Favorable indications, however, are apparent in a 12 per cent increase in the estimated value of the years' agricultural output. This means increased buying power in that direction. Increased issuance of building permits indicates a continuation of the winter construction movement. Firmness of steel prices and maintenance of buying among railroads and automobile makers, are indicative of the trend of business expected at the beginning of the new year. November export figures were higher than any other month this year.

A brief outline of the iron and steel situation follows: Pig-iron market very quiet. No. 2 foundry iron quoted as low as $20@$21 per ton at Birmingham. Iron and steel scrap buying active; prices tending upward. Tin plate demand fairly good; mills operating at 96 per cent of capacity. Fabricated structural steel prices still firm at $2.50 for plates and shapes and $2.40 per 100 lb. for bars, f.o.b. Pittsburgh.

CONSTRUCTION NEWS

Engineering News-Record, July 5, 1923.

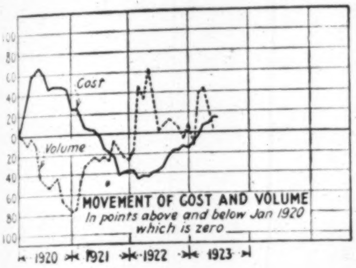
The Construction Barometer

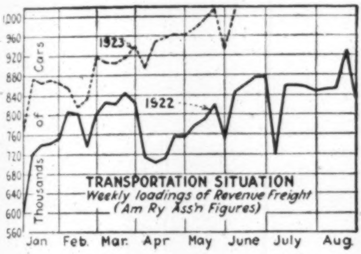
Gain In Large Private Building Contracts—Labor Costs Higher

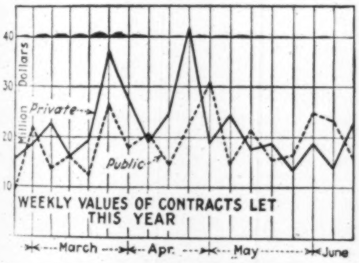
DESPITE several unfavorable factors, industrial activity shows little or no tendency to slow down. June contracts gained substantially in large private projects, despite the recent talk of a "buyers strike" and in the face of high construction costs. Latest Federal Reserve figures show an increase in debits to individual accounts, indicating no falling off in buying.

Production of steel, lumber, cement and other basic materials continues at a high rate and record freight loadings reveal the ability on the part of the railroads to handle the situation.

Wage adjustments, effective July 1, have materially increased cost.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
June 14	23,681,000	14,052,000	37,733,000
June 21	15,417,000	20,308,000	35,725,000
June 28	15,591,000	39,696,000	55,287,000
3 weeks	$54,689,000	$74,056,000	$128,745,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

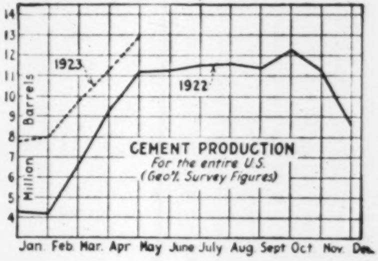
Week Ending	No.	Public Work	No.	Private Work
June 14	11	7,593,000	36	9,742,000
June 21	9	4,636,000	28	10,941,000
June 28	9	1,375,000	26	33,530,000
3 weeks	29	$13,604,000	90	$54,213,000

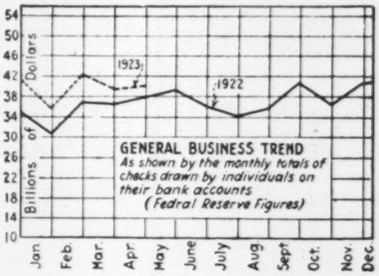
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

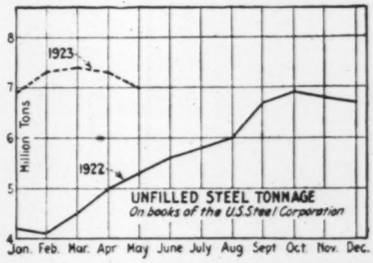
		Public			
Week Ending	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
June 14	26	211	80	41	35
June 21	23	205	84	37	37
June 28	23	181	78	29	31

BASE PRICES UNCHANGED IN TWO WEEKS—LABOR HIGHER

	Quoted on July 5, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	59.00	60.00	June 14
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 7	Tonawanda, N. Y.	June 28
July 7	Grandview Heights (Columbus P. O.), O.	June 28
July 9	Point Grey, B. C.	June 28
July 16	Lemmon, S. D.	June 28
July 17	Deland, Fla. Adv. June 21 to July 5.	June 21

SEWERS

Bids Close		See Eng. News-Record
July 6	Grove City, Pa.	June 21
July 7	Grandview Heights (Columbus P. O.), O.	June 28
July 9	Los Angeles, Calif.	June 21
July 9	Shermerville, Ill.	June 28
July 10	Springwells, Mich.	June 21
July 10	Essex Junction, Vt. Adv. June 28 and July 5.	June 28
July 10	Rutherfordton, N. C.	July 5
July 10	Emporia, Kan.	July 5
July 11	Milwaukee, Wis.	July 5
July 11	Chamois, Mo.	July 5
July 11	Vero, Fla.	June 28
July 12	Anaheim, Calif.	June 28
July 16	Bethlehem, Pa. Adv. July 5.	July 5
July 16	Redwood City, Calif.	July 5
July 17	Louisville, Ky. Adv. June 28 and July 5.	June 28
July 17	Delaware, O.	July 5
July 19	Syracuse, N. Y. Adv. July 5.	July 5
July 26	Chicago, Ill. Adv. July 5.	July 5
July 30	Los Angeles, Calif.	June 28

BRIDGES

Bids Close		See Eng. News-Record
July 9	Akron, O.	June 21
July 9	New Jersey Adv. June 28 and July 5.	June 28
July 10	New Richmond, Wis.	July 5
July 10	Washington	June 28
July 12	Indianapolis, Ind.	June 28
July 12	Ft. Wayne, Ind.	June 28
July 18	Phila., Pa. Adv. June 28 and July 5.	June 28
July 25	Bridgeport, Conn. Adv. June 28 and July 5.	June 28
July 31	La Center, Wash.	May 3
Aug. 1	Binghamton, N. Y. Adv. June 28 and July 5.	June 28
Aug. 7	Beaumont, Tex. Adv. June 28 and July 5.	July 5
Aug. 14	Charleston, S. C.	July 5
Aug. 15	Phila., Pa. Adv. July 5.	July 5
Nov. 30	Sydney, Australia Adv. Apr. 19, May 3, June 7 and July 5.	Apr. 19

DAMS

Bids Close		See Eng. News-Record
July 16	Beacon, N. Y. Adv. July 5.	July 5

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
July 10	Ottumwa, Ia.	June 14
July 10	Merced, Calif.	June 28
July 11	Trenton, Mo.	June 28
July 12	Crookston, Minn.	July 5
July 17	Dunkirk, N. Y. Adv. June 21 to July 5.	June 21

Bids Close		See Eng. News-Record
July 21	Savanna, Ill. Adv. July 5.	July 5
July 26	New Orleans, La. Adv. June 28 and July 5.	June 28

STREETS AND ROADS

July 7	Grandview Heights (Columbus P. O.), O.	June 28
July 7	Blacksburg, Va.	July 5
July 9	California	June 21
July 9	Laurel, Miss.	June 28
July 9	New Jersey Adv. June 28 and July 5.	June 28
July 9	Michigan	June 28
July 9	Keyport, N. J. Adv. June 28 and July 5.	June 28
July 9	East Grand Forks, Minn.	June 28
July 9	Kansas City, Mo.	June 28
July 9	St. Paul, Minn.	June 28
July 9	Ft. Davis, Tex.	June 28
July 9	Richmond, Va.	June 28
July 9	Edgerton, Wis.	June 28
July 9	Dayton, O.	July 5
July 9	Des Moines, Ia.	July 5
July 9	Martin, Tenn.	July 5
July 10	Hillsdale, Mich.	July 5
July 10	Racine, Wis.	July 5
July 10	Ukiah, Calif.	July 5
July 10	Columbus, Kan.	July 5
July 10	Jasper, Tex.	July 5
July 10	Michigan	July 5
July 10	Columbus, O.	July 5
July 10	Wapello, Ia.	July 5
July 10	Fairmont, W. Va.	June 21
July 10	St. Albans, W. Va.	June 21
July 10	Nashville, Tenn.	June 21
July 10	Circleville, O.	June 28
July 10	Michigan	June 28
July 10	Washington	June 28
July 10	Florida	June 28
July 11	Louisiana	June 28
July 11	Michigan	June 28
July 11	Vero, Fla.	June 28
July 11	Anderson, S. C.	July 5
July 11	Michigan	July 5
July 12	Michigan	July 5
July 12	Jefferson, Ia.	July 5
July 12	Faribault, Minn.	June 21
July 12	Michigan	June 28
July 12	Brooklyn, N. Y.	July 5
July 13	Michigan	July 5
July 13	Ohio	July 5
July 13	St. George, N. Y.	July 5
July 14	Bolivar, Pa.	June 28
July 15	Western Springs, Ill.	June 28
July 15	La Grange, Ill.	June 28
July 15	South Bend, Wash.	June 28
July 16	Plainfield, N. J.	June 28
July 16	Brooklyn Heights (Cleveland P. O.), O.	July 5
July 16	Redwood City, Calif.	July 5
July 16	Edgerton, Wis.	July 5
July 16	Michigan	July 5
July 17	Troy, N. C.	July 5
July 17	Michigan	July 5
July 17	Central City, Pa.	July 5
July 17	St. Louis, Mo.	June 21
July 17	Pottsville, Pa. Adv. June 21 to July 5.	June 28
July 18	New Mexico	June 28
July 18	Harrisburg, Pa.	July 5
July 18	Michigan	July 5
July 19	Michigan	July 5
July 19	Illinois	July 5
July 19	New Jersey Adv. July 5.	July 5
July 20	Michigan	July 5
July 23	New Jersey Adv. July 5.	July 5
July 24	West Virginia Adv. June 28 and July 5.	June 28
July 25	Boonton, N. J. Adv. July 5.	July 5
July 25	Kentucky	July 5
July 25	Delaware	July 5

INDUSTRIAL WORK

July 6	Verona, N. J.	June 28
July 10	Oshkosh, Wis.	July 5
July 13	New York, N. Y.	July 5

BUILDINGS

July 7	Athens, O.	June 28
July 7	Akron, O.	July 5
July 9	Lakewood (Cleveland P. O.), O.	July 5
July 9	Maplewood, N. J.	June 21
July 9	Easton, Pa.	June 21
July 9	Oshkosh, Wis.	July 5
July 9	Milwaukee, Wis.	July 5
July 9	Towson (Baltimore P. O.), Md.	July 5
July 10	Charleston, W. Va.	July 5
July 10	Holdenville, Okla.	June 28
July 14	Milwaukee, Wis.	July 5
July 15	Astoria, Ore.	June 7
July 15	Knoxville, Tenn.	June 21
July 16	Dover, O.	June 28
July 16	Pawhuska, Okla.	June 28
July 16	Nashville, Tenn.	June 28
July 19	St. Marys, O.	July 5
July 20	Logan, O.	June 28
July 21	Pittsburgh, Pa.	June 28
July 24	Conrad, Pa.	June 21
July 31	Mt. Vernon, N. Y.	July 5
Aug. 1	Jackson, Miss.	June 21

FEDERAL GOVERNMENT WORK

July 9	Steps—Denver, Colo.	June 14
July 9	Dredging — Wilmington, Del. Adv. June 28 and July 5.	June 14
July 10	Conveyor—Memphis, Tenn.	June 21
July 18	Extension—Pearl Harbor, H. T.	June 21
July 18	Fire Protection System — Pearl Harbor, H. T.	May 31
July 18	Storage Facilities — Pearl Harbor, H. T.	June 7
July 19	Tanks—Memphis, Tenn. Adv. June 21 to July 5.	June 21
July 19	Dredging—New Orleans, La. Adv. June 21 to July 5.	June 21
July 20	Dredging—Galveston, Tex. Adv. June 21 to July 5.	June 21
July 20	Intake Chamber, etc.—Wash., D. C. Adv. June 21 to July 5.	June 28
July 21	Dredging—Galveston, Tex. Adv. June 28 and July 5.	June 28
July 27	Extension—Marion, O. Adv. July 5.	July 5
July 30	Stone—Detroit, Mich. Adv. July 5.	July 5
July 31	Dredging—Baltimore, Md. Adv. June 28 and July 5.	June 28
Aug. 2	Excavation — Wilmington, Del. Adv. July 5.	July 5

MISCELLANEOUS

July 9	Reinforcing Steel—St. Paul, Minn.	July 5
July 11	Cement—Baltimore, Md.	July 5
July 11	Pier—San Diego, Calif.	June 28
July 12	Bituminous Road Material, etc. —New York, N. Y.	July 5
July 12	Dock—New Orleans, La.	July 5
July 12	Creosoted Sheet Piling—New Orleans, La.	July 5
July 12	Grain Elevator—Midland, Ont.	July 5
July 16	Lignin Binder — Trenton, N. J.	July 5
July 16	Power Equipment—Taylorville, Ill.	June 28
July 17	Timber Sluice and Sheathing —Wilmington, Del. Adv. July 5.	July 5
July 20	Timber—Webb, N. Y. Adv. June 28 and July 5.	June 28
July 24	Culvert—St. Louis, Mo.	July 5
July 24	Subway—Phila., Pa. Adv. July 5.	July 5
Aug. 1	Gas Pipe Line—Texas	July 5
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton—Broome Co. plans water system for County Hospital. $15,000. A. E. Kaeppel, supt.

N. Y., Clarence—Bd. Trade plans waterworks. $85,000.

O., Brooklyn Heights (Cleveland P. O.) —See "Streets and Roads."

O., Columbus—Plans 987 ft. 12 in. mains in Capella Ave. $5,428; 6,913 ft. 6 in. mains in Mithoff St., Alioth, Noonday, Morning, Gerrard, Altair and Ashland Aves., $15,902. R. H. Simpson, city engr.

Kan., Overland Park—Clarke & Jacoby, engrs., 528 Shukert Bldg., Kansas City, Mo., soon take bids 4½ mi. 8 in. mains from here to point south of Rosedale, for Shawnee Mission Water Supply Co., c/o Engineers.

Tex., Beaumont—Soon takes bids 500,000 gal. tank on 135 ft. steel tower. $30,000. Terrell Bartlett, 612 Calcasieu Bldg., San Antonio, engrs.

Tex., Ft. Worth—City Com. takes bids about July 17, 52,450 ft. 6-10 in. c.i. pipe in Rosen Heights. $25,000. D. L. Lewis, city engr. John B. Hawley, Exch. Bldg., consult. engr.

Ore., Dundee—City Council takes bids about Aug. 1, 2 mi. 4 in. w. i pipe, etc. $15,000 bonds voted. P. J. Groth, city recdr.

Ont., Oshawa—Sonn takes bids 500,000 imperial gal. steel elevated tank on 110 ft. tower. $25,000. W. C. Smith, city engr.

Ont., Whitby—F. W. Thorold, engr., 54 Admiral Rd., Toronto, soon takes bids waterworks intake, 1,000 ft. steel flanged pipe, in dredged channel with anchors, flexible joints, etc., for town. $30,000.

BIDS DESIRED

O., Columbus—See "Streets and Roads."

Mo., Chamois—See "Sewers."

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. 4,250 ft. 6 in. c.i. mains, from T. P. Egan, Caxton Bldg., $14,339; curb connections, from Gantose Constr. Co., Columbia Bldg., $7,014. Noted June 21.

O., Cleveland — Furnishing and laying Random Rd. main, Baldwin-Fairmount Project, Contr. 31, from Joseph Co., 3081 West 14th St., $146,425 (5 months). Noted May 31.

Wis., Milwaukee—Gate house and distribution system at Riverside Pumping Station, from P. Riesens Sons, 1018 Humboldt Ave., $64,777; two 100 kw. Uniflo engines and generators for Riverside Pumping Station, from Ames Iron Wks., 25 East 2nd St., Oswego N. Y., $16,250 and $16,850. Noted June 21.

CONTRACTS AWARDED

Pa., Steelton—Water Bd., c.i. pipe to R. D. Wood & Co., 400 Chestnut St., Phila., $23,467.

Md., Baltimore—Bd. Awards, valves for Water Dept., to Kennedy Valve Mfg. Co., 116 East Miller St., Elmira, N. Y., $56,365; standard valves, to A. P. Smith Mfg. Co., Norman St., East Orange, N. J., $64,601. Noted June 28.

Mich., Detroit—Bd. Water Comrs. will lay 4,745 ft. 6 in. mains in Grey Friars, Gleason, Chesterfield, Marsh and Evelyn Aves., St. Patricks and Wetherby Sts., 2,602 ft. 8 in. main in Canterbury and Picadilly Rds., by day labor. T. A. Leisen, Water Works Park, engr.

Kan., Herrington—Waterworks improvements, to Burt & Tripp, Herrington (on basis of concrete paving on dam slope) $176,068. Noted June 14.

Ont., Toronto—York Twp., 40 Jarvis St., waterworks system, 6 and 12 in. c.i. mains to National Iron Corp., Cherry St., $50,025; hydrants to J. T. Hepburne, Ltd., 18 Van Horne St., $2,238; valve chamber covers to Dominion Wheel & Foundries, 131 Eastern Ave., $3,508; 6 and 12 in. gate valves to Drummond McCall Co., 373 Front St. E., $8,660; c.i. specials to J. T. Hepburne, 18 Van Horne St., $2,270; laying mains in Almeda, Pope and Donlands Aves., to G. Thompson, 40 Jarvis St., $5,000; in Eglington, Grey and Hamsbad Aves., to C. E. Smith, 180 Fern Ave., $1,440. Noted Dec. 21.

Sewers

PROPOSED WORK

N. Y., Rochester—Plans outlet sewers in Highland and Steko Aves., De Neve and Rand Sts. $137,000. C. A. Poole, city engr.

W. Va., Bluefield—See "Buildings."

O., Marion—Aug. 7 to vote on $200,000 bonds for trunk line storm sewer. Noted Mar. 29.

Mich., Ann Arbor—See "Streets and Roads."

Ia., Des Moines—Soon takes bids South Side Sewer Dist., vitr. pipe (for smaller lines) and sectional pipe of concrete, clay or brick (for larger lines). $600,000. K. C. Kastberg, city engr.

Kan., Lyons—C. A. Haskin, engr., 517 Finance Bldg., Kansas City, Mo., takes bids about Aug. 1, sanitary sewerage system. $90,000. Noted May 24.

Neb., Kearney—Election soon to vote on $150,000 bonds for storm sewers.

Mo., Maplewood (St. Louis P. O.) — Rescinded contract for 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block sewer, etc., in Manchester Sewer Dist. 2 Will ask new bids. Noted June 21.

Calif., Compton—Voted $25,000 bonds for sewerage system. E. M. Lynch, Central Bldg., Los Angeles, engr. Noted Apr. 5.

Calif., Oildale—Plans to vote on $77,000 bonds for sewerage improvements.

BIDS DESIRED

N. Y., Syracuse—July 19, at office of Syracuse Intercepting Bd., 104 City Hall. intercepting sewer, Contrs. 37, 38 and 39. H. J. Hamlin, secy.; adv. this issue.

Pa., Bethlehem—July 16, by City Clerk. 5 mi. 8-20 in. sanitary sewers in 16th and 17th Wards. R. L. Fox, city engr.; adv. this issue.

Pa., Central City — See "Streets and Roads."

N. C., Rutherfordton—July 10, sewerage system and disposal plant. Carolina Eng Co., Wilmington, engrs. J. F. Flack, clk.

O., Brooklyn Heights (Cleveland, P. O.)—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Delaware—July 17, by W. H. Duffy, dir. Pub. Serv., Columbus, sewage disposal plant, 5,000 cu.yd. earth and 3,000 cu.yd.

Sewers (Continued)

rock excav., 840 cu.yd. concrete, 8,000 lb. reinforcing and 8,000 lb. cast iron, etc., also 2 sewage ejectors, 250 g.p.m. capacity, at Girls Industrial Home, here. $150,000. C. B. Hoover, 252 17th Ave., Columbus, engr. Noted June 28.

Ill., Chicago—July 26, by H. E. Wallace, clk., Sanitary Dist. of Chicago, 910 South Michigan Ave., for North Side Sewage Treatment Works, Div. A, aeration tanks, settling tanks and operating galleries. W. O. Nance, chn. of Comm. on Finance; adv. this issue.

Wis., Milwaukee—July 11, by Dept. Pub. Wks. storm sewers in various streets. $124,000. F. W. Ullins Jr., sewerage, engr.

Kan., Emporia—July 10, by E. T. Mendel, city clk., sanitary sewers incl. main sewers L. M. N. P and &, and lateral sewers in Dists. 101, 103, 104, 105, 108 to 116 inclusive, 12,922 lin.ft. 8-12 in. v.s. pipe, etc. R. J. Paulette, engr. and water supt.

Mo., Chamois—July 11, by W. B. Rollins & Co., engrs., 521 Ry. Exch. Bldg., Kansas City, sewers and waterworks, here, for city. $30,000. Noted June 14.

Calif., Redwood City—July 16, by City Trustees, sewers in portions of Reese, Hudson and Oak Sts., etc., 2,096 lin.ft. 8 in. and 11,742 lin.ft. 6 in. vitr. pipe, 11,562 lin. ft. 4 in. vitr. pipe laterals, etc. C. L. Dimmitt, city engr. Noted Feb. 8.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, June 27, sewer in (1) Lake St. (2) 54th St. (3) Sedgwick Pl. sewer basins on (4) East 10th St. (5) East 10th St. (6) Beverly Rd., from Nazzaro & Querriero, (1) 87.79% engrs. est. ($4,609); Manmill Constr. Co., 2035 Douglas St., (2) 98% ($3,062) (3) 97% ($2,443) (4) 87.5% ($1,600) (5) 87.5% ($1,600); J. McBride (6) 100% ($400). Noted June 21.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm sewer in 32nd Ave., from Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, Type A $135,476, Type B $125,786. Noted June 21.

Md., Linthicum Heights—Anne Arundel Sanitary Comn., June 21. sewers in Sanitary Dist. Contr. 2-S, 18,762 lin.ft. vitr. pipe, from P. Agrios, 3641 13th St., N. W., Wash., D. C., $30,952; Sanitary Dist. Contr. 1-S, 9,065 lin.ft. vitr. clay pipe, from E. C. Baker, Uniontown, Pa., $20,083. Noted June 7.

O., Idlewood (Cleveland Heights P. O.) —For 4,030 ft. 10-24 in. tile sewers in Eaton Pl., from J. B. Lynn Constr. Co., The Arcade, Cleveland, $22,096. Noted June 14.

Mich., Detroit—For 1,620 ft. brick or monolithic concrete sewer, 9 ft. 3 in. cylinder, in Cadieux Rd., open cut, from Anderson & Campbell, 400 Penobscot Bldg., $51,330; 4,487 ft. of 6 ft. sewer in Annsbury Ave. Arm, open cut or tunnel work, from S. Healy, Detroit, $65,508; 950 ft. of 24 in. crock sewer in Davison Ave. Arm., open cut work, from A. Arcari, Detroit, $13,229.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewer in Jarvis Ave., to McDonald & Wilson, $5,669; Pelham Parkway, to Anita Constr. Co., 2975 Marion Ave., $40,042; Tryon Ave., to Spadero & Turiano, 3185 East Tremont Ave., $5,417. Noted June 28.

O., Bexley (Columbus P. O.) — S. W. Roderick, village clk., 5,080 ft. 5-36 in. vitr., concrete and segmental block sewer in Astor Ave., Mound and Charles Sts., to E. W. Deasley, Linwood Ave., Columbus, $23,440. Noted June 21.

O., Euclid—For 110 ft. 6 in. concrete and 975 ft. 24 in. tile trunk inlet sewer in Lake Shore Blvd. and Bliss Rd., to C. W. Jackson, 1318 East 84th St., Cleveland, $35,247. Noted June 28.

Kan., Sterling—Sanitary sewerage system, to Burt & Tripp, Hutchinson, 53,112 ft. pipe 8 in. $0.45, 10 in. $0.55, 12 in. $0.70, etc., total $62,570. Noted June 7.

Mo., University (St. Louis, P. O.)—E. B. Colby, city clk., to Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, 1,861 ft. 36 in. vitr. sewer in River Des Peres, $20,302, engrs. est. $20,536, 1,765 ft. 12-27 in. vitr. sewer in Ferguson Ave., $6,934, engrs. est. $5,934, 1,460 ft. 12-21 in. vitr. sewer in Dist. Sewer 19, $5,440, engrs. est. $5,440. Noted June 21.

Calif., Pasadena—Constructing sewers in Dist. 7, to Fredrickson & Shannon, Cory Bldg., Fresno, $137,409.

Bridges

PROPOSED WORK

Fla., Lynn Haven—Bay Co. (Panama City), plans new bridge, here. $50,000 bonds authorized. Engineer not selected.

Fla., St. Lucie—Florida East Coast Ry. Co., St. Augustine, plans 60 ft. draw bridge over St. Lucie River, here. $25,000. C. Oberdorf, St. Augustine, constr. engr.

Ky., Paris—See "Streets and Roads."

Ohio—See "Streets and Roads."

Michigan—See "Streets and Roads."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids constructing bridges, s means steel, c g concrete girder, sub structure, and super superstructure; 3c-1-2B, White means 3 concrete, Route 1, Sect. 2B, White Co., 3 c-1-3B-White, 2 c-1-28B-White, 1 c and 1 sub-1-38B-Johnson, 1 super-1-38C-Johnson, 1 super-1-39C-Massac, 2 c-2-55B-McLean, 2 c-2-62B-McLean, 1 sub-2-63B-McLean, 1 super-2-63C-McLean, 2 c-3-23B-Mercer, 1 super-3-59C-Madison, 1 sub-3-59B-Madison, 1 s and 1 c-3-74B-Randolph, 1 c-6F-Cook, 1 sub and 1 c-7-Project 7-Sect. R-2-Bureau, 1 super-7-Project 7-Sect. R-3 Bureau, 3 c-8-25B-Livingston, 1 c-24-4B-Christian, 1 super-33-4C-Jasper 3 c and 2 sub-34-1B-Saline, 3 super-34-1C-Saline, 5 c-34-2B-Saline, 7 c-34-3B, Pope-Hardin, 3 c-34-4B-Hardin, 3 c and 1 sub-34-5B-Hardin, 1 super-34-5C-Hardin. Noted May 24.

Tex., Crockett—Hurricane Shoals Bridge Co. takes bids in summer 440 ft. steel highway bridge over Trinity River at Hurricane Shoals. $25,000. M. Brownberg, pres.

Tex., Ft. Worth—Northern Texas Traction Co., Main and 2nd Sts., making plans and takes bids late in summer street railway bridge, probably concrete, across Sycamore Creek on carline extension to Riverside. $125,000. J. M. Hardesty, ch. engr.

Wash., Omak — Comrs. Okanogan Co. (Okanogan) rejected bids opened June 20, 408 ft. steel bridge, 5 span, 20 ft. wide, 5 ft. walks. Will readvertise. $75,000. Noted June 7.

Que., Three Rivers—Plans steel bridge over St. Maurice River. $150,000. A. Normand, mayor.

BIDS DESIRED

Pa., Phila.—Aug. 15, by Delaware River Bridge Joint Comn., 806 Widener Bldg., 2 main cables of bridge over Delaware River, connecting Phila., Pa., and Camden, N. J., Contr. 8. G. Pinchot, chn.; adv. this issue.

S. C., Anderson—See "Streets and Roads."

S. C., Charleston—Aug. 14, by Charleston Co. Sanitary & Drainage Comn., 1,733 ft. bridge, 34 ft. driveway, over Ashley River, 43 ft. wide, superstructure involves 7,000 cu.yd. concrete, 1,400,000 lb. reinforcing, 6,000 sq.yd. paving, 5,400 lb. structural steel, etc., substructure 11,000 cu.yd. concrete, 80,000 lb. reinforcing, 55,000 lin.ft. concrete piling, 10,000 cu.yd. sand filling, 16,000 ft. creosoted timber. Steel bascules will take place of draw span. Noted Apr. 19.

S. C., Sumter—July 5, by Sumter Co., Permanent Rd. Comn., creosoted timber bridges over Black River Swamp on Shiloh Rd., 25,000 cu.yd. embankment, 94,833 ft. creosoted timber, 4,456 lin.ft. creosoted piling, 1,031 sq.yd. bituminous surface treatment, etc. Lee, Pennell & Murray, Sumter, engrs.

Kentucky—See "Streets and Roads."

Ohio—See "Streets and Roads."

Wis., New Richmond—July 10, by State Hy. Comn. at office City Clerk, City Hall, New Richmond, Willow River Bridge, here, concrete deck girder, two 50 ft. spans, 30 ft. roadway and two 6 ft. sidewalks. A. R. Hirst, Madison, highway engr.

Tex., Beaumont—Aug. 7, by B. B. Johnson, judge Jefferson Co., for Neches River Bridge. A. C. Love, co. engr.; adv. this issue.

California—July 9, by Supervs. Yolo Co., (Woodland) and Supervs. Solano Co., (Fairfield), 337 ft., rein.-con., bridge over Putah Creek, Yolo Co. To exceed $35,000. A. G. Proctor, surv. Yolo Co.

BIDS RECEIVED

Fla., Sulphur Springs—State Rd. Dept., Tallahassee, 172 ft. rein.-con. bridge, 30 ft. wide, 4 spans, bituminous macadam surface, over Hillsboro River, from R. Mugge Co., Bay View Hotel, Tampa, $61,105. Noted June 21.

Ohio—See "Streets and Roads."

Colorado—See "Streets and Roads."

CONTRACTS AWARDED

Fla., Bradentown — See "Streets and Roads."

Ky., Irvine—Estill Co., steel truss highway bridge over Kentucky River in South Irvine, to Internatonal Steel & Iron Co., 243 Edgar St., Evansville, Ind., $49,975. Noted June 28.

Ohio—See "Streets and Roads."

O., Cincinnati—Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., 511 West 3rd St., one 76 ft. and four 80 ft. steel girder spans, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., $50,000. Engrs. est. $45,000. Noted May 24.

O., Cincinnati—Peoria & Eastern Ry Co., 511 West 3rd St., five 85 ft. and five 94 ft. steel girder spans, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., $68,000. Engrs. est. $67,500. Noted May 24.

Wisconsin—See "Streets and Roads."

Ia., Davenport—Scott Co., to O. Holm, Everly, 16 box culverts, $13,350; Vinton Eng. & Constr. Co., Vinton, 2 pony trusses, 7 box culverts and 1 slab, $21,790; A. Olson Constr. Co., Waterloo, 9 box culverts and 1 pony truss, $18,995; W. D. Phelan Co., Davenport, 5 I-beams, 8 box culverts and 1 pair abutments, $43,150; Federal Bridge Co., Bankers Trust Bldg., Des Moines, 8 box culverts, 1 slab and 1 I-beam, $16,990. Noted June 28.

Ia., Le Mars—Plymouth Co., to H. Enterline, Rock Rapids, 14 box culverts $8,177, concrete figures $25,12; J. C. Peterson, Tyler, Minn., one I beam $4,000, concrete $28.50, and 13 box culverts $8,000, concrete $22.65; Vinton Eng. and Constr. Co., Vinton, 5 pony trusses, $52,000, concrete $26.80.

Tex., Lufkin—Angelina Co., 279.4 ft. bridge, incl. one 150 ft. steel span and 7 concrete slabs, over Neches River on State Highway 35, to Brown-Abbott Co., Inc., Wilson Bldg., Dallas, $30,250. Engrs. est. $33,275.

Tex., Richmond—Ft. Bend Co. rein.-con. bridges and culverts on State Highway 3, to M. M. Craven, Missouri City, $84,664. Engrs. est. $96,000. Noted June 21.

Ia., Boone—Boone Co., to Alexander & Higbie, 273 36th Ave., Des Moines, 80 ft. pony truss and 18 ft. slab bridge, $10,472; Des Moines Steel Co., 421 Southwest 4th St., Des Moines, one 50 ft. one 90 ft. and two 60 ft. pony trusses $25,354; McHose Sand & Tile Co. Boone, one 24 ft. slab, $2,703; R. E. Shackelton, Perry, one 32 ft., one 36 ft. and one 40 ft. I beam spans, one 16 ft. slab and two 8 x 10 ft. box culverts, $16,115.

Calif., San Leandro—Supervs. Alameda Co. (Oakland), repairing bridge over San Leandro Creek on 14th St., here, to W. B. Ellis, 2236 Grove St., Berkeley, $24,818. Noted June 21.

Dams

PROPOSED WORK

Conn., Meriden—Plans repairing Broad Brook Dam. $25,000. A. Hazen, 30 East 42nd St., New York City, engr.

BIDS DESIRED

N. Y., Beacon—July 16 (change of date) by City Council, 525 Main St., dam at Melzingah Reservoir. K. W. Krieger, Jr., Poughkeepsie, consult. engr.; adv. this issue. Noted June 21.

Railways

PROPOSED WORK

Kentucky—Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans second tracking on 39.18 mi. line from Walls End to Harlan on Cumberland Valley Div. $3,527,000. W. H. Courtenay, ch. engr.

Texas—Houston & Texas Central Ry., Field St., Dallas, takes bids about July 20, belt line railway around city near White Rock Reservoir. $300,000. H. M. Lull, c/o Southern Pacific Ry. Lines, Houston ch. engr.

BIDS DESIRED

Idaho—Oregon Short Line R.R., Deseret News Bldg., Salt Lake City, Utah, receiving bids 22 mi. standard gauge line from Orchard to Perkins, here. $3,000,000. W. R. Armstrong, asst. ch. engr. Noted Nov. 30.

CONTRACTS AWARDED

Kentucky—Louisville & Nashville R. R., 10th St. and Bway., Louisville, grading and masonry work for 16.63 mi. second track from Baileys to Walls End, to Nichols Contg. Co., Trust Co. of Georgia Bldg., Atlanta, Ga., several hundred thousand dollars. Noted June 28.

Ontario—Michigan Central Ry. Co., 15th St., Detroit, Mich., 5 mi. new sidings, switches, ballasting and grading, at St. Thomas Yards, to Dominion Constr. Co., 14 Wellington St., E. Toronto. Engrs. est. $500,000. Noted June 14.

Excavation, Drainage Irrigation

PROPOSED WORK

Mich., Detroit—Wayne and Washtenaw Counties, Wayne Co. Bldg., had plans prepared 19,320 ft. drain in Canton and Van Buren Twps., to be known as Simes Drain, 4.5 ft. deep, 2 ft. bottom width. G. A. Dingman, Wayne County Bldg., engr.

Excavation, Drainage and Irrigation (Continued)

Wis., Port Washington—Farm Drains 6 and 7, G. S. Hales, secy., Courthouse, plan Farm Drain 6, involving 9,000 lin.ft. 8-12 in. tile, located 3 mi. west of Cedarburg. Farm Drain 7, 22,000 lin.ft. 6-22 in. tile. (2,000 lin.ft. to be 22 in.) near Ulao. Engineer not selected.

Minn., Mankato — Blue Earth Co. authorized $399,500 bonds for drainage and roads. J. W. Hruska, Mankato, engr.

BIDS DESIRED

Minn., Crookston — July 12, by H. J. Welte, aud. Polk Co., (Crookston) and H. K. Rude, aud. Clearwater Co. (Bagley), Judicial Ditch 72, 356,537 cu yd. excav., 28.5 mi. level road, 1,060 lin.ft. 15 in. culvert pipe, fourteen 16 ft. and one 24 ft. span timber bridges. $51,470. S. Steenerson, Crookston, engr.

Ill., Savanna—July 21, by Carroll Co. Drainage and Levee Dist. 1, at office H. P. Greison, secy., oil engine driven pumping plant, and building to house same. Former bids rejected. Elliott & Harman Eng. Co., Peoria, engrs.; adv. this issue. Noted June 7.

BIDS RECEIVED

N. Y., New York—J. H. Delaney, comr. Docks, Pier "A," North River, June 26, dredging at street cleaning dumps in Boros of Manhattan and Brooklyn, Contr. 1808, from Columbia Dredging Co., 30 Church St., Item 1 $0.75, Item 3 $1; L. E. Dodge, 564 Rugby Rd., Brooklyn, Item 4 $1.24. Noted June 21.

CONTRACTS AWARDED

Ontario — Dept. Pub. Wks., Parliament Bldg., Ottawa, dredging in harbor of Ft. William and Port Arthur, to D. S. Pratt, Midland. Est. cost $300,000. Noted June 14.

Streets and Roads

PROPOSED WORK

N. Y., New York—Park Bd., Municipal Bldg., rejected bids May 24, road and paths, etc., from Eastern Blvd. to City Island Rd., in Pelham Bay Park, Bronx Boro. Will readvertise. Noted May 31.

N. Y., Rochester—Plans asphalt paving Admiral Pk., Lehigh and Wisteria Sts., $43,200; walks and grading Southview Terrace, Hewitt and Huron Sts., $9,800; surface treating South Ave. $3,000; opening Wesp Ave. $6,000; extending Wilder Terrace and Alpha St. $1,020; tract, walks and grading Lake Ave. $20,600. C. A. Poole, city engr.

N. J., Belvidere—Warren Co. plans concrete paving 5 mi. Riegelsville-Warren Glen Rd. $248,000. State to appropriate toward cost. H. W. Vetter, Belvidere, engr.

Maryland—State Rds. Comn., Baltimore, rejected bids opened June 19, Contrs. Cl-40, F-60, Ch-27, AA-34, Carroll, Frederick, Charles and Anne Arundel Counties. Will readvertise. J. N. Mackall, chn. Noted June 7.

W. Va., Bluefield—See "Buildings."

Fla., Panama City—Bay Co. plans paving road from Red Fish Point to County line, $29,000; road from Lynn Haven Bridge via Vicksburg, West Bay and Pine Log Creek, $39,000; road from Vicksburg to Washington Co. line and from Parker to Lynn Haven, $43,000. Engineer not selected.

Ky., Henderson—Soon takes bids paving 2 mi. North Main, South Elm, North Green, South Green and Washington Sts., 40,000 sq.yd. asphalt. J. H. Cunningham, comr. pub. wks.

Ky., Paris—Bourbon Co. sold $100,000 bonds for road and bridge work.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids opened June 15, grading, bridging and paving 2.5 mi. Sect. "G" Ironton-Jackson Rd., Lawrence Co. Noted June 21.

O., Cincinnati—Making plans improving Clearview subdivision $25,000. E. F. Layman, 514 Main St., engr.

O., Lisbon—Columbiana Co. plans grading and improving 1⅝ mi. Columbiana-Middleton Rd., 18 ft., $40,000.

O., Warren—Plans widening and repaving West Market St., from 42 ft. to 54 ft. $75,000.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and concrete surfacing 1½ mi. State Trunk Line Rd. 21-10 and 47-8, 20 ft., Owasso Co., 3 mi. Federal Aid Project 98, 18 ft., Kent Co., 1 mi. State Trunk Line Rd. 21-22, 20 ft., Lyons Co., 8 mi. Federal Aid Project 108, 18 ft., Marquette Co., 7½ mi. Federal Aid Project 99, 18 ft., Kalamazoo Co.; grading and asphalt, concrete or bituminous concrete surfacing 1½ mi. State Trunk Line Rd. 11-22, 18 ft., Berrien Co., 2½ mi. Federal Aid Project 89, 20 ft., Calhoun Co.; grading and graveling 9 mi. State Trunk Line Rd. 26-7, Sect. B, 16 ft., Gogebic Co.; grading and concrete and gravel surfacing 1 mi. State Trunk Line Rd., 21-20, 16 and 20 ft. in Pewamo; grading and concrete or bituminous macadam surfacing 1¼ mi. State Trunk Line Rd. 11-16, 18 ft. in Alanson; grading and surfacing 1 mi. State Trunk Line Rd. 35-5, Sect. E, 20 ft., Marquette Co.; 60 ft. concrete arch Bridge 580902, 42 ft. roadway, Monroe Co. F. F. Rogers, comr.

Mich., Ann Arbor—Making plans 20,000 ft. curbs and gutters in districts 50 to 61 inclusive, 3,700 ft. 4 and 8 in. vitr. sanitary sewer in districts 127 to 131 inclusive. E. G. Reynolds, city clk.

Mich., Detroit—Making plans paving with 3½ in. sheet asphalt on 8 in. concrete, 8,000 sq.yd. Parkside Ave. $47,610, $9,000 sq.yd. Post St. $54,050, 11,000 sq.yd. Lonyo St. $70,204, 1,700 sq.yd. Washburn Ave. $10,450, 5,500 sq.yd. Lakewood Ave. $33,180, 3,500 sq.yd. Parkhurst Pl. $21,230, 2,400 sq.yd. Green Ave. $14,880, $27,000 sq.yd. Puritan Ave. $165,970, $1,800 sq.yd. Shoemaker Ave. $10,720, 5,300 sq.yd. Lakeview Ave. $31,740; 3½ in. sheet asphalt on 6 in. concrete 5,400 sq.yd. Shrewsbury Ave. $27,202, 3,500 sq.yd. Roslyn Ave. $18,830; all to have Berea, Medina or concrete curbs. J. W. Reid, City Hall, engr.

Mich., Grosse Ponte Farms — Making plans grading and paving 19,348 sq.yd. 9 in. one course concrete on Kerby Ave. $75,000. R. H. Erley, Village Hall, engr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids grading 5.51 mi. 1-2A-White means 5.51 mi. Route 1, Sect. 2A, White Co., 2.53 mi. 1-3A-White, 5.88 mi. 1-28A-White, 4.34 mi. 1-38A-Johnson, 4.81 mi. 1-39A-Massac, 4.89 mi. 1-40A-Massac, 3.49 mi. 2-21A-Fayette, 5.04 mi. 2-22A-Fayette, 9.58 mi. 2-37A-Ogle, 0.84 mi. 2-46A-Shelby, 1.01 mi. 2-47A-Macon, 2 mi. 2-66A-McLean, 0.89 mi. 2-63A-McLean-Woodford, 7.86 mi. 3-59A-Jersey-Madison, 2.86 mi. 3-60A-Madison, 0.86 mi. 3-67A-Monroe, 5.77 mi. 3-69A-Monroe, 7.25 mi. 3-70A-Monroe-Randolph, 3.67 mi. 5-24A-Jo Daviess, 6.72 mi. 5-25A-Jo Daviess, 1.55 mi. 5-26A-Jo Daviess, 7.17 mi. 7 and 29-Project 7-Sect. R-Bureau, 1 mi. 7-Project 55-Sect. R-1, Bureau, 0.64 mi. 7-Project 55-Sect. 14-A Bureau, 7.45 mi. 16-2 A-Montgomery, 1.53 mi. 33-1A-Crawford, 4.57 mi. 34-1A, Saline, 5.78 mi. 34-2A Saline, 5.32 mi. 34-3A-Pope-Hardin, 5.6 mi. 34-4A-Hardin, 6.54 mi. 34-5A-Hardin. Noted Apr. 26 and May 24.

Ill., Edwardsville—Making plans grading and concrete paving 4,300 ft. various streets. $45,000. Sheppard & Morgan, Bank of Edwardsville Bldg., engrs.

Wis., Stevens Point—Making plans paving Illinois Ave., Fremont, Dixon, Church and 1st Sts. W. L. Bronson, clk.

South Dakota—State Hy. Dept., Pierre, plans grading, etc., 19.85 mi. Federal Aid Project 75, Perkins and Corson Counties, $94,637; graveling 36.5 mi. Federal Aid Project 152, Codington, Grant and Roberts Counties, $82,196. F. D. Hudgins, state highway engr.

Mo., Kansas City — L. Koehler, engr., Court House, opens bids about July 16, resurfacing 10½ mi. Brickner-Silsby Rd., 17 ft., asphaltic top, for Jackson Co.

Mo., Kansas City — L. Koehler, engr., Court House, takes bids in about 3 weeks grading and resurfacing 9 mi. Wood Chapel Rd., 19 ft., tar top, resurfacing 7 mi. Blue Springs-Tarsney Rd., 17 ft., new top cushion; bids in about 30 days grading and resurfacing 8½ mi. Hickman Mills-Lee Summitt Rd., 16 ft., tarvia preparation on top, 9 mi. Oak Grove Rd., 18 ft., new cushion tar top, for Jackson Co.

Tex., Brenham—Washington Co. postponed date for opening bids for grading, bridging, etc., 17.3 mi. State Highway 36 and 19.2 mi. Brenham-Washington Rd. Will readvertise soon. G. A. Bracher, co. engr. Noted June 7.

Tex., Angleton—Brazoria Co. making plans grading and shell surfacing 6 mi. Danbury Rd., State Highway 19-A, 16 ft. $50,369. E. N. Gustafson, Angleton, engr.

Tex., Barstow—Ward Co. making plans grading, caliche and gravel surfacing 5.5 mi. Bankhead Highway, 18 ft. $45,180. R. E. Booker, Monahans, engr.

Tex., Dallas—City Com. takes bids about Aug. 20, widening 10 blocks Live Oak St. $390,000. E. A. Kingsley, city engr.

Tex., Ft. Worth—Tarrant Co. soon takes bids resurfacing with bituminous macadam, widening, etc., 7 mi. State Highway 10, $166,000; 3½ mi. State Highway 40, $50,000. D. A. Davis, co. engr.

Tex., Memphis—Hall Co. defeated $200,000 bond issue to grade, gravel surface, etc. Colorado Gulf Highway and road in Estelline Rd. Dist. A. C. Hoffman, co. judge. Noted June 7.

Tex., Memphis—Hall Co. voted $100,000 bonds for roads in Turkey Precinct. A. C. Hoffman, co. judge.

Tex., Palestine—Anderson Co. making plans grading and bituminous macadam surfacing 10 mi. Athens Rd., 18 ft. $245,000. E. W. Davis, co. engr.

Idaho—State Highway Comn., Boise, soon takes bids paving 2 mi. Fruitland-Payette Rd. $81,000. D. P. Olson, dir. highways engr.

Calif., San Diego—Common Council plans paving Pershing Ave. between University Ave. and Balboa Park, 102,808 sq.ft. 2½ in. asphalt on concrete, 951 sq.ft. concrete sidewalks. F. A. Rhodes, city engr.

Calif., San Diego—Had plans prepared paving Elm St., 9,593 sq.yd. 2½ in. asphaltic concrete with ½ in. wearing surface. F. A. Rhodes, city engr.

Calif., San Diego—San Diego Co. had plans prepared grading and paving with 5 in. concrete with 8 in. edge or 3½ in. asphaltic concrete base, 1½ in. wearing surface, 37,960 sq.yd. Inland Route from Buena to Vista, 32,208 sq.yd. Inland Route from Barnardo to Escondido; paving with 1½ in. asphaltic concrete on 5 in. concrete 29,923 sq.yd. Adams Ave. from city limits of San Diego to Canyon Bridge. J. M. Heath, Courthouse, engr.

Que., Montreal—City soon takes bids constructing 4 ft. sidewalks on Victoria, St. Donat, Montclair, Monkland, Melrose, Fortune, Chambly and Calbrooke Sts., $50,000 paving Cathcard, Monkland and Hubert Sts. H. Terreault, dir. pub. wks.

Ont., Brantford—Plans paving with asphalt and brick block Elgin, Murray, Clarence and Chatham Sts.; concrete curbing and guttering Clarence, Murray, Chatham and Marlborough Sts. $60,000. F. P. Adams, city engr.

Ont., Oshawa—City Council plans to resurface ¾ mi. Simcoe and King Sts., 15,000-16,000 sq.yd. asphalt. $30,000. W. C. Smith, city engr.

Ont., Toronto—Soon takes bids paving with asphalt and brick block Glendonwynne Rd. $26,900, paving with asphalt Cloverlawn Ave. $3,842, Suffolk Pl. $5,091, paving with bitulithic Oakcrest Ave. $23,316, Woodbine Ave. $6,551; widening and asphalt paving St. Clair Ave. $181,218; concrete sidewalks on Carthness, Haslett, Cloverlawn, Coxwell and Fairlawn Aves., Balliol, Haddon and Minto Sts. $38,312; concrete curbing and sidewalks on Glendonwynne Rd., Cambridge, Carthness and Haslett Aves. $30,000. R. C. Harris, city engr.

Ont., Waterloo—Plans paving ¾ mi. Duke, Willow, George, John and Herbert Sts., 10,000 sq.yd. asphalt or concrete. $35,000 J. C. Haight, clk.

BIDS DESIRED

N. Y., Brooklyn—July 11, by E. Riegelmann., boro pres., Boro Hall, asphalt paving Delamere Pl., Gelston Ave., Bay 31st, East 40th, 66th, 70th, 72nd and 90th Sts.; grading, curbing and flagging Delamere Pl.; asphalt repaving Tompkins Ave.; recurbing where necessary and asphalt paving 6th Ave. Former bids rejected. Noted June 28.

N. Y., St. George — July 13, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Post Ave. granite block on present concrete foundation; Bway., granite block on new concrete foundation.

New Jersey—July 19, by Pohatcong Twp. Com., at Schoolhouse, Springtown, grading, etc., Riegelsville-Warren Glen Rd., Warren Co. H. W. Vetter, Belvidere, engr.; adv. this issue.

New Jersey—July 23, by State Hy. Dept., Trenton, macadamizing State Highway Route 10, Sect. 2, in municipality of Palisade Park, Bergen Co., also steel encased bridge on steel columns and 3 cell rein.-con. highway bridge over trolley tracks, on above road; grading and plate girder bridge encased in concrete, etc., on Route 2, Sect. 4, Burlington, Burlington Co. A. L. Grover, ch. clk.; adv. this issue.

N. J., Boonton—July 25, by Bd. Freeholders Morris Co. (Morristown) reconstructing East Main St., bituminous concrete on concrete. W. Hopkins, co. engr.; adv. this issue.

Pa., Central City — July 17, by Boro Council, paving with vitr. brick block on cement or one course rein.-con., and building sanitary and storm sewers in 3,000 ft. Sunshine and Central Aves., $30,000 and $12,000 respectively. S. A. Dickey & Co., 809 Johnstown Trust Bldg., Johnstown, engrs.

Pa., Harrisburg — July 18 by H. W. Gough, controller Dauphin Co., 27,881 ft. rein.-con. or bituminous penetration macadam pavement on Horseshoe Pike, Hummelstown Boro and Derry Twp. G. H. Biles, Telegraph Bldg., consult. engr.

Delaware—July 25, by State Hy. Dept., Dover, grading and cement concrete paving, etc., 2.2 mi. Contr. CN 12, 16,000 cu.yd. excav., 3,800 cu.yd. cement concrete, etc.; 1.55 mi. Contr. CS 23, 6,500 cu.yd. excav.,

Streets and Roads (Continued)

2,250 cu.yd. cement concrete, etc.; 4.518 mi. Contr. CK 14, 20,000 cu.yd. excav., 7,000 cu.yd. cement concrete, etc. C. M. Upham, chn.

Va., Blacksburg—July 7, by D. B. H. Begg, engr., Blacksburg, 33,000 cu.yd. excav. and 7,000 sq.yd. 6 in. macadam surface for city.

N. C., Troy—July 17, by C. C. Broughton, mayor, 20,000 sq.yd. bituminous paving, 40,000 sq.yd. gravel surfacing, 8 mi. curb and gutter, 5 mi. concrete sidewalk, etc. L. V. Edwards, Winston-Salem, engr.

S. C. Anderson — July 11, by Anderson Co. Highway Comn., constructing 3.86 mi. road between Abbeville Co. line and Varennes Church, State Route 18, Federal Aid Project 150, 32,307 cu.yd. common and 2,500 cu.yd. rock excav., 11,981 cu.yd. topsoil, also 216 ft. rein.-con., treated timber and structural steel bridge, etc., on above road. E. D. Sloan, Jr., Courthouse, Greenville, engr.

Miss., Houston—Chickasaw Co. taking bids grading, gravel surfacing and bridging 7.97 mi. roads. H. S. Dutzer, Jackson, engr.

Tenn., Martin—July 9, by E. W. Harper, mayor, improving various streets, 25,000 sq.yd. gravel, 125,000 sq.yd. penetration macadam, 250,000 gal. refined asphalt, 3,000 ft. vitr. clay pipe, separate bids 50,000 ft. concrete curb and gutters.

Kentucky—July 25, by State Hy. Comn., Frankfort, surfacing 4.28 mi. Albany-Monticello Rd., State Project 27, Sect. A, Clinton Co., 12.14 mi. New Castle-Carrollton Rd., State Project 46, Sect. A, Henry, Trimble and Carroll Counties, 3 mi. road in Oldham Co.; constructing 3 bridges in Kenton Co., total length 100 ft., one 100 ft. concrete bridge, Rowan Co., 2 bridges in Morgan Co., total length 180 ft., concrete or steel. J. S. Boggs, state highway engr. Noted May 10.

Kentucky—July 25, by State Rd. Dept., Frankfort, resurfacing 12.4 mi. roads in Pendleton and Jessamine Counties, 16 ft.; reconstructing with waterbound macadam 6.1 mi. road, Garrard Co., 14 ft.; reconstructing 458 ft. road, Shelby Co., 26 and 28 ft.; cleaning surface and applying bituminous material and spreading covering material on 92.022 mi. roads in Boyle, Fayette, Greenup, Harrison, Hart, Hardin, Jefferson, Larue, Madison, Nicholas, Owen, Scott, Todd and Whitley Counties. J. S. Boggs, state highway engr.

Ohio—July 13, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 12.722 mi. roads in Summit and Wayne Counties, bituminous concrete, brick, bituminous macadam, asphalt or tar, rein.-con. or monolithic brick; also bridge in Auglaize Co. A. V. Donaheys, dir.

O., Brooklyn Heights (Cleveland P. O.)—July 16, 2,000 ft. 12-15 in. tile sewers, 1,860 ft. 6 in. c.i. mains, 2,600 cu.yd. grading, and 17,500 sq.ft. stone or concrete sidewalks. W. H. Evers Eng. Co., Engineering Bldg., Cleveland, engrs.

O., Cleveland—July 5, grading, curbing and vitr. brick paving Earle and St. Clair Aves. To exceed $25,000. R. Hoffman, City Hall, engr.

O., Cleveland—July 16, by Bd. Educ., East 6th St. and Rockwell Ave., grading, landscaping and masonry work, at Sunbeam School, East Blvd. and Mt. Overlook Ave. To exceed $25,000. W. R. McCornack, East 6th St. and Rockwell Ave., engr.

O., Columbus—July 10, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 740 ft. alley west of Summit Ave., 16 ft., 1,154 ft. Taylor Ave., 26 ft., 1,346 ft. Brehl Ave., 50 ft., 3,322 ft. alley north of Lane Ave., Williams St. and Kinnear alley, 20 ft., 4,175 ft. Crescent Dr. and Binns Blvd., 24 ft., brick, concrete or asphalt.

O., Dayton—July 9, by G. F. Baker, dir. Pub. Serv., paving Mt. Vernon Ave. and Red Haw Rd., asphalt or concrete, $22,969; Dow St., brick or asphalt, $17,560; Fairview Ave., brick on concrete, $21,565. I. E. Houk, city engr. Noted Oct. 12.

Michigan—July 10, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 66, Sect. B, St. Joseph Co., 27,665 sq.yd. concrete, 7,384 cu.yd. earth excav.; Federal Aid Project 49, Sect. A, 68,061 sq.yd. concrete, 1,181 cu.yd. concrete curb and gutter, etc. R. F. F. Rogers, comr.

Michigan—July 11, by State Hy. Dept., Lansing, grading and surfacing, State Trunk Line Rd. 54-7, Newaygo Co., 4,367 sq.yd. concrete, 32 917 sq.yd. gravel, 22,883 cu.yd. earth excav.; Federal Aid Project 102, Sect. B, Charlevoix Co., 38,612 sq.yd. gravel, 55,251 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 12, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 13-15, Grand Traverse Co., 4,851 sq.yd. concrete, 11,583 sq.yd. gravel, 12,505 cu.yd. earth excav.; State Trunk Line Rd. 19-14, Macomb Co., 10,588 sq.yd. asphalt, concrete or bituminous concrete, 3,869 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 13, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 46-21, 51,845 sq.yd. gravel, 22,731 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 16, by State Hy. Dept., Lansing, paving State Trunk Line Rd. 27-4, Sects. A and B, 22,682 sq.yd. asphalt, concrete or bituminous concrete; State Trunk Line Rd. 21-17, Sects. A and B, 35,452 sq.yd. asphalt, concrete or bituminous concrete, St. Clair Co. State Hy. Dept., Lansing, engrs.

Michigan—July 17, by State Hy. Dept., Lansing, grading and surfacing road, Utica Co., 10,061 sq.yd. asphalt, concrete or bituminous concrete, 2,211 lin.ft. concrete curb and gutter, 5,007 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 18, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rds. 21-10 Sect. A and 47-8, Owasso Co., 16,564 sq.yd. asphalt, concrete or bituminous concrete, 6,010 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 19, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 37-4, Grand Rapids Co., 18,765 sq.yd. asphalt, 12,344 cu.yd. earth excav.; Federal Aid Project 98, Sect. D, Kent Co., 37,256 sq.yd. asphalt, concrete or bituminous concrete, 9,736 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 20, by State Hy. Dept., Lansing, grading and paving Federal Aid Project 99, Kalamaoo Co.; 77,838 sq.yd. asphalt, concrete or bituminous concrete, 27,314 cu.yd. earth excav. F. F. Rogers, comr.

Mich., Hillsdale—July 10, by Hillsdale Co. Rd. Com. grading and gravel surfacing 7 mi. Assessment Dist. Rd. 7, 9 ft. F. Rogers, co. engr.

Illinois—July 19, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving 0.5-6 mi. Route 14, Sect. 9-1, Hamilton Co., 18 ft.; also at same time by City of McLeansboro, widening Sect. 9-1. C. H. Older, ch. engr. Caldwell Eng. Co., Jacksonville, engrs. Noted May 31.

Wis., Edgerton—July 16 (change of date) by G. Blanchard, city clk., concrete paving, etc., 16,055 sq.yd. Victoria Rd., Randolph, Perry, Jenson, Blain, West, North 3rd and High Sts. $50,000-$60,000. A. W. Ely, 29 West Milwaukee St., Janesville, engr. Noted July 28.

Wis., Racine—July 10, by C. R. Weymouth, div. engr., Stephenson Bldg., Milwaukee, concrete surfacing, etc., Kilbourn Rd. Sect. A, 40,000 sq.yd. concrete, 22,952 cu.yd. earth excav., etc. Wisconsin Hy. Comn., Madison, engrs.

Ia., Des Moines—July 9, by Auditor Polk Co., concrete paving 2.5 mi. Norwalk Rd. south of here, 18 ft., 25,429 cu.yd. excav., 29,506 sq.yd. concrete, etc. $100,000. F. O. Laing, co. engr.

Ia., Jefferson — July 12, by Supervs. Greene Co., grading and concrete paving 1.513 mi. road through Grand Junction, 4,978 cu.yd. excav., 16,182 sq.yd. concrete, 8,868 lin.ft. tile drain, etc. Ia. Hy. Comn., Ames, engrs.

Ia., Wapello—July 10 by Supervs. Louisa Co., grading 9.94 mi. primary road northwest and northeast of Grandview, 89,837 cu.yd. excav., 8,440 ft. tile, etc. Ia. Hy. Comn., Ames, engrs.

Kan., Columbus—July 10, by W. H. Tyrell, engr., Columbus, concrete paving 1 mi. Federal Aid Project 71, 18 ft., for Cherokee Co.

Tex., Jasper—July 10, by A. D. Hancock, judge Jasper Co., 6.06 mi. State Highway 7, 52,924 cu.yd. roadway, 30,056 cu.yd. borrow, 12,657 cu.yd. gravel surfacing, etc., $112,700; 1.29 mi. State Highway 7, 9,406 cu.yd. roadway, 9,795 cu.yd. borrow, 2,741 cu.yd. gravel, etc. $32,800. Noted May 31.

Calif., Redwood City—July 16, by City Trustees, improving various streets in Oak Knoll Tract, 19,785 cu.yd. excav., 305,400 sq.ft. oil macadam, 17,330 lin.ft. concrete curb and gutters, etc. To exceed $75,000. C. L. Dimmitt, city engr. Noted June 14.

Calif., Redwood City—July 16, by Redwood Highlands Co., improving various roads in Redwood Highlands Tract, 5,055 cu.yd. grading, 11,513 lin.ft. concrete curb and gutter, 154,443 sq.ft. oil macadam. To exceed $35,000. C. L. Dimmitt, city engr. Noted May 17.

Calif., San Jose — July 9, by Supervs. Santa Clara Co., paving 6,782 lin.ft. Sierra Rd., Superv. Dist. 3, 116,100 sq.ft. oil macadam; Mayfield Ave., Superv. Dist. 5, 120,200 sq.ft. oil macadam. R. Chandler, co. surv.

Calif., Ukiah—July 10, by Supervs. Mendocino Co., grading 1.75 mi. Leggett-Valley-Rockport Rd., Sect. 3, 22,500 cu.yd. excav. E. H. Smith, co. surv.

BIDS RECEIVED

R. I., Central Falls—Paving Broad St., 7,800 sq.yd. cut granite block, from Simpson Bros. Corp., 77 Summer St., Boston, $32,760. Noted June 14.

N.Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, June 27, paving (1) DeKalb Ave. (2) Gelston Ave. (3) Rutland Rd., repaving (4) 15th Ave. (5) 84th St. (6) North Elliott Pl. (7) North Oxford St. (8) roadway of 60th St., all foregoing asphalt, (9) St. Edwards St., grade 1 granite, from Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $46,855; Cranford Co., 52 9th St., (2) $5,940 (4) $4,943; Borough Asphalt Co., 1301 Metropolitan Ave., (3) $24,085 (5) $19,535 (6) $20,160 (7) $21,608; Uvalde Asphalt Paving Co., 1 Bway., New York, (8) $31,414; Greico Bros., 172 Russell St., (9) $12,479. Noted June 21.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., June 27, paving (1) Woodhaven Ave. (2) Rocky Hill Rd. (3) Flushing Ave. (4) Hillside Ave. (5) Hillside Ave., all foregoing sheet asphalt (6) Roosevelt Ave., concrete, from Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $233,123; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (2) $130,595 (3) $70,390; Uvalde Asphalt Paving Co., 1 Bway. New York, (4) $60,040 (5) $109,069; Kennedy & Smith, Inc., 93 Amity St., Flushing, (6) $27,974. Noted June 21.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, June 26, repaving Richmond Rd., bituminous granite block, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $107,613. Noted June 21.

N. Y., Syracuse—Bd. Contr. & Supply, June 25, paving (1) West Colvin St. (2) Durston Ave. (3) Glenwood Ave. (4) Salt Springs Rd. (5) Peck Ave., (a) asphalt (b) bituminous concrete, from F. J. Baker, University Blk., (1a) $24,797 (1b) $24,326; G. B. Dickinson, Union Bldg., (2a) $48,720 (2b) $46,918 (5a) $17,092 (5b) $16,678; Dale Eng. Co., Mann Bldg., Utica, (3a) $31,468 (3b) $30,645 (4a) $46,666 (4b) $45,438.

New Jersey—State Hy. Dept., Trenton, concrete paving 57,483 sq.yd. Route 4, Sect. 21, Point Pleasant-Laurelton Rd., from M. Staub, Pitman, 102.3% engrs. est. ($257,699); 20,566 sq.yd. Route 5, Sect. 10, Chatham-Brantwood Rd., from R. Sangiovani, 80 Hoyt St., Newark, 109.8% engrs. est. ($146,751). Noted June 14.

Delaware—State Hy. Dept., Dover, improving 4.58 mi. Contr. CN 13, from T. Miele, 85th Ave., New Rochelle, N. Y., $169,885; 6 mi. Contr. CK 16, from David Shontag, Inc., Saugerties, N. Y., $182,661; 1.58 mi. Contr. 45, from Juniata Co., Empire Bldg., Phila., $86,090. Noted June 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 28, grading, bridging and paving 3.843 mi. Sect. "A" Painesville-Ravenna Rd., Geauga Co., from Mahoning Constr. Co., Warren, bituminous macadam, asphalt, $108,559, bituminous macadam, tar, $108,196; 2.526 mi. Sects. "D" and "G" Bryan-Defiance Rd., Williams Co., from R. Stone Contg. Co., Lima, asphaltic macadam, $23,714, Erman & Leibel, Defiance, tar macadam, $23,864. Noted June 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 29, grading, bridging and paving (1) 2.809 mi. Sect. "M-3" Ohio River Rd., Lawrence Co. (2) 3.338 mi. Sect. "N" Ohio River Rd., Lawrence Co. (3) 4.368 mi. Toledo-Grand Rapids Rd., Wood Co. (4) 5.475 mi. Sect. "E" Toledo-Grand Rapids Rd., Wood Co., (5) 1.1776 mi. Sect. "C" Findlay-Bowling Green Rd., Hancock Co., (a) asphaltic macadam (b) tar macadam (c) brick (d) warrenite bitulithic, oil (e) warrenite bitulithic, lake (f) bituminous macadam, asphalt (g) bituminous macadam, tar (6) concrete bridge on Sect. "N" Ohio River Rd., Lawrence Co., from G. C. Hardin, Ironton, (1a) $70,588 (2a) $70,742; F. B. Davies, Ironton, (1b) $71,207 (2b) $82,323 (6) $12,820; W. D. Winchell Co., 337 Siebert Ave., Columbus, (3c) $201,892 (4c) $233,370; Russell-Jennison Co., Toledo, (3d) $186,031 (3e) $190,197 (4d) $206,081 (4e) $211,315; Frost Constr. Co., Findlay, (5f) $29,866 (5g) $30,300.

Ohio—Dept. Highways and Pub. Wks., Columbus, June 30, grading, bridging and paving (1) 3.437 mi. Sect. "N-3" Toledo-Napoleon Rd., Lucas Co. (2) 1.4164 mi. Sect. "Maumee" Toledo-Napoleon Rd., Lucas Co., (a) brick (b) sheet asphalt, oil (c) sheet asphalt, lake (d) willite bituminous concrete, oil (e) willite bituminous concrete, lake, from E. A. Freshwater & Sons, Painesville, (1a) $320,700 (2a) $150,866; Russell-Jennison Co., Toledo, (1b) $275,831 (1d) $287,171 (1e) $293,095 (2b) $130,780 (2c) $133.599 (2d) $136,224 (2e) $139,042; H. P. Streicher Co., Inc., 319 Terminal Bldg., Toledo, (1c) $308,411.

O., Akron—S. Porter, clk. Summit Co., June

Streets and Roads (Continued)

20, grading and graveling (1) 6,000 sq.yd. Sharon-Fairlawn Rd., grading and paving (2) 4.8 mi. Sects. E, F and G, Richfield Hudson Rd. 19, 44,700 sq.yd. 1½ in. (a) bituminous concrete, 20,600 cu.yd. earth excav., etc. (3) 0.77 mi. East Akron-Brimfield Rd. 90, 7,500 sq.yd. (b) granulated slag (c) tar bound macadam (d) asphalt bound macadam (4) 2.05 mi. Barberton-Springfield Rd., 20,750 sq.yd. (a) bituminous concrete or (e) vitr. brick, 12,100 cu.yd. earth excav. (5) 4.12 mi. Cleveland-East Liverpool Rd. 12, 39,200 sq.yd. (a) bituminous concrete or (f) bituminous macadam 22,220 cu.yd. earth excav., etc., from Kahl Bros. Constr. Co., 13004 Woodland Ave., Cleveland, (1) $13,080; W. P. McCourt, 365 South Main St., (2a) $149,293 (4a) $78,973 (5a) $138,242; H. Gilbert, 19 North Martha Ave., (3b) $18,245 (4e) $106,303; A. F. Wible, 859 Chalker St., (3c) $20,820; Crano & Lombardi, 274 Crosby St., (3d) $24,622; T. F. Bowers & Son, Kinsman, (5f) $128,625. Noted June 14.

O., Canton—Stark Co., June 22, improving about 1 mi. Whipple Rd., 18 ft., from Wise Bros., Canton, $42,160. Engrs. est. $50,000.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., (a) grading and landscaping (b) masonry work, in (1) Euclid Park School (2) Glenville School (3) Rawlings School, from H. Long, (1a) $10,300; C. N. Griffen, 5511 Euclid Ave., (1b) $18,555; V. Q. Galier, Builders Exch., (2a) $6,287 (3a) $6,228; A. MacDougall Co., Irene Ave., (2b) $1,929 (3b) $2,533. Noted June 7.

O., Cleveland — Cuyahoga Co., June 20, waterbound macadamizing 14,000 sq.yd. Lander Rd., from E. Gedney, Addison Rd., $54,150. Engrs. est. $67,244. Noted June 14.

O., Euclid—Grading, curbing ad paving (1) Chelsea Rd. (2) Sunnyclff Dr. (3) Shoreview Dr. (4) Overlook Dr. (5) Oriote Dr. (1-5 inclusive) involve 24,100 lin.ft. cement curb and gutter, 14,750 cu.yd. earth excav., 274,520 sq.yd. concrete base, 31,870 sq.yd. asphalt, (6) Independence Ave. (7) Iddings Ave. (8) Edgecliff Dr. (9) East Bowne Ave. (10) Cushman Rd. (6-10 inclusive) involve 14,720 lin.ft. cement curb and gutter, 5,850 cu.yd. earth excav., 13,860 sq.yd. asphalt, 151,420 sq.yd. concrete base, (11) Bayard Rd. (12) Bell Ave. (13) Naumann Ave. (14) Mallard Rd. (15) Liberty Ave., from Cleveland Trinidad Paving Co., The Arcade, Cleveland, (1) $30,544 (2) $21,747 (6) $22,120 (8) $7,272 (11) $12,083 (13) $36,978 (15) $42,371; Gould & Maybach, 823 East 150th St., Cleveland, (3) $32,430 (4) $54,224 (5) $32,430 (9) $22,421 (14) $32,505; H. G. Herring, Pavers Exch., Cleveland, (7) $20,688 (10) $16,135 (12) $23,401.

Michigan — State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 88, Ingham Co., Sect. A, 77,950 sq.yd. concrete, 50,444 cu.yd. earth excav., from Palma Constr. Co., Yysilanti, $163,092; Federal Aid Project 70, Sect. A, Oakland Co., 45,970 sq.yd. concrete, 24,861 cu.yd. earth excav., from Scott, Cochran & Scott, Bauch Bldg., Lansing, $85,617; Federal Aid Project 69, Sect. B in Fowlerville 12,491 sq.yd. concrete, 6,516 lin.ft. concrete curb and gutter, from H. A. Hoxie, 1426 4th St., N. W., Grand Rapids, $29,483; Federal Aid Project 69, Sect. A, Livingston Co., 20,956 sq.yd. concrete, 10,410 cu.yd. earth excav., from Handyside Constr. Co., 1758 Penobscot Bldg., Detroit, $43,980; state may do foregoing projects by day labor; Federal Aid Project 117 Sects. B and C, Muskegon Co., 31,938 sq.yd. concrete, 5,929 cu.yd. earth excav., from G. P. Schail, Muskegon, $63,973; Federal Aid Project 117, Sect. A, Ottawa Co., 21,628 sq.yd. concrete, 12,726 cu.yd. earth excav., from Cline & Bocleus, Spring Lake, $45,449. State will furnish cement.

Michigan — State Hy. Dept. Lansing, grading and surfacing State Trunk Line Rd. 16-12, 15,999 sq.yd. concrete, 9,006 cu.yd. earth excav., etc., from Townsend, Shuttleworth, Ballner Co., Capital Natl. Bank Bldg., Lansing, $37,355; cement furnished by state.

Wis., Kenosha—Paving 9,300 sq.yd. various streets, 3,200 cu.yd. grading, from Brennan & Bounsall, 709 Exch. St., gradng $0.60, rein.-con. paving $2.60, etc., total $30,330; from White Constr. Co., 68 Wisconsin St., Milwaukee, grading $0.66, sheet asphalt paving $2.86, total $33,175, asphaltic concrete paving $2.62, total $30,443.

Mo., St. Louis—Bd. Pub. Serv., City Hall, June 26, improving 12,320 sq.yd. 12th St. from Soulard to Chouteau Aves., 9,530 sq.yd. 12th St. from Russell to Soulard Aves., and 4,160 sq.yd. Soulard Ave., trinidad asphalt, from Central Pavingf Co., 6161 Maple Ave., $90,231, 57,679 and $27,437 respectively, engrs. ests. $74,000, $48,800 and $21,000 respectively; 15,000 sq.yd. Forest Park St., trinidad asphalt, from Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $50,932, engrs. est. $37,450; 1,425 sq.yd. Tennessee St., asphalt, 2,355 sq.yd. Wiesehan St., and 1,955 sq.yd. Elenore St., both asphaltic concrete, from Bridges Asphalt Paving Co., 5847 Highland Ave., $8,186, $14,484 and $12,266 respectively, engrs. ests. $6,450, $10,200 and $8,200 respectively; 4,965 sq.yd. Hebert St. and 4,320 sq.yd. Utah St., both bitulithic, from Granite Bituminous Paving Co., Ry. Exch. Bldg., $27,402 and $17,270 respectively, engrs. ests. $25,900 and $16,600 respectively; 1,735 sq.yd. Osceola St. from Ohio St. to Bway, and 4,265 sq.yd. Tyrolean and Elmer Sts., rein.-con., from Eyermann Constr. Co., 1216 South Grand Blvd., $7,590 and $20,460 respectively, engrs. est. $8,100 and $22,000 respectively; 925 sq.yd. Osceola St. from Ohio St. eastward, rein.-con., from J. E. Perkinson, 3237 Carter St., $5,472, engrs. est. $5,600; 2,820 sq.yd. Schollmeyer St., rein.-con., from Skrainka Constr. Co., Security Bldg., $13,448, engrs. est. $13,950. Noted May 31.

Tex., Coleman—Coleman Co. grading and gravel surfacing 5.87 mi. State Highway 7A, 688.7 cu.yd. concrete, 24,845 cu.yd. roadway, 22,042 cu.yd. borrow, 3,967 cu.yd. loose and 1,167 cu.yd. solid rock excav., 50,522 lb. reinforcing, from D. H. Buchanan and J. H. Veazey, Temple, $41,838; 12,621 cu.yd. gravel to be furnished by county $19,563. Engrs. est. $61,090. Noted June 21.

Tex., Lufkin — Angelina Co., grading, gravel surfacing and bituminous topping 15 mi. State Highway 37, 86,079 cu.yd. roadway and 30,754 cu.yd. borrow excav., 112,952 gal. asphalt oil, 2,824 cu.yd. limestone, 1,883 cu.yd. trap rock, 108, 195 lb. reinforcing, 39,376 cu.yd. gravel, from J. S. Moore & Sons, Lufkin, $238,115. Engrs. est. $219,550.

Colorado—State Hy. Dept., Denver, gravel surfacing (1) 2.082 mi. Federal Aid Project 214 La Plata Co. (2) 4.748 mi. Federal Aid Project 208 C, Mesa Co; concrete paving (3) 5.0659 mi. Federal Aid Project 135, Jefferson Co. (4) 2.702 mi. Federal Aid Project. 255 A, Morgan Co. (5) 2.868 mi. Federal Aid Project 226 B, Weld Co.; gravel surfacing and bridging (6) 0.587 mi. Federal Aid Project 229, Fremont Co.; grading and gravel surfacing (7) 2.144 mi. State Aid Project 714, Garfield Co.; (8) 150 ft. truss bridge over Clear Creek, Federal Aid Project 120, Jefferson Co., (a) corrugated metal pipe, (b) concrete pipe, from D. Hinman, 3358 Race St., Denver, (1) $48,556 (2a) $39,019 (2b) $39,759; Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver (3) $161,962 (4a) $77,967 (8) $30,055; C. C. Madsen, Box 2301, Denver, (4b) $84,958; White & Johnson, 521 Chamber Commerce Bldg., Denver, (5) $81,748; H. M. Fox, Florence, (6) $34,647; Northwestern Constr. Co., Craig, (7) $11,587. Noted June 14.

Nevada—State Hy. Dept., Carson City, asphalt macadam surfacing 4.99 mi. Project 64, from Fallon south, Churchill 2-C-3, Churchill Co., from Alston & Hoggan, Continental Natl. Bank Bldg., Salt Lake City, Utah, $39,954.

Wash., Bellingham—Whatcom Co., June 21, paving 27,000 sq.yd. Sedro Wolley-Wickersham Rd., 6 to 7½ in. concrete, from C. L. LaPlant, Sedro Wolley, $69,935.

Wash., Seattle—Bd. Pub. Wks., June 19, concrete paving Greenwood Ave., et al., from Fiorito Bros., 3950 6th Ave., N. W., 49,700 sq.yd. 6 in. concrete $1.65, 3,000 lin.ft. asphaltic concrete curbing $0.55, 20,760 lin.ft. concrete curbing $0.30, 12,250 cu.yd. subgrade $0.60, total $126,249. Engrs, est. $132,787.

Calif., Huntington Beach—From G. H. Oswald, 366 East 58th St., Los Angeles, improving Ocean Ave. Blvd., through city to connect with state highway, 711,300 sq.ft. 1½ in. warrenite bitulithic on 4½ in. concrete, 23,800 cu.yd. excav., etc., $253,000; portions Delaware and 17th Aves., 227 yd. excav. at $0.50, 1,575 tons block patch base $8, 204,295 ft. 3 in. resurface, $0.15, etc. Noted May 17.

Calif., Los Angeles—From G. R. Curtis, 2440 East 26th St., improving Wilton Pl. between Santa Monica Blvd. and Clinton St., total for grading $4,800, 104,481 sq.ft. asphalt $0.24, 2,350 sq.ft. walks $0.25, 5,592 sq.ft. concrete gutter $0.29, etc.; Ridgeway Pl. between Santa Monica Blvd. and Lemon Grove Ave., total for grading $1,700, 35,390 sq.ft. warrenite bitulithic paving $0.26, 2,523 ft. curb $0.75, 1,072 sq.ft. walks $0.25, 2,531 sq.ft. gutter $0.30, etc. Noted June 21.

Calif., San Mateo—City Trustees, grading, concrete curbing, sidewalks and paving with 1½ in. asphaltic concrete on 4½ in. concrete, portions 1st, 3rd and 4th Aves., etc., from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $112,711. Noted June 21.

CONTRACTS AWARDED

Mass., Roxbury (Boston, P. O.)—Paving 2,000 ft. South St. and Belgrave Ave., 20-30 ft. wide, bitulithic, to Warren Bros. Co., Parkman Bldg., $66,416.

N. Y., Buffalo—To H. P. Burgard, 1968 Fillmore Ave., asphalt paving on concrete, Fernwood Pl. $13,950, Oxford St. $14,850, Lovejoy St. $29,625, Grider St. $28,720; to Rock Asphalt & Constr. Co., Morgan Bldg., Holloway alley $8,352, Englewood Ave. $21,357; to J. M. Fahning, 460 Leroy Ave., Oak St. $11,000, 10-18 in. tile sewer in Elmwood Ave. $11,981, 10 in. tile sewer in Texas St. $1,717, 10 and 12 in. tile sewer in Keating St. $2,300.

N. Y., Hudson—Paving 39,000 sq.yd. streets, to Municipal Constr. Co., U. C. N. Bank Bldg., Utica, $108,000. Noted June 7.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, grading sidewalk and gutter space on Andrews St. $449, Jay Ave. $1,572, grading, curbing, laying sidewalks and sheet asphalt paving Van Cott Ave. $6,960; to Cleveland Trinidad Paving Co., Flushing, sheet asphalt paving Crescent St. $20,455; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, sheet asphalt paving Linden St. $10,288, grading, curbing, laying sidewalks and sheet asphalt paving Doubleday St. $26,909, Van Dam St. $66,720; to H. E. Kordes Co., 2577 Cooper St., Brooklyn, East 101st St. $13,170. Noted June 14.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., repaving White Plains Rd., granite block, to Casper Helbock, Inc., Harlem River and 150th St., $209,790; Jerome Ave., granite block, to Leonard Paving Co., 233 Bway., $153,764; Jerome Ave. from Cromwell Ave. to East 176th St., also Melrose Ave., granite block, to Asphalt Constr. Co., 208 Bway., $290,491 and $137,499 respectively; Boston Rd., granite block, to Regan Towers Co., 124 West 121st St., $26,394; paving Tiebout Ave., granite block, to C. D. Beckwith, Inc., 2875 Bway., $66,524; East 172nd and West 238th Sts., both bituminous concrete, also Charlotte St., sheet asphalt, to Brusstar Constr. Co., Harlem River and 150th St., $9,264, $19,519 and $5,984 respectively; grading, building inlets, etc., in Godwin Terrace, to Spedeo Contg. Co., $4,557; grading, laying sidewalks, curbing, etc. Cruger Ave., to Spadero & Turiano, 3185 East Tremont Ave., $5,863; East 157th St. to M. DelBalso, 660 East 221st St., $20,749; regrading, etc. Bryant Ave., to P. J. Kearns Contg. Co., 2306 Creston Ave., $44,437. Noted June 28.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., changing park strips on Park Ave. from 34th to 39th Sts., to P. T. Cox Contg. Co., 154 Nassau St., $68,000. Noted June 28.

N. Y., Port Jervis—For 8,200 sq.yd. rein.-con. pavements, to E. McGreevy, 309 Robinson Bldg., Elmira, $40,242. Noted June 7.

N. J., Trenton — To J. J. Barrett, 601 Greenwood Ave., paving Pennington Ave. outside trolley tracks $41,111, resurfacing Passaic St. $10,266, Spruce St. $14,983, Lalor St. $61,394, repaving Monmouth St. $2,768, all asphalt; to A. DeLucia, 52 Bayard St., paving Pennington Ave., inside trolley tracks, asphalt $14,060. Noted June 14.

N. J., Trenton—Mercer Co., paving Upper Ferry Rd., 15,000 sq.yd. penetration macadam, 3,500 tons broken stone, to Sigafoos & Poore, Riegelsville, Pa., $60,869. Noted June 21.

Pennsylvania—State Hy. Dept., Harrisburg, one course rein.-con. paving, Route 233, Scott and Plain Grove Twps., Lawrence Co., 32,682 sq.yd. concrete, 27,016 cu.yd. excav., etc., to Burns & Burt, 411 Wayne Ave., Ellwood City, $199,392; Route 68, White Twp., Indiana Co., 5,883 sq.yd. concrete, etc., Owen & Plummer, Inc., Otto Bldg., Johnstown, $29,972; Route 304, North East Twp., Erie Co., 21,852 sq.yd. concrete, 8,705 cu.yd. excav., etc., C. H. Fry Constr. Co., 609 West 19th St., Erie, $100,552; Route 91, Washington Twp., Clarion Co., 22,767 sq.yd. concrete, 10,168 cu.yd. excav., etc., R. V. Baldwin, 1361 4th Ave., Coraopolis, $122,279; Route 18, Loyalsock Twp., Lycoming Co., 23,115 sq.yd. concrete, etc., G. I. Thompson, Clearfield, $91,318; bituminous macadam penetration method on rein.-con., Route 170, Fairview and Hanover Twp., Luzerne Co., 38,898 sq.yd. bituminous macadam, etc., H. B. Sproul Constr. Co., 218 Adams Ave., Scranton, $78,991. Noted June 14.

Pennsylvania—State Hy. Dept., Harrisburg, one course rein.-con. paving Route 50, Confluence Boro, Somerset Co., 9,452 sq.yd. concrete, etc., to M. F. McCabe & Co., 309 Deveny Bldg., Fairmount, W. Va., $42,834; Route 304, Amity Twp., Erie Co., 22,498 sq.yd. concrete 10,020 cu.yd. excav., etc., to F. W. Knickenberg, 702 Michigan Ave., Buffalo, N. Y., $103,428; Route 83, Pine and

Streets and Roads (Continued)

Conneaut Twps., Crawford Co., 35,901 sq.yd. concrete, 12,230 cu.yd. excav., 2,100 lin.ft. concrete gutter etc., to H. E. Bunce, Cambridge Springs, $155,501. Noted June 14.

Pa., Rockwood—Grading, curbing and concrete paving 4 mi. Market St., to Owen & Plummer, Inc., Otto Bldg., Johnstown, $162,000. Noted May 17.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 18,500 sq.yd. Contr. Q-26, Queen Annes Co., to Kauffman Constr. Co., Denton, $53,569. Noted June 7.

W. Va., Williamson—Mingo Co. clearing and grading using concrete pipe, Tamcluff-Spice Creek Rd., Project 16, to F. H. Herring Constr. Co., Greenwood, Va., $41,882; Glen Alum-Ben Creek Rd., Project 13, to Ballard-Herring Co., Huntington, $46,772. Noted May 31.

Fla., Bradentown—To H. R. Curry, Bradentown, paving with tarvia on shell base compacted Sunset, Otis and Sarasota Aves. and East Court St., $25,000, paving, probably with asphalt blocks Cherokee and Central Sts., $25,000, relaying and widening Main, Fairview, Price and Washington Sts., $25,000; to Shirley & Mattison, grading and laying sidewalks on various streets, $16,595; to J. B. Rodgers, Palma Sola, bridge over Waves Creek, $6,783. Noted May 17.

Fla., Tampa—Granite curbing and paving with 2½ in. asphaltic block, Amelia, Albany, Melville and Cowene Sts., etc., to Cone Bros., Tampa, $33,000.

Ala., Birmingham—Paving 5th Ave. from 39th to 45th Sts., vitr. brick and asphalt, to H. N. Bowdry, 3426 Norwood Blvd. and Birmingham Railway Light & Power Co., 1st Ave., $53,339 and $13,390 respectively. Noted June 7.

Tenn., Elizabethton—Paving, curbing and guttering various streets, 32,000 sq.yd. asphalt on concrete to Municipal Paving & Constr. Co., Bristol, $130,000.

Kentucky—State Hy. Dept., Frankfort, paving with waterbound macadam 4.995 mi. Lexington-Harrodsburg Rd., State Project 47, Sect. A, Jessamine Co., 16 ft., to W. Lutes & Co., Lexington, $117,477; grading 7.767 mi. Stanton-Campton Rd., State Project 4, Sect. C, Powell Co., to Costello Bros., Henson Bldg., Knoxville Tenn., $77,184. Noted June 28.

Ky., Central City—Curbing, guttering and surfacing with rock asphalt on stone macadam 51,000 sq.yd. various streets, to Hornaday Constr. Co., 1261 Central Ave., Memphis, Tenn., $185,000. Noted June 14.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.791 mi. Sect. "A-1" **Bridge-Dort-Cadiz Rd.**, Belmont Co., brick, to E. M. O'Neil Constr. Co., Youngstown, $130,905; 7.155 mi. Sect. "O" **Piketon-Hillsboro Rd.**, Highland Co., waterbound macadam, and 1.356 mi. Sect. "K" **McConnellsville-Athens Rd.**, Morgan Co., bituminous macadam tar, to Foy-Nixon Co., Columbus, $148,758 and $39,084 respectively; 0.514 mi. Sect. "D" **Pique St. Mary Rd.**, Auglaize Co., brick, and 0.975 mi. Sect. "I" **Roundhead-McGuffey Rd.**, Hardin Co., rein.-con., to Wapakoneta Cement Block Co., Wapakoneta, $19.239 and $30,249 respectively; 0.707 mi. Sect. "K" **Washington-London Rd.**, Fayette Co., brick, to W. H. Ringwald Co., Chillicothe, $27,212; 0.606 mi. Sect. "D-1" **Woodsfield-Clarington Rd.**, Monroe Co., bituminous macadam asphalt, to W. W. Patton, Woodsfield, $36,489; 1.596 mi. Sect. "P" **Cleveland-Massillon Rd.**, Stark Co., brick, to Holmes Constr. Co., Wooster, $78,170; 3.374 mi. Sect. "C" **Bowling Green-Waterville Rd.**, Wood Co., bituminous macadam asphalt, to J. H. Blausey, Woodville, $48,978; 1.532 mi. Sect. "S" **Wellsville-Salineville Rd.**, Columbiana Co., plain concrete, to E. A. Freshwater & Sons, Painesville, $60,619; 3.001 mi. Sect. "M" **Toledo-Angola Rd.**, and 1.002 mi. Sect. "E" **Archbold-Fayette Rd.**, both Fulton Co., rein.-con., to LaBoiteaux & Hayes, Toledo, $94,118 and $28,405 respectively; 2.79 mi. Sect. "C" **Youngstown-Lisbon Rd.**, Mahoning Co., brick, to A. Colucci, Youngstown, $72,200; 2.351 mi. Sect. "T-1" **Akron-Youngstown Rd.**, and 3.066 mi. Sect. "T-2" **Akron-Youngstown Rd.**, both Portage Co., rein.-con., to Turner Constr. Co., Park Theatre Bldg., Youngstown, $71,930 and $105,536 respectively; 0.559 mi. Sect. "E" **Cleveland-Sandusky Rd.**, Erie Co., bituminous concrete, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $29,885; 1.954 mi. Sect. "A" **Washington-Bloomington Rd.**, Fayette Co., bituminous macadam tar, to R. Stone Constr. Co., Lima, $25,679; 4.5 mi. Sect. "H-2" **Columbus-Washington C. H. Rd.**, Franklin Co., waterbound macadam, to W. M. Gray, Columbus, $48,818; 5.791 mi. Sect. "C" **Newark-New Lexington Rd.**, Licking Co., bituminous macadam asphalt, to F. E. Francis, Columbus, $69,065; grading, etc. 0.695 mi. Sects. "F and J" **Jackson-Pomeroy Rd.**, Jackson Co., to W. McKinnis and O. S. Bennett, Jackson, $10,036; concrete bridge on Sect. "Lisbon" **Lisbon-Salineville Rd.**, Columbiana Co., to Cox & Hezlep, Kinsington, $10,004; steel superstructures and concrete substructures on Sect. "D" **Celina-Greenville Rd.**, Darke Co., to Hinton & Smalley, Celina, $14,533; concrete bridge on Sect. "B" **Delaware-Marysville Rd.**, Delaware Co., to C. C. Carpenter, Ada, $8,594. Noted June 21 and 28.

O., Akron—Summit Co. paving about 1 mi. East Akron-Brimfield Rd., 18 ft., macadam with asphalt top, to T. E. McShaffrey Constr. Co., 171 South Forge St., $26,414. Engrs. est. $28,000. Noted June 14.

O., Carroll — Fairfield Co. (Lancaster) paving 2 mi. Minerva-Oneida Rds., 18 ft., vitr. brick on concrete, here, to G. Hadley, General Del., Canton, $72,464. Engrs. est. $76,000.

O., Cincinnati—Hamilton Co., grading and paving 13,100 sq.yd. Boomer Rd., bituminous macadam, to W. P. Flynn, Dana and Chase Sts., $30,688, engrs. est. $34,165; Zig Zag and Elm Rds., to A. C. Pickelheimer, 3555 Mooney Ave., $27,890 and $9,834 respectively, engrs. ests. $32,868 and $11.107 respectively. Noted June 14.

O., Cleveland—Grading and asphalt paving 56,450 sq.yd. Woodland Ave., to Cleveland Trinidad Paving Co., The Arcade, $311,059. Noted June 14.

O., Cleveland — Improving Jesse Ave., 2,830 lin.ft. stone curb and 4 in. tile drain gutter, 2,000 cu.yd. earth excav., 4,750 sq.yd. vitr. brick on concrete, to Enterprise Paving & Constr. Co., 8444 Bway., $29,386.

O., Cleveland Heights (Warrensville P.O.) —Grading, curbing and asphalt paving 2 sections of Mayfield Rd. and Euclid Heights Blvd., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $235,300.

O., Dayton—Paving Irwin and Summit Sts., brick on concrete, to Finke Eng. Co., 15 South St. Clair St., $22,298 and $54,019 respectively. Noted June 7.

O., Euclid—Grading and laying concrete sidewalks on Bliss Rd., to F. B. Stein, Euclid, $43,084. Noted June 28.

Michigan—State Hy. Dept., Lansing, fine grading and surfacing 4.145 mi. Federal Aid Project 71, Sect. A, Charlevoix Co., to Remus Constr. Co., Remus, 218.9 sta. fine grading $3.50, 44,284 sq.yd. rein.-con. pavement $1.43, etc., total $66,016, cement furnished by state; 3.028 mi. State Trunk Line Rd. 31-12, Huron Co., to Shulz & Liken, Sebewaing, 10,354 cu.yd. earth excav. $0.60, 32,204 sq.yd. rein.-con. pavement $1.70, etc., total $67,678.

Michigan—State Hy. Dept., Lansing, resurfacing old pavement on State Trunk Line Rd. 10-38, 24,336 cu.yd. 8 in. concrete, Genessee Co., by day labor. F. F. Rogers, comr.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, Amherst curbstone, (natural lake or oil) to Detroit Asphalt Paving Co., 20 McGraw Bldg., 2,000 sq.yd. Army Ave. $12,757, 2,800 sq.yd. Eureka Ave. $16,978, 1,900 sq.yd. 52nd St. $11,465, 4,300 sq.yd. Huber Ave. $26,161, 2,900 sq.yd. Iroquois Ave. $17,623, 2,300 sq.yd. Mackenzie Ave. $14,153, 4,000 sq.yd. Oliver Ave. $24,248, 12,100 sq.yd. Tireman Ave. $72,836, 2,350 sq.yd. Van Buren Ave. $14,377, to G. R. Cooke, 1260 Penobscot Bldg., 6,400 sq.yd. Dexter Ave. $38,850, 16,300 sq.yd. Dexter Ave., $97,931; grading and paving alleys with 6 in. one course concrete, to Otis Cement Constr. Co., 806 Hammond Bldg., 5,800 sq.yd., $17,539; to G. Nunn, 6409 3rd St., 2,100 sq.yd. $9,233; to R. J. Powelson Co., 6415 Iroquois Ave., 3,900 sq.yd. $11,681; to Smith Trucking Co., 3325 West Euclid Ave. 2,860 sq.yd. $8,199.

Wisconsin — State Hy. Comn., Madison, grading and surfacing Columbus-Beaver Dam Rd., Columbia and Dodge Counties, to J. P. Connell, Janesville, 9,852 cu.yd. earth excav. $0.72, 30,226 sq.yd. concrete surfacing $1.33, etc., total $60,395; Clinton-Darien Rd., Rock Co., to Fess & Fess, Madison, 13,828 cu.yd. earth excav. $0.78, 45,485 sq.yd. concrete surfacing $1.34 ,etc., total $81,226; concrete bridge on Columbus-Beaver Dam Rd., to Weyenberg Constr. Co., 812 College St., Appleton, $13,288. Noted June 21.

Wis., Green Bay—Brown Co. State Road and Bridge Com., grading and concrete surfacing Finger Rd., to E. Schuster, Denmark, 11,005 cu.yd. earth excav. $0.68, 14,888 sq.yd. concrete $1.47, etc., total $33,210; Eaton-Kewaunee Rd., to Wilson & Johnson, Appleton, 9,434 cu.yd. earth excav. $0.72, 46,944 sq.yd. concrete $1.49, etc., total $93,239.

Wis., La Crosse—Paving, curbing and guttering 12 streets, one course concrete and 3 in. brick, to T. E. Wooley, 148 West Ave., S., $134,587. Noted June 14.

Wis., Milwaukee—Paving Lake St., 18,239 cu.yd. earth excav., 30,030 sq.yd. vibrolithic concrete, to Czerwinski Constr. Co., 376 16th Ave., $109,572. Noted May 31.

Wis., Milwaukee—Concrete paving various alleys, etc., to Bodeman Constr. Co., 691 48th St., 4,649 sq.yd. $13,522, 2 alleys $13,536; to C. Vanderboom & Sons, 99 32nd St., 4,403 sq.yd. $16,345; to Ryback & Sadowski, 1092 2nd Ave., 14,853 sq.yd. $41,191; to J. C. Bluhm & Sons, 1298 Achilles St., 9,150 sq.yd. $25,567; to Milwaukee General Constr. Co., 427 Mitchell St., 3,051 sq.yd. $8,576. Noted June 14.

Ia., Centerville—Appanoose Co., grading 9.26 mi. Primary Rd. Project 227, 26 ft., to Byers & Wilson, Manchester, 182,021 cu.yd. excav. $50,172; to H. Teget, Webster City, 12,929 lin.ft. tile, $2,842. Noted May 31.

Ia., Le Mars—Plymouth Co., grading 17.88 mi. Primary Rd. 29, 26 ft., to J. H. Miller & Sons, Corydon, 219,885 cu.yd. excav. and 1,104 lin.ft. culvert pipe labor, $49,510; W. H. Dugan, 820 North 42nd St., Omaha, Neb., 100,603 cu.yd. excav., $21,127; Ft. Dodge Culvert and Iron Mills Co., Ft. Dodge, 2,236 ft. 15 to 25 in. culvert pipe, $3,000. Noted May 31.

Minn., Ortonville — Big Stone Co. improving (1) 4½ mi. Job 2301 (2) 3½ mi. Job 2302, to R. C. Shoen, Ortonville, grading on (1) $7,672 (2) $6,393, corrugated metal culverts on (1) $576 (2) $250; to Elk River Concrete Products Co., Elk River, concrete culverts on (1) $487 (2) $403; to G. L. Mowery, Ortonville, gravel surfacing (1) $3,990 (2) $4,297. Noted May 17.

Tex., Glen Rose—Somerwell Co. grading and gravel surfacing State Highway 10-A, 383 cu. yd. concrete, 40,772 cu.yd. roadway and 14,852 cu.yd. borrow excav., 28,725 lb. reinforcing, 12,360 cu.yd. gravel, to J. E. Harris Co., Alvarado, $30,516. Engrs. est. $35,000. Noted June 21.

Tex., Gonzales — Gonzales Co. grading and gravel surfacing 3.66 mi. State Highway 29, to Stahl Bros. & Tom, Gonzales, $36,084; 11,657 cu.yd. gravel furnished by county. Engrs. est. $48,120 incl. engineering and contingencies. Noted July 28.

Tex., Greenville—Hunt Co. bituminous top on waterbound macadam base and gravel subbase on 3.7 mi. State Highway 1 and 3.7 mi. State Highway 39, to D. H. Purvis, Ft. Worth, $53,203 and $20,689 respectively, materials furnished by county $121,293 and $46,355 respectively, engrs. ests. $191,946 and $73,748 respectively, incl. 10% for engineering and contingencies; 3.3 mi. State Highway 11, to J. E. Ward, 510 Slaughter Bldg., Dallas, $19,745, material furnished by county $40,460, engrs. est. $66,250 incl. engineering and contingencies. Noted June 21.

Tex., Orange—Orange Co. grading rein.-con. surfacing, etc., 5.21 mi. State Highway 3, 1,740 cu.yd. concrete, 17,638 cu.yd. roadway and 103,349 cu.yd. borrow excav., 53,579 sq.yd. concrete pavement, etc., to F. P. McElwrath, Corsicana, $253,694. Engrs. est. $285,000.

Tex., Paris—Lamar Co. paving with one course concrete 1.59 mi. State Highway 5, and grading and concrete paving 4.05 mi. State Highway 19, both 18 ft., to J. C. Field Co., Denison, $42,093 and $96,014 respectively, engrs. ests. $46,845 and $105,616 respectively; grading and gravel surfacing 7.58 mi. State Highway 19, 12 ft., to McGuire & Cavender, Sherman, $12,166, 11,863 cu.yd. shipped gravel to be furnished by county $35,589, engrs. est. $52,531. Noted June 21.

Tex., Richmond—Ft. Bend Co. grading, etc., 15.14 mi. State Highway 3, 154,449 cu.yd. roadway, 127,220 cu.-yd. borrow and 56,828 cu.yd. channel excav., to M. M. Craven, Missouri City, $63,080. Engrs. est. $70,000. Noted June 21.

Tex., San Antonio—Bexar Co., grading, gravel surfacing, etc., 3.4 mi. State Highway 3, 559 cu.yd. concrete, 22,973 cu.yd. roadway, 13,766 cu.yd. borrow, 32,328 sq.yd. bituminous macadam, 48,662 lb. reinforcing, 10,009 cu.yd. gravel; grading and gravel surfacing, to Stahl Bros. & Tom, Gonzales, $19,110; bituminous topping, to C. E. Hoff, 220 Linores St., $20,043; rein.-con. drainage structures, to W. M. Behymer, 623 Avenue C, and M. J. Kaine, 212 Pleasanton Rd., $12,870. Engrs. est. $69,935. Noted May 24.

Colo., Denver—Grading, concrete curbing and surfacing 5 mi. North Side Impvt. Dist. 31, 30 ft., to Western Constr. Corp., 33rd and Blake Sts., $86,436, engrs. est. $107,346; North Denver Paving Dist. 3, to Western Paving Co., First Natl. Bank Bldg., $25,535; 4 mi. South Denver Impvt. Dist. 16, to Monaghan & Cunningham, 1710 Market St., $82,300, engrs. est. $108,104. Noted June 21.

Nevada—State Hy. Dept., Carson City, concrete and gravel surfacing Project 26, Reno-Lawtons Rd., Washoe 1-A-1, Contr. 79, Washoe Co., to Alston & Hoggan, Continental Natl. Bank Bldg., Salt Lake City,

Streets and Roads (Continued)

Utah, $31,927; grading, gravel surfacing and building culverts on Halleck-Deeth Rd., Elko 1-C, Federal Aid Project 74, Contr. 78, Elko Co., to W. Hoops, Hollister, Idaho, $72,750. Noted June 21.

Wash., Seattle—Bd. Pub. Wks. paving Boren Ave. et al., 9,630 sq.yd. 6 in. asphaltic concrete, and 6,250 sq.yd. 7 in. concrete, etc., to D. H. Traphagen, Walker Bldg., $66,035. Engrs. est. $68,059. Noted June 21.

Calif., Compton—To G. H. Oswald, 366 East 58th St., Los Angeles, improving Acacia St., 16,160 sq.ft. walks, 3,440 ft. curb, 261,500 sq.ft. 5 in. concrete, etc., $68,661, Myrrh St., 4,950 sq.ft. walks, 96,340 sq.ft. 5 in. concrete, etc., $24,615; to E. B. Garretson, 3639 East 2nd St., Long Beach, improving Wilmington St., 71,700 sq.ft. grading and paving with 5 in. concrete, etc., $15,226. Noted June 7.

Calif., Hanford—Paving portions Phillips and 5th Sts., etc., 1½ in. warrenite bitulithic on 4 in. bituminous, to California Constr. Co., 58-2nd. St., San Francisco, $74,703. Noted June 28.

Calif., Inglewood — Grading, preparing subgrade, curbing, guttering, 5 in. oil macadam paving portions Buckthorn St., Inglewood Ave., Fir Ave. and Hawthorne St., to W. H. Goff, 745 Lyon St., Los Angeles, $43,125, $6,515, $12,714 and $11,708 respectively.

Calif., Madera—To Thompson Bros., G and Divisadero Sts., Fresno, grading, concrete curbing, guttering and bituminous paving Yosemite Ave. $38,145; B and 6th Sts. $35,223. Noted June 28.

Calif., Redding—Improving Shasta and Trinity Sts., etc., 252,000 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, 65,000 sq.ft. walks, 20,000 sq.ft. gutters, 10,000 lin.ft. curbs, to Warren Constr. Co., Bacon Bldg., Oakland, $90,000. Noted June 7.

Calif., San Bruno—City Trustees grading, concrete curbing, guttering, sidewalks and paving Tucker, Linden and Cypress Sts., etc., 30,000 cu.yd. grading, 246,000 sq.ft. waterbound macadam, etc., to Bates & Borland, Bank of Savings Bldg., Oakland, $248,527. Noted June 14.

Calif., San Jose—Improving portions 7th St., to San Jose Paving Co., San Carlos and Dupont Sts., 153,677 sq.ft. 1½ in. warrenite on 3 in. asphaltic concrete $0.25, concrete curb $0.65, concrete gutter $0.25, etc.

Calif., Stockton — Improving Ash, East Scotts, and East Hazelton Sts., etc., in Villa addition, 33,862 sq.ft. walks, 122,730 sq.ft. 2 in. asphalt macadam on 4 in. cementing gravel, etc., to Blumenkranz & Vernon, Farmers & Merchants Bldg., $36,782. Noted June 14.

Que., Montreal—To B. Brault, Ltd., 2855 Rosemount Blvd., surfacing with 2 in. asphalt 4,200 sq.yd. Lebrin St. $20,460, 4,400 sq.yd. Mercier St. $21,980, surfacing with 3 in. asphalt 4,005 sq.yd. Jeanne Mance St. $15,050; to Sicily Asphaltum Paving Co., 60 St. Viateur St., surfacing with 2 in. asphalt 1,858 sq.yd. St. Hubert St. $8,964, 8,050 sq.yd. Esplanade Ave. $29,570; to Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., surfacing with 2 in. asphalt 3,400 sq.yd. Chomedy St. $19,815, surfacing with 3 in. asphalt 5,738 sq.yd. Ryde St. $23,360, 6,700 sq.yd. St. Charles St. $25,590, 6,500 sq.yd. Knox St. $24,222, 11,214 sq.yd. Eadie St. $51,124. Noted June 28.

Ont., Burlington—Paving various streets, 15,000 sq.yd. concrete, etc., to McArthur Eng. Co., Ltd., Douglas St., Guelph, $2.10 per sq.yd.

Ont., Chatham—Concrete base on Queen St. S., to G. W. Cutter Co., Chatham, $10,610; on Elizabeth, St. Clair, Barthe and Colborne Sts., to Western Constr. So., c/o C. H. R. Fuller, city engr., Chatham, $10,857. City supplies all materials and puts asphalt top on above streets, by day labor. Work involves 21,000 sq.yd. asphalt on concrete. Noted Apr. 5.

Ont., Lindsay—Victoria Co., 6,300 lin.ft. concrete edging and 600 ft. concrete curb at Babcogeon, 3,200 sq.yd. bituminous macadam and 3,200 ft. concrete edging in Fenelon Falls, to F. King, Lindsay, $41,000. Noted May 31.

Ont., Peterboro—Paving Hunter St. and George St., 10,000 sq.yd. concrete and asphalt, etc., to J. Carroll, Peterboro, $40,676. Noted June 7.

Ont., Toronto — Concrete sidewalks on Lawlor Ave., to Grant Contg. Co., 50 Front St., E; Norman and Pendrith Aves. and St. Clair Ave. W, to Ramsay Contg. Co., 39 Indian Crescent; Elmer, Raglan, Park and Rhyle Aves., Gifford and Nasmith Sts., Glenmouth Park Rd., and Vaughan Crescent, to S. Simpson, 41 Stibbard St.; Knox, Park and Salem Aves., to F. Angotti, 819 St. Clarens Ave.; Ballenburg, Boxwood, Castlefield, Deloraine, Gillard, Glenfern, Glenforest, Hastings, Lawton, Lidner, and Norway Aves., and Oriole Gardens, to Works Dept., City Hall, by day labor. Contract prices per lin.ft. 4-6 ft. wide $1.125-$1.30, 6 ft. wide $1.61 8 ft. wide $2.05-$2.30. Total est. $40,000. Noted May 3.

Ont., Toronto—Paving various streets, to Godson Contg. Co., Manning Chambers, 3,200 sq.yd. asphaltic concrete on concrete $14,078, 7,500 sq.yd. asphalt on concrete $31,231, 4,000 sq.yd. asphalt $8,258; to Grant Contg. Co., 50 Front St. E., 1,200 sq.yd. brick block on concrete $6,972, 5,000 sq.yd. granite block $13,455; to Kelmer & Barker, 24 Adelaide St. W., 1,600 sq.yd. asphaltic concrete on brick block $9,100, 4,000 sq. yd. asphalt on concrete $15,388; to Construction and Paving Co., Confederation Life Bldg., 12,000 sq.yd. asphalt on concrete $58,305; to Warren Bituminous Paving Co., 54 University Ave., 11,000 sq.yd. bitulithic on concrete $45,827; to Ramsay Constr. Co., Indian Crescent, 2,500 sq.yd. concrete $8,283; concrete sidewalks to A. Johnson, Fairmount Crescent, A. E. Jupp Constr. Co., 170 Berkeley St., Murphy Contg. Co., Wychwood Ave., and D. Mackay, 287 Ashdale Ave., about $25,000.

Ont., Toronto—York Twp., 40 Jarvis St., concrete sidewalks (mostly 4-6 ft. wide), on Bude St., to J. Harrop, 1414 Davenport Rd., $4,700; Dentonia Park, Lascelle, Lumsden, Monarth Park, Poulton and Queensdale Aves., to H. S. Walton, 60 Gamble Ave., $17,350; Park Rd. to Natl. Contg. Co., 9 Garnock Ave., $1,650; Rushton Rd., to S. Simpson, 41 Stibbard St., $2,200. Owner will construct sidewalks on Stratton Ave., $1,700, by day labor.

British Columbia — Provincial Government, Victoria, grading and gravel surfacing 3½ mi. Kitchener-Goat River Road in East Kootenay, 18 ft., to De Wolfe & Ham, Cranbrooke, $35,000; 1¼ mi. Stewart-Hyder Rd., along Portland Canal, to O. M. Watson & Co., Stewart, $31,000.

Industrial Works

BIDS DESIRED

N. Y., Glendale (Brooklyn, P. O.)—Osbruck Realty Co., Inc., 2332 Myrtle Ave., Ridgewood, will build 1 story, 102 x 186 ft., brick and steel garage and show room, on Pansy St., south of Central Ave., here. $40,000. Work will be done by separate contracts under supervision of H. C. Brucker, archt., 2549 Myrtle Ave., Ridgewood.

N. Y., New York—July 13, by J. Miller, pres. Manhattan Boro. Municipal Bldg., additions and alterations at asphalt plant, 90th St. and East River.

Pa., Johnstown—Borinson Motor Car Co., 212-218 Main St., receiving bids 3 story, 66 x 140 ft. garage, brick and steel, Main St. $80,000. E. Robinson, pres. H. M. Rogers, Trust Bldg., archt.

Wis., Hurley—Montreal Mining Co., taking bids 2 story and basement, dry house, brick and timber, plain foundation. $150,000. O. M. Schaus, supt. Private plans.

Wis., Oshkosh—July 10, by Auler & Jensen, archts., F. R. A. Bldg., 1 story, 48 x 84 ft. creamery, and 30 x 58 ft. stable, brick, tile and concrete, plain foundation, Main St., for Winnebago Dairy Products Co., 332 Main St. $40,000.

BIDS RECEIVED

O., Gallipolis—See "Buildings."

O., Orient—Dept. Pub. Welfare, 9th and Oak Sts., Columbus, June 27, 1 story and basement, 48 x 115 ft. cold storage plant, brick and concrete, at Institution for Feeble Minded, here, from D. W. McGrath & Son, 255 East Broad St., Columbus, $20,000. Noted June 7.

Calif., Oroville — Wyandotte Canneries, Inc., constructing cannery, frame and corrugated iron, from Davison & Nicolsen, 736 West Lafayette St., Stockton, $72,000. Noted Feb. 22.

CONTRACTS AWARDED

Conn., Forrestville—Wallace Barns Co., 3 story, 32 x 125 ft. factory, to C. Vacca, 19 Main St., Bristol. Archts. est. $70,000.

Conn., Middletown—B. Williams, 34 Silver St., South Farms (Middletown P. O.), 1½ story, 90 x 90 ft. garage, brick and steel, plain foundation, Center St., to D. O'Brien & Sons Co., 15 McDonough St. Archts. est. $40,000. Noted June 7.

N. Y., Buffalo—Mann Bros. & Co., 340 Ohio St., 4 story and basement, 50 x 70 ft. addition to oil building, to Turner Constr. Co., 244 Madison Ave., New York.

N. Y., Falconer—Amer. Mfg. Concern will build 3 story, brick and timber factory addition, Work St., by day labor. $50,000. Engineer and architect not announced. Noted May 15.

N. Y., Jamestown — Jamestown Metal Desk Co., Blackstone Ave., 1 story, brick and steel plant addition, to Mullen, Guianane & Ludwig, 303 North Main St. Archts. est. $50,000. Noted May 3.

N. Y., New York—Bricken Constr. & Impvt. Corp., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build brick, steel and concrete factory, plain foundation, West 38th St., by day labor. $850,000.

N. Y., New York—Edes Garage, Inc., c/o L. A. Sheinart, archt. and engr., 194 Bowery, will build 1 story, brick, steel and concrete garage, plain foundation, West Farms Rd., by day labor. $60,000.

N. Y., Yonkers—Otis Elevator Co., 11th Ave. and 26th St., New York, 5 story, 90 x 145 ft. plant addition, here, to Turner Constr. Co., 244 Madison Ave., New York.

N. Y., Yonkers—Alexander Smith & Sons Carpet Co., Elm and Palisades Aves., 2 story, 26 x 152 ft. and 1 story, 30 x 101 ft. extensions to Mill 9, to Turner Constr. Co., 244 Madison Ave., New York.

Pa., Phila. — Terminal Warehouse & Transfer Co., Delaware Ave. and Green St., 8 story and basement, 102 x 148 ft. warehouse, to Turner Constr. Co., 244 Madison Ave., New York.

Pa., Pittsburgh—Allegheny County Steam Heating Co., 703 Chamber of Commerce Bldg., 6 story and basement, 62 x 68 ft., brick, tile and rein.-con. central heating plant, Duquesne Way, to Dwight P. Robinson Co., Inc., 125 East 46th St., New York City. Engrs est. $1,000,000.

Pa., Pittsburgh—Conroy-Prugh Glass Co., 1430 Western Ave., 4 story and basement, 60 x 103 ft. factory, to Inland Constr. Co., 5612 Penn Ave.

O., Cleveland—Anders & Reimers, archts., Erie Bldg., 3 story and basement, brick and concrete packing plant addition, West 65th St. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R., to Schirmer-O'Hara Co., 2031 Euclid Ave., for Theuer-Norton Co., 3136 West 63rd St. Archts. est. $100,000. Noted Mar. 22.

O., Cleveland—Cleveland Electric Illuminating Co., Illuminating Bldg., 3 story, 108 x 194 ft., brick, steel and concrete substation, East 70th St. and Lake Erie, to J. Gill & Sons, Citizens Bldg. Archts. est. $750,000. Noted May 17.

O., Cleveland—Mapleleaf Dairy Co., 2038 West 32nd St., 2 story and basement, 45 x 95 ft., brick and timber factory, 1609 Auburn Ave., to H. E. Klefman Co., 2840 Lorain Ave. Archts. est. $40,000.

O., Cleveland—C. J. Menk, 2572 Kenilworth Ave. 2 story and basement, 44 x 80 ft., brick and timber factory, 643 East 103rd St., to Vaner-Smith Co., 1774 East 88th St. Archts. est. $40,000.

O., Cleveland — Standard Sanitary Mfg. Co., 4402 Euclid Ave., 2 story and basement, 67 x 150 ft., brick, steel and concrete display room and warehouse, 10800 Lorain Ave., to S. W. Wmerson Co., 1836 Euclid Ave. Archts. est. $150,000.

O., Cleveland—See "Buildings."

Ill., Quincy—Quincy Gas, Electric & Heat Co., 60 x 75 ft. brick and concrete retard house, 18 horizontal coke ovens, conveyors, etc., to Russell Eng. Co., Ry. Exch. Bldg., St. Louis, Mo. Engrs. est. $200,000.

Wis., Columbus—Chisholm-Scott Viner Co., 2 story, 50 x 100 ft. factory, incl. 40 ft. smokestack and boiler room, brick, rein.-con. and steel, plain foundation, to Hasenfus & Ibisch, Columbus. Archts. est. $50,000.

Wis., Manitowoc—Manitowoc Portland Cement Co., 16th and River Sts., 1 story, 75 x 500 ft. cement mill, brick, rein.-con. and steel, plain foundation, South 26th St., to MacDonald Eng. Co., 53 West Jackson Blvd., Chicago. Archts. est. $1,000,000. Noted June 14.

Wis., Oconto—Oconto Lumber Co., 1 story, 40 x 80 ft. power house and 60 x 150 ft. dry kiln, brick and timber, plain foundations, to J. Young & Bros., Oconto, and J. Derks, Oconto. Archts. est. $60,000.

Wis., Sheboygan—Lincoln Plywood Co., South Water St. and New York Ave., 1 story, 50 x 90 ft., factory and dry kiln, brick, rein.-con. and steel, plain foundation, to Verhulst Co., Inc., 2221 Calumet Dr. Archts. est. $50,000.

Mo., St. Louis—P. A. Schulze Butter Co., 1014 South Cardinal Ave., 1 and 2 story, 48 x 138 ft., brick and concrete factory, South Grand Ave., to Wimmer Constr. Co., Victoria Bldg. Archts. est. $50,000.

Ark., Camden—O. B. Burns, 2 story, 50 x 110 ft. garage, Adams and Jackson Sts., to H. G. Burnham, 1410 13th St., Pine Bluff. Archts. est.

Colo., Denver—Blayney-Murphy Packing Co., Union Stockyards, 5 story, 300 x 400 ft., rein.-con. packing plant, 48th and Gilpin Sts. to C. S. Lambie, 1759 Stout St. Archts. est. $1,000,000. Noted Nov. 23.

Ore., Astoria—Astoria Central Heating

Industrial Works (Continued)

Co., will build central heating plant, by day labor $102,000. F. B. Nye, secy. and resident mgr. F. J. Dorsey, Vancouver, B. C., engr.

Calif., Stockton — Davis-Heller-Pearce Co., Delta Bldg., will build 2 story and basement, 100 x 100 ft., garage and auto salesrooms, rein.-con., American and Channel Sts., by day labor. $80,000. Studebaker Agency, Stockton, lessee.

Buildings

PROPOSED WORK

N. Y., New York—Apartment—St. James Episcopal Church, c/o P. C. Hunter, archt. and engr., 191 9th Ave., soon takes bids 5 story, 90 x 150 ft., brick, steel and stone, plain foundation, Morris Ave. $250,000.

N. Y., New York—Clubhouse—Knights of Columbus, 244 West 51st St., having plans prepared by Edward F. Fanning, archt. and engr., 522 5th Ave., 12 story, 100 x 150 ft., brick, steel and stone, plain foundation, 8th Ave. and 51st St. $1,650,000. Noted May 3.

Del., Wilmington—Exchange—Bell Telephone Co., 6th and Shipley Sts., plans new exchange on 9th and Tatnall Sts $1,000,000.

Wis., Milwaukee—Hotel—Hotel Wisconsin, 172 3rd St., and Holabird & Roche, archts., 104 South Michigan Ave., Chicago, soon take bids 12 and 15 story, 50 x 150 ft., brick, concrete and terra cotta addition, plain and wood pile foundation. $1,000,000. Noted Jan. 18.

Mo., Kansas City—School—Bd. Educ. takes bids in about 3 weeks, Francis Willard School, 2 story and basement, 103 x 258 ft., rein.-con., brick, steel and stone. $225,000. C. A. Smith, 601 Finance Bldg., archt.

Tex., Eagle Lake—High School—School Bd. havings plans prepared by Giesecke & Harris, archts. and engrs., 408 Littlefield Bldg., Austin, and takes bids about July 10, 2 story, 90 x 140 ft. rein.-con. and brick, concrete pile foundation. $150,000.

Que., Montreal—Office—Ross & McDonald, archts., Belmont St., preparing plans New Keefer Bldg., 10 story, concrete, brick, hollow tile, marble and stone, St. Catherine and McKay Sts. $2,000,000.

BIDS DESIRED

N. Y., Mt. Vernon—Bank and Office—July 31, by Eastchester Savings Bank 6 story, brick, steel and stone, plain foundation. $500,000. Holmes & Winslow, 134 East 44th St., New York, archts. and engrs. Noted June 14.

Pa., Phila.—Apartment—T. J. Whelan, 17th and Summer Sts., will build 4 story, 60 x 195 ft., brick, steel and stone, plain foundation, City Line Ave., Overbrook, here, by separate contracts. $350,000. H. W. Goddard, Engr., 1524 Chestnut St., receiving bids.

Md., Towson (Baltimore, P. O.)—Dormitories—July 9, by Smith & May, archts., Calvert Bldg., Baltimore, 5 story, 40 x 140 ft. brick addition, fcr State of Maryland Bd. Educ. $150,000. Noted Feb. 23.

W. Va., Charleston—Club—July 10, by Kanawha Holding Corp., 2 story, brick and steel. $300,000. L. Lott, 35 East 1st St., Dayton, O., archt. Noted June 14.

O., Akron—Bank and Office—July 7, by A. Hopkins, archt., 101 Park Ave., Cleveland, 12 story, brick, steel and concrete, South Main St., here, for Akron Savings & Loan Co. $600,000.

O., Cleveland—Commercial—Watson Eng. Co., archts., 4614 Prospect Ave., taking bids and open same about July 9, 3 story (ultimately 8 story) 66 x 189 ft., brick, steel and concrete, Euclid Ave. near East 18th St., for J. J. Callow, 1900 Euclid Ave. $150,000. Noted Mar. 29.

O., Cleveland—Sunday School and Recreation—Pearl Rd. Methodist Episcopal Church, 3528 Muriel Ave., taking bids and opens same about July 9, 3 story and basement, 50 x 150 ft., brick and steel, Pearl Rd. $150,000. W. H. Nicklas, 1900 Euclid Ave., archt. Noted Mar. 15.

O., Lakewood (Cleveland P. O.)—School—July 9, by Bd. Educ., 50 ft. connecting corridors and 1 story top addition, Bunts Rd. and Franklin Ave. $150,000. C. W. Hopkinson, Rose Bldg., Cleveland, archt.

O., St. Marys—School—July 19, by Bd. Educ., 2 story, rein.-con. and brick, plain foundation. $175,000. Walker & Norwick, 1301 Amer. Bldg., Dayton, archts. Noted Apr. 19.

Wis., Milwaukee—Business—July 9, by M. Tullgren & Sons Co., archts., 425 East Water St., 2 story, 102 x 150 ft., brick, tile and concrete, plain foundation, for J. Saxe, 104 11th St. $150,000.

Wis., Wilwaukee—Temple—July 14, by Elks Building Comm., 208 City Bank Bldg., and R. Messmer & Bros., archts., 221 Grand Ave., 8 story, 110 x 145 ft., brick and concrete, Mason and Marshall Sts. $1,000,000. Noted May 10.

Wis., Oshkosh—Hospital—July 9, by E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, 4 story and basement, 46 x 100 ft., brick and concrete addition, plain foundation, Hazel St., for Mercy Hospital, 185 Hazel St. $150,000. Noted Feb. 1.

Tex., Austin—Biology—University Texas Bd. Regents receiving bids 3 story and basement, 69 x 92 ft., brick, rein.-con., terra cotta and stone, on campus. $400,000. H. M. Greene, 620 North Texas Bldg., Dallas, archt. Noted June 21.

Calif., Los Angeles — Loft — Walker & Eisen, archts., Pacific Finance Bldg., receiving bids 5 story and basement, 50 x 150 ft., rein.-con., 15th and Los Angeles Sts., for Los Angeles Rubber Stamp Co., 131 South Spring St.

Calif., Pomona—Lodge—Building Comm., B.P.O.E., 134 East Holt St., receiving bids 2 story and basement, brick. $150,000. Noted May 17.

Calif., San Diego—Hospital—St. Josephs Hospital, headed by J. J. Cantwell, Higgins Bldg., Los Angeles, receiving bids 6 story, rein.-con. $500,000. Engineer and architect not announced. Noted Mar. 22.

Calif., San Francisco—Apartment—E. E. Young, archt., 2002 California St., receiving bids 12 story and basement, fireproof, Taylor and O'Farrell Sts., for M. A. Little, c/o architect. $500,000. Noted May 17.

BIDS RECEIVED

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., June 18, general contract 2 story and basement, 172 x 306 ft. school and 33 x 78 ft. boiler house, brick, steel and concrete, East 106th St. and Sandusky Ave., from Drummond-Miller Co., 7900 Euclid Ave., $484,000, steam heat, from Feldman Bros., 10306 Barrett Ave., $74,245; general contract 2 story and basement, 172 x 306 ft. school, and 33 x 78 ft. boiler house, brick, steel and concrete, East 146th St. and Harvard Ave., from C. Peterson Co., 4500 Euclid Ave., $475,000, steam heat, from Feldman Bros., 10306 Barrett Ave., $74,245. Noted May 31.

O., Gallipolis—Hospital, Cottage, etc.—J. E. Harper, dir. Dept. Pub. Welfare, 9th and Oak Sts., Columbus, June 27, 2 story and basement, 30 x 130 ft. cottage, 2 story and basement hospital, and 1 story and basement, 80 x 130 ft. laundry, brick and concrete, at Ohio Hospital for Epileptics, here, from E. Elford, 60 East Broad St., Columbus, $182,180. Noted June 7.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 82 x 144 ft. and 79 x 101 ft., brick, steel and rein.-con. addition, plain foundation, Fullerton Ave., from Rosenwarne, McNab & Worewick, 333 State St., $354,520.

Mich., Lansing—Temple—Masonic Temple Assn., Amer. State Savings Bank Bldg., 7 story, 100 x 165 ft., South Capitol Ave., from Christman Constr. Co., Porter Apartments, $599,000.

Que., Montreal—City Hall—For supply of stone and construction of stone walls for new city hall, from A. D. Boileau, 245 McDougall St., $182,000.

CONTRACTS AWARDED

Conn., Hartford—Apartment—Gordon & Wagman, 321 Garden St., will build 3 story, 90 x 160 ft., brick, plain foundation, Garden St., by day labor. $200,000. G. Zunner, 182 High St., archt. Noted June 21.

N. Y., Brooklyn — Apartment — Hamel Realty Corp., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 5 story, brick, steel and stone, plain foundation, Eastern Parkway, by day labor. $175,000.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, 3 story, 200 x 213 ft., brick, steel and stone, plain foundation, Rockaway Ave. near Riverdale Ave., to Turner Constr. Co., 244 Madison Ave., New York. Archts. est. $700,000. Noted June 28.

N. Y., New York—Apartment — A. A. Bimberg, 1520 Bway., will build 15 story, 120 x 125 ft., brick, steel and stone, plain foundation, West 44th St., by day labor. Rouse & Goldstone, 512 5th Ave., archts. and engrs.

N. Y., New York—Apartment—Florea Building Corp., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Davidson Ave., by day labor.

N. Y., New York—Apartment—F. P. B. Corp., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 6 story, 100 x 115 ft., brick, steel and stone, plain foundation, Webb Ave. and 170th St., by day labor. $250,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 60, brick, steel and stone, East 12th St., to G. Dekempie, 30 Church St., $1,185,000. Noted June 28.

Pa., Johnstown—Store—Penn Traffic Co., Washington St., 5 story and basement, 79 x 87 ft. addition, to Berkibile Bros., Swank Bldg., fee basis. Archts. est. $350,000.

W. Va., Charleston—Hospital—Mountain State Hospital Co., 3 story and basement, 50 x 198 ft., Virginia Ave., to Higginbotham & Jones, 702 Charleston Natl. Bank Bldg. Archts. est. $200,000. Noted May 24.

N. C., Winston-Salem—Church—First Baptist Church, constructing church, to J. A. Jones Constr. Co., Realty Bldg., Charlotte, $365,000.

Ala., Birmingham — Auditorium — City Comrs., 3 story, 130 x 160 ft., brick and steel, 8th Ave. and 20th St., general contract to Day & Sachs, 2400 Ave. E, $408,000. Noted June 7.

Ky., Paducah—Apartment—C. C. Davis, 3 story, 50 room, 7th and Monroe Sts., to M. Stewart, Paducah. Est. cost $150,000.

O., Cleveland—Apartment—Rosen Bros., 201 Ulmer Bldg., 3 story and basement, 37 x 120 ft., brick and timber, East 82nd St. near Hough Ave., to I. Lessowitz, 1091 East 111th St. Archts. est. $150,000. Noted May 31.

O., Cleveland—Office—J. L. Free Co., 1004 Prospect Ave., 8 story, 73 x 93 ft., brick, steel and concrete addition, 1227 Prospect Ave., to Crowell & Little Constr. Co., 3751 Prospect Ave. Archts. est $250,000.

O., Cleveland — Sale, etc. — Euclid-66th Co., c/o J. J. Klein and G. B. Harris, attorneys, Engineers Bldg., 2 story and basement 75 x 100 ft. auto sales, and 2 story and basement, 80 x 110 ft. service building, brick and concrete, 6604 Euclid Ave., to Bolton-Pratt Constr. Co., Columbia Bldg. Archts. est. $150,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 83 x 245 ft. and 80 x 102 ft., rein.-con., brick and steel, Joy Rd., to F. H. Goddard, 2130 Franklin St., $349,891. Noted June 21.

Wis., Madison—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, 10 story and basement, 132 x 144 ft., brick and concrete, plain foundation, West Washington St., to S. M. Siesel Co., 160 Ogden Ave., Milwaukee. Archts. est. $1,000,000. Noted May 31.

Wis., Manitowoc—Hotel—Dickinson Hotel Co., c/o Manitou Hotel, 5 story, 50 x 91 ft., brick, rein.-con. and brick, plain foundation, to T. Stark Co., 130 Muskego Ave., Milwaukee. Archts. est. $165,000.

Wis., Milwaukee—Apartment — Franklin Arms Apartment Co., c/o Rosman & Wierdsma, archts., 424 Jefferson St., 3 story, 118 x 146 ft., brick, tile and concrete, plain foundation, to C. B. Danielson, 638 Mineral St. Archts. est. $200,000. Noted Mar. 29.

Wis., Milwaukee—Store and Office—Straus Bldg., Corp., 97 Wisconsin St., 11 story, 40 x 100 ft., brick, concrete and steel, plain and wood pile foundation, Grand Ave., general contract to G. E. Kahn, 114 Grand Ave.; 250 tons structural steel sublet to Milwaukee Structural Steel Co., 19th St. and St. Paul Ave. Archts. est. $400,000.

Wis., Viroqua—High School—Bd. Educ. general contract 3 story and basement, 87 x 180 ft., brick, tile and concrete, plain foundation, to Schaefer & Olsen, 222 Bay St., Chippewa Falls, $121,518; heating and ventilating to Bann & Fehlberg, Viroqua, $31,500. Noted June 7.

Mo., Kansas City—Hotel—W. Jewell, Jr., 227 Rialto Bldg., will build 6 story and basement, 75 x 100 ft., rein.-con., brick and stone, 14th and Central Sts., by day labor. $200,000. Wilkerson & Crans, 608 Interstate Bldg., archts.

Tex., San Antonio—Church—Presbyterian Church, 2 story, 60 x 80 ft., rein.-con., brick, stone and tile addition, concrete pile foundation, 402 Avenue D, to McKenzie Constr. Co., 616 Bedell Bldg., $154,678. Noted June 21.

Calif., Long Beach—Apartment—W. Garner and H. Alsop, 40 Locust Ave., 4 story and basement, rein.-con., Magnolia Ave., to Graham Constr. Co., 453 South Springs St., Los Angeles, $150,000. Noted June 6.

Calif., Los Angeles — Apartment — San Jacinto Dwellings Co., c/o Russell & Alpaugh, archts., Story Bldg., 13 story, rein.-con., 6th and Carondelet Sts., to Richardson Building & Eng. Co., 141 Larchmont Blvd., $700,000.

Calif., Los Angeles—Store—May Dept. Store, Hill St., steel work for 9 story addition, to Llewellyn Iron Wks., 1200 North Main St., $305,000.

Calif., Oakland—Loft and Store—Midgley Co., Amer. Theatre Bldg., San Pablo and 17th Sts., 2 story and basement, concrete, 16th St. and San Pablo Ave., to P. A. Palmer, Monadnock Bldg., San Francisco, $150,000.

Calif., Sacramento — School — Roman Catholic Archbishop, (St. Frances Parish) 12th and K Sts., 3 story and basement, rein.-con., 25th and K Sts., to W. C. Keating, Forum Bldg., $150,000. Noted Jan. 18.

Buildings (Continued)

Calif., Stockton—City Hall—Constructing city hall, fireproof, on block bounded by El Dorado, Center, Fremont and Lindsey Sts., general contract to H. S. Williams, 180 Jessie St., San Francisco, $398,000; mechanical equipment (incl. plumbing, heating, ventilating and electric work) to E. L. Gneckow, 647 East Main St., $61,068; jail equipment to Ralston Iron Wks., 20th and Indiana Sts., San Francisco, $36,465. Noted June 28.

Que., St. Hyacinthe — College — Freres Maristes, 4 story, 47 x 170 ft., concrete, brick and stone, to Ulric Boileau Ltd., 568 Garnier St., $150,000.

Ont., Ottawa—Home—Ottawa Hospital Comn., completing civic hospital, incl. nurses' home, to Taylor & Lackey, Central Station, $400,661; elevator for service building, to Otis Fensom Elevator Co., 254 Queen St., Ottawa, $61,305; ice machines to Canadian Ice Machine Co., Viliers St., Toronto, $33,621.

B. C., Victoria—Office—Canadian Pacific Ry., Windsor St., Montreal, Que., will build 4 story, office and terminal, rein.-con., Belleville St. Docks, here, by day labor. $200,000.

Federal Government Work

BIDS DESIRED

Del., Wilmington—Excavation—Aug. 2, at office U. S. Engineer, Wilmington, excavating inland waterway from Delaware River to Chesapeake Bay, Delaware and Maryland; adv. this issue. Noted Mar. 15.

O., Marion—Extension—July 27, by Treas. Dept., Wash., D. C., extension to building and driveway at U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Mich., Detroit—Stone—July 30, at office U. S. Engineer, Detroit, furnishing and placing stone for rubble mound at Alpena Harbor; adv. this issue.

BIDS RECEIVED

N. Y., Buffalo—Dredging, etc.—U. S. Engineer, dredging and rock removal in Black Rock Channel, from Great Lakes Dredge and Dock Co., Morgan Bldg., $272,000. Noted May 24.

Pa., Phila.—Engine Testing Laboratory—Spec. 4845—Bureau Yards & Docks, Navy Dept., Wash., D. C., engine testing laboratory, at Navy Yard, here, from Newport Contg. & Eng. Co., Law Bldg., Newport News, Va., $82,145. Noted June 21.

Va., Yorktown—Power Plant Equipment, etc.—Spec. 4826—Bureau Yards & Docks, Navy Dept., Wash., D. C., power plant equipment and piping at Navy Mine Depot, here, from Noland-Clifford Co., 330 28th St., Newport News, $15,265. Noted June 7.

Mich., Detroit — Dredging — U. S. Engineer, Detroit, dredging in Livingstone Channel, mouth of Detroit River, from G. H. Breyman & Bros., 103 Chamber of Commerce Bldg., Toledo, O., 740,000 cu.yd. at $0.397. Noted May 31.

Ill., Chicago — Sewer Extension — Spec. 4851—Bureau Yards & Docks, Navy Dept., Wash., D. C., sewer outfall extension at Great Lakes Naval Training Station, here, from Great Lakes Dredge and Dock Co., 104 South Michigan Ave., (1) $28,500 (2) $28,000 (120 days). Noted June 7.

CONTRACTS AWARDED

Mass., Boston — Repairs, etc. — Spec. 4848—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs and alterations to Commanding Officer's quarters, Marine Barracks, here, to Howard Bros., 412 Dorchester Ave., South Boston, $17,874 (120 days).

N. J., Lakehurst—Oil Pipe Line—Interior Dept., Wash., D. C., oil pipe line for helium plant, here, to L. S. Sauers, Lakehurst, $16,692 (35 days).

Va., Norfolk—Roads—Spec. 4867—Bureau Yards & Docks, Navy Dept., Wash., D. C., roads at Naval Hospital, here, to J. W. Addenbrooks Sons, Inc., 125 East 24th St., $9,830.

Utah—Roads and Bridges—U. S. Bureau Pub. Rds. Colonel Hudson Bldg., Ogden, grading and structures on 13 mi. Cedar Long Valley Rd. and 7.5 mi. Panquitch-Tropic Rd., to Higbee Constr. Co., Cedar City, $87,882 and $66,853 respectively. Noted May 3.

Calif., San Diego—Grading—Spec. 4872—Bureau Yards & Docks, Navy Dept., Wash., D. C., grading at Marine Corps Base, here, to H. G. Fenton, Dewey and Main Sts., $4,403 (60 days).

Miscellaneous

PROPOSED WORK

Athletic Field, etc.—Bristol, Conn.—Endee Club plans athletic field and gymnasium. $85,000. G. R. Marsh, 213 Summer St., chn. building com.

Oil and Gas Well—Dunkirk, N. Y.—Dougherty Development Co., plans extensive oil and gas well drilling, near here. $50,000. F. L. Dougherty, pres

Underground Conduits—Hornell, N. Y.—Western Union, 80 Main St., plans placing all lines in underground conduits. $25,000.

Parks—Bluefield, W. Va.—See "Buildings."

Swimming Pools—New Orleans, La.—Bd. Park Comrs. having plans prepared 2 concrete swimming pools at Audubon Park, 154 x 390 ft. outdoor and 50 x 140 ft. indoor, tile lined with building capable of storing 2,500 steel lockers, etc. Dimensions of indoor pool with building to be 102 x 200 ft. overall rein.-con. structure. $130,000. S. Stone, 714 Union St., archt.

Park System—Paducah, Ky.—City Comrs. authorized $150,000 bonds for development of park system. H. A. Pulliam, comr. pub. wks.

Transmission Line Iron Mountain, Mich—Michigan Iron Land & Lumber Co. making plans 2 mi. high voltage transmission line from here to factory on Menominee River. $25,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs

Dry Dock—Green Bay, Wis.—Green Bay Dry Dock Co., Pearl and Arndt Sts., having plans prepared 60 x 1,250 ft. floating dry dock. $300,000. W. T. Donnelly, 17 Battery Pl., New York City.

Steam Heating Plant—Wisconsin Rapids, Wis.—Bd. Educ. making plans new steam heating plant in Lincoln High School, incl. 2 low pressure boilers. $25,000. Private plans.

Wharf and Terminal — Corpus Christi, Tex.—Neuces County having plans prepared and soon takes bids wharfage and terminal facilities for deep channel port. $1,000,000. Sands & Cummins, Houston, engrs. Noted Nov. 16.

Traffic System—Ft. Worth, Tex.—Plans electrically operated traffic system for business section. $25,000. D. L. Lewis, city engr.

Street Lighting System — Bakersfield, Calif.—Plans street lighting system on 60 blocks. To exceed $25,000.

Park Improvements—Eureka, Calif.—Defeated $100,000 bonds for park improvements. Noted May 31.

Park and Playground Improvements — Long Beach, Calif.—Voted $900,000 bonds for park and playground improvements. Noted June 21.

Street Equipment—Visalia, Calif.—City to vote on $10,000 bonds to purchase street equipment, incl. motor street sweeper. B. J. Pardee, city Mgr.

Power Development—North Bay, Ont.—Hydro Electric Power Comn., 190 University Ave., Toronto, plans Bingham Chutes development incl. twp. 450 kva. units, about 1,200 hp.; Nipissing power development increased by adding 1,200 hp. unit and new wood stave pipe line; 4,000 hp. at Coxs Chutes and 1 000 hp. at Elliotts Chutes, both on South River; 600 hp. Diesel oil engine reserve in North Bay for low water conditions. $500,000. F. A. Gaby, ch. engr.

Shaft Sinking — Schumacher, Ont. — McIntyre-Porcupine Mines plans to sink main shaft to depth of 5,000 ft. and to increase milling capacity by erecting new mill on another section of their mine. Work involves hoisting equipment, crushers, tube and ball mills, pumps, electric motors.

BIDS DESIRED

Bituminous Road Material, etc.—New York, N. Y.—July 12, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., bituminous road surfacing material (for hot use), asphaltic cement and asphalt wearing surface sand.

Lignin Binder—Trenton, N. J.—July 16, by State Hy. Dept., 574,230 gal. lignin binder for surface treatment for gravel roads. A. W. Muir, Broad St. Bank, engr.

Cables—Phila., Pa.—See "Bridges."

Subway—Phila., Pa.—July 24 at office W. S. Twining, dir. Dept. of City Transit, 1211 Chestnut St., 2 track subway in Arch St.; adv. this issue. Former bids rejected. Noted May 31.

Timber Sluice and Sheathing—Wilmington, Del.—July 17, by President of Levy Court, County Bldg., timber sluice and sheathing across channels of Augustine Creek, etc. C. E. Grubb, co. engr.; adv. this issue.

Cement—Baltimore, Md.—July 11, by Bd. Awards, furnishing and delivering cement. J. R. Pitcher, city purch. agt.

Culvert—St. Louis, Mo.—July 24, by Bd. Pub. Serv., 208 City Hall, 467.5 ft. rein.-con. culvert, 32 ft. inside diameter at base, to carry Delmar Blvd. over River Des Peres, 113,375 cu.yd. earth excav., 116,500 cu.yd. rein.-con., etc. $131,000. L. R. Bowen 301 City Hall engr.

Creosoted Sheet Piling—New Orleans, La.—July 12, by Bd. Port Comrs., 200 New Court Bldg., 57,600 ft. creosoted sheet piling.

Dock—New Orleans, La.—July 12, by Bd. Port Comrs., 200 New Court Bldg., rein.-con. dock, at Poland St. wharf.

Steam Heating Plant—Sheboygan, Wis.—W. C. Weeks, engr., 720 Ontario St., taking bids steam heating plant and 2 pressure boilers in store building, for Seils Real Estate Co., 901 North 8th St. $25,000.

Reinforcing Steel—St. Paul, Minn.—July 9, by H. W. Austin, city purch. agt., reinforcing steel for Wabasha Ave. bridge. No bids received June 11. Noted June 7.

Gas Pipe Line—Texas—Aug. 1, by Lone Star Gas Co., Amer. Exch. Bank Bldg., Dallas, 45 mi. gas pipe line from Ranger-Eastland gas field to Judd. $1,350,000. J. C. Brokaw, Amer. Exch. Natl. Bank Bldg., Dallas, engr.

Grain Elevator—Midland, Ont.—July 12, by C. J. Smith, genl. mgr. elevators and warehouses, Canadian Natl. R.R., 230 St. James St., Montreal, Que., 2,250,000 bu. rein.-con. storage annex to Tiffin Elevator 2, here.

BIDS RECEIVED

Dock — Cleveland, O. — Concrete dock from Cleveland Eng. Constr. Co., The Arcade, $32,400.

Lime—St. Louis, Mo.—G. Oetting, supply comr., furnishing 9,000 tons lime, f.o.b. cars Chain of Rocks, from Glencoe Lime & Cement Co., Syndicate Trust Bldg., $10.30 per ton.

CONTRACTS AWARDED

Asphalt Binder—New York, N. Y.—Bd Purch., Municipal Bldg., asphalt binder and binder oil, for Dept. Parks—Bronx, to C. D. Beckwith, 2875 Bway., $1,450. Noted June 14.

Tunnel—New York, N. Y.—New York State Bridge & Tunnel Comn., and New Jersey Interstate Bridge & Tunnel Comn., Hall of Records, portion of 2 tunnels as approaches to river section of vehicular tunnel under Hudson River, on Island of Manhattan, Contr. 5, to Rodgers & Hagerty, Inc., Grand Central Terminal, $3,467,414. Noted June 7.

Wall—Pittsburgh, Pa.—Allegheny Cemetery, 47th and Butler Sts., 1,600 ft. stone wall, 2 ft. 6 in. wide, to A. and S. Wilson, 541 3rd Ave. Engrs. est. $30,000.

Pipe—Baltimore, Md.—Mayor and City Council, rein.-con. pipe, to Lock Joint Pipe Co., Ampere, N. J., $32,950.

Dock and Boat Basin—Sanford, Fla.—For dock and boat basin, 24,000 cu.yd. hydraulic sand fill, 1,750 cu.yd. rein.-con. 35,000 lin.ft. wood piling, 76,000 lb. steel, 11,000 ft. creosoted timber, etc., to Interstate Contg. Co., Sanford, $68,887. Noted May 31.

Stadium—Akron, O.—University of Akron single deck concrete stadium, to Carmichael Constr. Co., Hamilton Bldg., $35,000.

Street Lighting System—Shorewood, (Milwaukee, P. O.) Wis.—Installation, to Herman Andrae Electric Co., East Water St., $38,800; insulated wire, to Kerite Insulated Wire & Cable Co., 122 South Michigan Ave., Chicago, $13,449; concrete posts and transformer vaults, to Massey Concrete Products Co., Port Washington Rd., $12,705; transformers, to Kuhlman Electric Co., 26th and Jefferson Sts., Bay City, Mich., $6,047. Noted June 14.

Sewer Brick—St. Paul, Minn.—H. W. Austin, city purch. agt., 70,000 sewer brick for Water Dept., to St. Paul Builders Material Co., 605 Ryan Bldg., $5.60 per M. Noted June 7.

Tanks—Mexia, Tex.—Sinclair Crude Oil Purchasing Co., ten 80,000 bbl. tanks, involving 3,000 tons plate, here, to Chicago Bridge & Iron Wks., 30 Church St., New York City.

Foundations, etc.—South San Francisco (San Francisco, P. O.), Calif.—Metal & Thermit Corp., foundations, sewer work, pile driving and grading in connection with factory, to Coast Constr. Co., Crocker Bldg., San Francisco, $80,000. Noted May 10, under Industrial Works.

Fill — British Columbia — Kettle Valley Ry., c/o Canadian Pacific Ry., Windsor St., Montreal, Que., filling in trestles at Penticton, Summerland and Midway, 200,000 cu.yd. earth excav., 200,000 cu.yd. earth fill, to Nickson Constr. Co., Ltd., 410 Seymour St., Vancouver, $100,000.

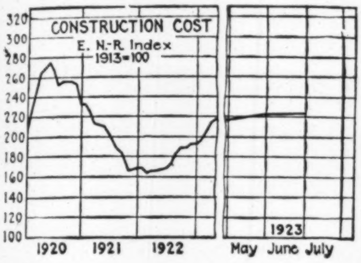
CONSTRUCTION NEWS

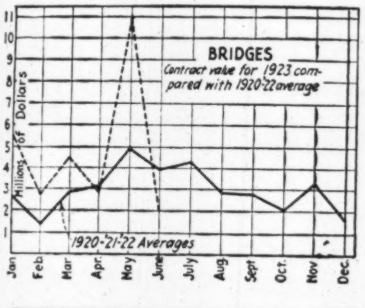
Engineering News-Record, July 12, 1923.

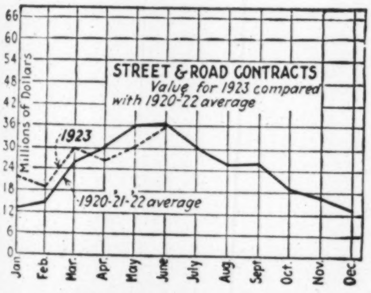
The Construction Barometer

June Contracts Heavy—Lumber Lower—Other Prices Unchanged

WHEN a number of red flags are displayed for a considerable period of time it is likely that the danger indicated will be avoided. The promised business depression may yet come, but the heed paid to the warnings seems to have postponed it. June contracts, as reported by *Engineering News-Record*, were 17 per cent heavier than for May and 2 per cent above a year ago. The charts show a recovery in the chief classes of construction, with the exception of bridges. Next week the contract volume for the various sections of the country will be shown and compared with the total for the nation.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ending	Public Work	Private Work	Total Contracts
June 21	$15,417,000	$20,308,000	$35,725,000
June 28	15,591,000	39,696,000	55,287,000
July 5	17,438,000	13,460,000	30,898,000
3 weeks	$48,446,000	$73,464,000	$121,910,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

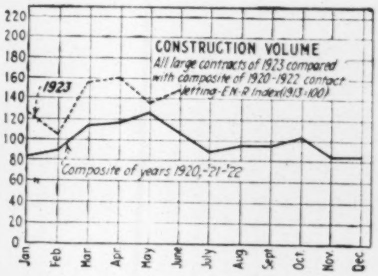
Week Ending	No.	Public Work	No.	Private Work
June 21	9	$4,636,000	28	$10,941,000
June 28	9	1,375,000	26	33,530,000
July 5	5	2,794,000	24	6,615,000
3 weeks	23	$8,805,000	78	$51,086,000

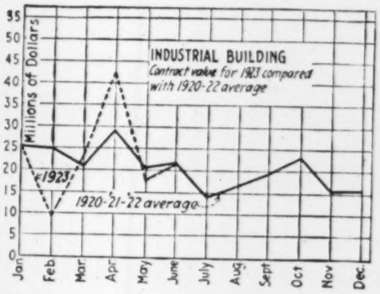
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

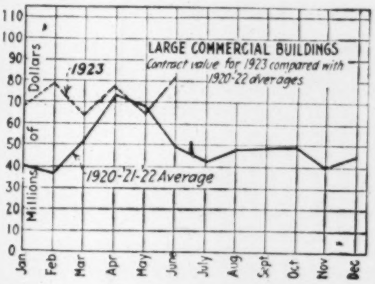
		Public			
Week Ending	Private	All	Streets and Roads	Water-Works and Sewers	All Buildings
June 21	23	205	84	37	37
June 28	23	181	78	29	31
July 5	27	158	71	24	30

LUMBER EASIER—OTHER BASE PRICES UNCHANGED

	Quoted on July 12, at	Price Was	On
Structurals, Pittsburgh, 100 lb. . . .	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N.Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 13	Akron, O.	July 12
July 16	Whitby, Ont.	July 12
July 16	Lemmon, S. D.	June 28
July 16	Brooklyn Heights (Independence P. O.), O.	July 12
July 17	Deland, Fla.	June 21
July 17	Niagara Falls, N. Y.	July 12
July 20	Graham, N. C. Adv. July 12.	July 12
July 20	Cleveland, O. Adv. July 12.	July 12
July 20	Cleveland, O.	July 12
July 20	Watertown, N. Y.	July 12
July 20	Camas, Wash.	July 12
July 21	Cleveland, O.	July 12
July 23	Aurora, Ill. Adv. July 12.	July 12
July 23	Willmar, Minn.	July 12
July 25	Ft. Worth, Tex.	July 12

Bids Close		See Eng. News-Record
July 30	Tulsa, Okla. Adv. July 12.	July 12

SEWERS

Bids Close		See Eng. News-Record
July 16	Bethlehem, Pa. Adv. July 5 and 12.	July 5
July 16	New York, N. Y.	July 12
July 16	Des Moines, Ia.	July 12
July 17	Louisville, Ky.	June 28
July 17	Delaware, O.	July 5
July 17	Niagara Falls, N. Y.	July 12
July 19	Syracuse, N. Y. Adv. July 5 and 12.	July 5
July 19	Knoxville, Tenn.	July 12
July 19	Sacramento, Calif.	July 12
July 19	Long Island City, N. Y.	July 12
July 20	Millville, N. J. Adv. July 5 and 12.	July 12
July 23	Leonia, N. J. Adv. July 12.	July 12
July 23	Los Angeles, Calif.	July 12
July 24	Toronto, Ont.	July 12
July 26	Chicago, Ill.	July 5
July 30	Los Angeles, Calif.	June 28
July 31	Wash., D. C. Adv. July 12.	July 12
Aug. 13	Arvada, Colo.	July 12

WASTE DISPOSAL

Bids Close		See Eng. News-Record
July 26	Lakewood (Cleveland P. O.), O.	July 12

BRIDGES

Bids Close		See Eng. News-Record
July 18	Phila., Pa. Adv. June 28 to July 12.	June 28
July 18	Rhode Island Adv. July 12.	July 12
July 20	Milwaukee, Wis.	July 12
July 21	Cleveland, O.	July 12
July 21	Waynesburg, Pa. Adv. July 12.	July 12
July 23	Arlington, N. Y.	July 12
July 23	Requa, Calif.	July 12
July 23	New York Adv. July 5 and 12.	July 12
July 24	Indiana	July 12
July 25	Kentucky	July 12
July 25	Bridgeport, Conn.	June 28
July 31	La Center, Wash.	May 3
July 31	Alabama	July 12
Aug. 1	Binghamton, N. Y. Adv. June 28 to July 12.	June 28
Aug. 1	Ansonia, Conn. Adv. July 12.	July 12

Bids Close		See Eng. News-Record
Aug. 7	Beaumont, Tex.	July 5
	Adv. June 28 to July 12.	
Aug. 14	Charleston, S. C.	July 5
	Adv. July 12.	
Aug. 14	Clearwater, Fla.	July 12
	Adv. July 12.	
Aug. 15	Phila., Pa.	July 5
Nov. 30	Sydney, Australia	Apr. 19

DAMS

Bids Close		See Eng. News-Record
July 16	Beacon, N. Y.	July 5
	Adv. July 5 and 12.	

RAILWAYS

Bids Close		See Eng. News-Record
July 15	Louisiana	July 12

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
July 16	New Orleans, La.	July 12
July 17	Dunkirk, N. Y.	June 21
	Adv. June 21 to July 12.	
July 17	New York, N. Y.	July 12
July 20	Albert Lea, Minn.	July 12
July 21	Savanna, Ill.	July 5
July 26	New Orleans, La.	June 28
Aug. 1	Sioux City, Ia.	July 12

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 14	Great Barrington, Mass.	July 12
July 16	East Grand Forks, Minn.	July 12
July 16	Casper, Wyo.	July 12
July 16	New York, N. Y.	July 12
July 16	Mitchell, S. D.	July 12
July 16	Iola, Kan.	July 12
July 16	Roscoe, Tex.	July 12
July 16	Utah	July 12
July 16	Plainfield, N. J.	June 28
July 16	Brooklyn Heights (Cleveland P. O.), O.	July 5
July 16	Redwood City, Calif.	July 5
July 16	Edgerton, Wis.	July 5
July 16	Michigan	July 5
July 16	Akron, O.	July 12
July 16	St. Paul, Minn.	July 12
July 16	Olney, Ill.	July 12
July 17	Niagara Falls, N. Y.	July 12
July 17	Maryland	July 12
July 17	Troy, N. C.	July 5
July 17	Michigan	July 5
July 17	Central City, Pa.	July 5
July 17	St. Louis, Mo.	June 21
July 17	Pottsville, Pa.	June 28
July 17	Florida	July 12
July 17	Fairfield, Calif.	July 12
July 17	Columbus, O.	July 12
July 17	St. George, N. Y.	July 12
July 18	Brooklyn, N. Y.	July 12
July 18	Clayton, Mo.	July 12
July 18	Michigan	July 12
July 18	Senotobia, Miss.	July 12
July 18	New Mexico	June 28
July 18	Harrisburg, Pa.	July 5
July 18	Michigan	July 5
July 18	Urbana, Ill.	July 12
	Adv. July 12.	
July 18	Wisconsin	July 12
July 19	Michigan	July 5
July 19	Illinois	July 5
July 19	New Jersey	July 5
	Adv. July 5 and 12.	
July 19	Michigan	July 12
July 19	Creston, Ia.	July 12
July 20	Sebring, Fla.	July 12
July 20	New York	July 12
	Adv. July 12.	
July 20	Michigan	July 5
July 23	New Jersey	July 5
	Adv. July 5 and 12.	
July 23	Escondido, Calif.	July 12
July 23	Michigan	July 12
July 23	Casper, Wyo.	July 12
July 23	San Diego, Calif.	July 12
July 23	White Plains, N. Y.	July 12
	Adv. July 5 and 12.	
July 23	Hillsboro, N. D.	July 12
July 24	Minnesota	July 12
July 24	Huntington, W. Va.	July 12
	Adv. July 12.	
July 24	Maryland	July 12
	Adv. July 12.	
July 24	Napoleonville, La.	July 12
July 24	Michigan	July 12
July 24	West Virginia	June 28
July 25	Boonton, N. J.	July 5
	Adv. July 5.	
July 25	Kentucky	July 5
July 25	Delaware	July 5
	Adv. July 12.	
July 25	Virginia	July 12
	Adv. July 12.	
July 25	Johnson City, Tex.	July 12
July 26	Michigan	July 12
July 27	Williamson, W. Va.	July 12
July 30	Passagoula, Miss.	July 12
July 31	Alabama	July 12
July 31	Wind Gap, Pa.	July 12
	Adv. July 12.	
Aug. 2	Tallahassee, Fla.	July 12
	Adv. July 5 and 12.	
Aug. 6	Sayre, Okla.	July 12
Aug. 7	St. Louis, Mo.	July 12
Aug. 14	Clearwater, Fla.	July 12
	Adv. July 12.	
Jan. 17	Trenton, N. J.	July 12

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
July 13	New York, N. Y.	July 5
July 17	Baltimore, Md.	July 12
July 18	New York, N. Y.	July 12

BUILDINGS

Bids Close		See Eng. News-Record
July 15	Springfield, Mo.	July 12
July 16	Louisville, Ky.	July 12
July 16	Dover, O.	June 28
July 16	Pawhuska, Okla.	June 28
July 16	Nashville, Tenn.	June 28
July 16	Chisholm, Minn.	July 12
July 16	Mansfield, Conn.	July 12
July 17	Fultonville, N. Y.	July 12
July 18	Burlington, Wis.	July 12
July 18	Painesville, O.	July 12
July 19	Long Beach, Calif.	July 12
July 19	St. Marys, O.	July 5
July 19	Denison, Tex.	July 12
July 20	Boone, Ia.	July 12
July 20	Pittsburgh, Pa.	July 12
July 20	Logan, O.	June 28
July 20	Ft. Worth, Tex.	July 12
July 20	Palmyra, N. Y.	July 12
July 21	Pittsburgh, Pa.	June 28
July 23	Texarkana, Tex.	July 12
July 24	Conrad, Pa.	June 21
July 24	Ware, Mass.	July 12
July 24	New York, N. Y.	July 12
July 25	Los Angeles, Calif.	July 12
July 31	Mt. Vernon, N. Y.	July 5
Aug. 1	Jackson, Miss.	June 21
Aug. 7	Corsicana, Tex.	July 12
Aug. 15	Dallas, Tex.	July 12
Aug. 25	Denton, Tex.	July 12
Nov. 1	Ft. Worth, Tex.	July 12

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 18	Extension—Pearl Harbor, H. T.	June 21
July 18	Fire Protection System — Pearl Harbor, H. T.	May 31
July 18	Storage Facilities — Pearl Harbor, H. T.	June 7
July 19	Tanks—Memphis, Tenn.	June 21
	Adv. June 21 to July 12.	
July 19	Dredging—New Orleans, La.	June 21
July 20	Dredging—Galveston Tex.	June 21
	Adv. June 21 to July 12.	
July 20	Intake Chamber, etc —Wash., D. C.	June 28
	Adv. June 21 to July 12.	
July 21	Dredging—Galveston Tex.	June 28
	Adv. June 28 to July 12.	
July 21	Cement—Memphis, Tenn.	July 12
	Adv. July 12.	
July 24	Alterations—Williamsport, Pa.	July 12
	Adv. July 12.	
July 25	Tower—Annapolis, Md.	July 12
July 25	Screening — San Diego, Calif.	July 12
July 25	Road—San Diego, Calif.	July 12
July 27	Extension—Marion, O.	July 5
July 30	Stone—Detroit, Mich.	July 5
	Adv. July 5 and 12.	
July 30	Breakwater—Alpena, Mich.	July 12
July 31	Dredging—Baltimore, Md.	June 28
July 31	Remodeling—Albuquerque, N. M.	July 12
	Adv. July 12.	
Aug. 2	Excavation — Wilmington, Del.	July 5
	Adv. July 5 and 12.	
Aug. 4	Dikes, etc.—New Orleans, La.	July 12
	Adv. July 12.	
Aug. 6	Extension—Spartansburg, S. C.	July 12
	Adv. July 12.	
Aug. 7	Water System, Neenah, Wis.	July 12
Aug. 7	Driveway—Fond du Lac, Wis.	July 12
Aug. 8	Buildings—St. Juliens Creek, Va.	July 12
Aug. 8	Remodeling—Concord, N. H.	July 12
Aug. 13	Dredging—Baltimore, Md.	July 12

MISCELLANEOUS

Bids Close		See Eng. News-Record
July 16	Lignin Binder — Trenton, N. J.	July 5
July 16	Power Equipment—Taylorville, Ill.	June 28
July 16	Paving Materials—St. Paul, Min.	July 12
July 17	Timber Sluice and Sheathing —Wilmington, Del.	July 5
July 20	Timber—Webb, N. Y.	June 28
	Adv. June 28 to July 12.	
July 23	Cement—Napa, Calif.	July 12
July 24	Culvert—St. Louis, Mo.	July 5
July 24	Subway—Phila., Pa.	July 5
Aug. 1	Gas Pipe Line—Texas	July 5
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. J., Hawthorne—Takes bids early in August extending water distributing system. $37,000. H. J. Harder, 129 Market St., Paterson, engr.

N. J., Pennington—Rejected bids June 25 550 lin.ft. 2 in. w.i. and 3,250 lin.ft. 4-10 in. c.i. mains, water pumping station, etc Will readvertise. Remington & Vosbury, 601 Market St., Camden, engrs. Noted June 14.

N. C., Hickory—City Council plans new water system, water will be obtained from Jacobs Fork, 21 mi. distance, and carried by gravity in 16 in. pipe, 4 m.g. daily capacity. G. C. White, Durham, engr.

Tenn., Trezevant — City making plans waterworks and electric light installations along Louisville & Nashville R.R. $35,000. Address J. J. Blanks, Trezevant.

Ky., Louisville — Louisville Water Co., 435 3rd St., plans extending water system to Highland Park and South Louisville, new c.i. mains, etc. $350,000. G. W. Smith, pres.

La., Hammond—Will sell $40,000 bonds July 17 for waterworks equipment. C. C. Carter, mayor.

O., Columbus—See "Streets and Roads."

Mich., Grosse Pointe Farms (Grosse Pointe P. O.)—Making plans 3,500 ft. 6 in. c.i. main extensions. $15,000. R. H. Erley, Village Hall, engr.

Wis., Portage—Making plans brick, rein.-con. and steel filtration plant $100,000. Pearnall, Greely & Hansen, 39 West Adams St., Chicago, engrs.

Kan., Marquette — Voted $15,000 bonds for water and light systems. Engineer not selected.

Kan., Salina—See "Sewers."

Mo., Burlington Junction—Defeated $70,000 bonds for waterworks and sewers. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs. Noted June 14.

Mo., Cameron—Defeated $75,000 bonds for waterworks and lighting system. New election soon. E. E. Harper, 3031 Park Ave., Kansas City, engr. Noted June 14.

Mo., Maysville—See "Sewers."

Mo., Piedmont — Defeated $40,000 bonds waterworks, etc. Will probably be re-submitted. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, engr. Noted May 3.

Tex., Dallas—See "Miscellaneous."

Tex., Paducah—Plans water supply from wells, pumps, etc. Test well being drilled. $75,000. Engineer not announced.

Ore., Bishops Meadows—See "Miscellaneous."

Calif., Tracy—See "Streets and Roads."

Ont., Islington—Etobicoke Twp. soon takes bids 1,800 ft. 12 in. c.i. pipe and standpipe water tower, 100 ft. high, 30 ft. diam., steel encased in concrete or brick. $40,000. S. Barratt, clk. R. O. Wynne-Roberts & Son, 88 Church St., Toronto, engrs.

Man., Winnipeg — See "Streets and Roads."

BIDS DESIRED

N. Y., Niagara Falls—July 17, c.i. mains in 3 streets. $15,000. W. Bennett, city engr.

N. Y., Watertown—July 20, by Black River Regulating Dist., Light and Power Bldg., clearing lands to be flowed by enlargment of Stillwater Reservoir on Beaver River. To exceed $25,000. E. S. Cullings, secy.

N. C., Graham — July 20, by Graham Water Comn., constructing clear water reservoir. Spoon & Lewis, Greensboro, consult. engrs.; adv. this issue.

O., Akron—July 13, by B. J. Hill, purch. agt., 500 valve boxes and parts.

O., Brooklyn Heights (Independence, P. O.)—July 16, 2,000 ft. 12 and 15 in. vitr. tile and 1,860 ft. 6 in. c.i. mains, 3,600 cu.yd. excav., and 17,500 sq.ft. concrete or stone sidewalk. W. H. Evers Eng. Co., Engineers Bldg., Cleveland, engrs.

O., Cleveland—July 21, by Cuyahoga Co. 4,800 ft. 14 in. c.i. siphon line across Big Creek in Co. Sewer Dist. 1. R. F. MacDowell, Court House, engr.

Waterworks (Continued)

O., Cleveland—July 20, mains in Firwood Ave. N. E., Grovewood Ave. N. E., Wayside Rd. N. E., Caine Ave. S. E., Oakfield Ave. S. E., Puritan Ave., S. E., Rexford Ave. S. E., Milverton Rd. S. E., Erin Ave. S. W., South Hills Dr. S. W., Cress Rd. S. W., Dixon Rd. S. W., East 164th, East 185th, East 88th, East 91st, East 110th, East 112th, East 124th, East 126th, East 127th, East 129th, East 130th, East 146th, East 147th, West 56th, West 103rd and West 107th Sts.

O., Cleveland—July 20, at office of Commissioner Purchases & Supplies, 219 City Hall, West Side 1st High Service Main, Sect. 1, for Division of Water. A. V. Ruggles, comr. water; adv. this issue.

O., Columbus—See "Streets and Roads."

Ill., Aurora—July 23, by J. P. Wetz, city clk., furnishing machinery and labor for drilling deep well. Adv. this issue.

Wis., Manitowoc—City taking bids 1 story, 55 x 65 ft., brick, rein.-con. and steel addition to water and light plant. F. Alter, City Hall, engr.

Minn., Willmar—July 23, by city, waterworks improvements incl. 500,000 gal. steel or concrete reservoir and pumping equipment. $35,000. Cory & LeCocq, Aberdeen, S. D., engrs. Noted May 3.

Mo., St. Louis—See "Streets and Roads."

Tex., Ft. Worth—July 25, by City Com., 6-12 in. main extensions in Hemphill Dist., Baptist Theology Seminary, Texas Christian University. $100,000. D. L. Lewis, city engr. John B. Hawley, consult. engr.

Tex., Galveston—City Comn. taking bids Alta Loma waterworks, etc., incl. 2 oil engine driven generator sets, 21 mg. wells, pipe line from wells to plant, motor driven air compressor, three 3 mg. motor driven pumps, 24 in. pipe line from pumping plant here to standpipe, 6 mg. steam pump at plant, here. $125,000. W. D. Masterson, supt. waterworks. C. A. Holt, Jr., city engr. Noted May 31.

Tex., Roscoe—See "Streets and Roads."

Okla., Tulsa—July 30, by Water Comn., furnishing pumps and boilers for Mohawk Pumping Station of Spavinaw Water Supply Project. J. D. Trammell and W. R. Holway, 508 Wright Bldg., engrs. D. H. Murray, 1445 Monadnock Block, Chicago, consult. engr.; adv. this issue. Noted June 14.

Wash., Camas—July 20, by W. E. Farr, city clk., improvements to waterworks, incl. intake structures hauling and laying about 8.5 mi. 8 in. and 10 in. welded steel pipe, 50,000 gal. steel tank, etc. Stevens & Koon, Spalding Bldg., Portland, Ore., engrs. Noted May 31.

Calif., Yuba City—City Trustees receiving bids laying 6,000 ft. 6 in. c.i. mains, 5,000 ft. 3 in. w.i. mains, separate bids for furnishing 98 tons 6 in. Class B c.i. pipe, in 16 ft. lengths, 5,000 lin.ft. 3 in. standard w.i. pipe and fittings, valves and fire hydrants. E. Von Geldern, city engr.

Ont., Whitby—July 16, by Public Utilities Comn., laying 1,000 ft. steel waterworks intake pipe. $40,000. W. J. Luke, chn. F. W. Thorald, 54 Admiral Rd., Toronto, engr. Noted July 5.

BIDS RECEIVED

Calif., Montebello—Montebello Irrigation Dist., furnishing and laying 67,500 ft. 4-18 in. riveted steel pipe, steel tower, 25 ft. high, 250,000 gal. steel tank and pumping plant, from Lacy Mfg. Co., 1000 North Main St., Los Angeles, $64,475. Noted Feb. 15.

CONTRACTS AWARDED

N. Y., Binghamton—Bd. Contr. & Supply, furnishing 3,000 ft. 6 in. c.i. pipe, to R. D. Wood & Co., Binghamton, $65.25 per ton; laying above pipe in Leroy, Evans, Frederick, De Russey and Bond Sts., Howard, Highland and Woodland Aves., to Stento & Sarafini, 84 Court St., $17,406. Noted June 21.

N. Y., New York—Park Dept., Municipal Bldg., completing pump house, sump pit and septic tank in Pelham Bay Park, Bronx Boro, to Sloane-Dickinson Corp., 136 Liberty St., $28,550. Noted June 21.

N. J., New Brunswick—For 1,000 ft. 6 in. pipe for Water Dept., to R. D. Wood & Co., 400 Chestnut St., Phila., $63.60 per ton.

Md., Frostburg—Building reservoir, to Wentworth & Co., Cumberland, $44,900.

La., LeCompte—For light and waterworks plant: machinery to Fairbanks-Morse & Co., 608-14 Magazine St., New Orleans, $23,475; reservoir, concrete foundation, and building, to Hayden Constr. Co., Pass Christian, Miss., $4,000, $15 per cu.yd., and $75,000 respectively; water well, to Gray Artesian Well Co., $4,000.

O., Columbus—See "Streets and Roads."

O., Columbus—R. W. Smith, clk. Franklin Co., 8,900 ft. 6 in. c.i. mains in Sewer Dist. Marion 2, Contr. 17, and 3,103 ft. 6 in. c.i. mains in Sewer Dist. Marion 2, Contr. 23, to H. E. Miller Contg. Co., Columbus, $16,200 and $5,702 respectively. Noted June 21.

Wis., Milwaukee—Gate house and distribution system at Riverside Pumping Station, to P. Riesens Sons, 1018 Humboldt Ave., $64,777. Noted July 5.

N. D., Fargo—Water main extensions in Holes addition, to Haggart Constr. Co., 214 Roberts St., $18,904.

Tex., Baird—For 1,000 ft. tunnel 3½ x 4 ft., 30 ft. underground, 6 in. dry well, 6 in. concrete cover, 10,000 ft. pipe, fire hydrants, digging and walling storage well, to J. U. Johnson, Eastland, and J. W. Moore, Lampasas, $45,000. Engrs. est. $50,000. Noted June 21.

Okla., Sayre—For 3 wells, pumps, motors, three 8 x 10 ft., pump houses, 1,200 ft. 4 and 6 in. c.i. pipe, 40 x 60 ft. city hall, etc., to Ajax Constr. Co., 1824 West Main St., Oklahoma City, $30,887. Noted Apr. 4.

Sewers

PROPOSED WORK

Mass., Roxbury (Boston P. O.)—Pub. Wks. Dept., Boston, soon takes bids 1,500 ft. sewer in Bradeen St., here, 18 in. underground pipe and 22 in. surface drain, both earthen pipe, and 2 ft. 3 in. x 2 ft. 9 in. concrete drain. $26,000. J. A. Rourke, comr. and city engr.

N. Y., Syracuse—Bd. Contr. & Supply, plans 613 ft. of 36 in. rein.-con. storm sewer in Erie Canal bed between Saline and Clinton Sts. $40,000. T. H. Mather, City Hall, engr.

N. J., Glen Rock (Ridgewood, P. O.)—Takes bids about Aug. 25, extending sewerage system and constructing small pumping station. $52,000. H. J. Harder, 129 Market St., Paterson, engr.

N. J., Leonia—July 23, by Mayor and Boro Council, Boro Hall, sanitary sewers, septic tank, etc. C. H. Eckerson, 47 Dean St., Englewood, engr.; adv. this issue.

Pa., Erie—Plans extension to sewerage system in G-E Dist. $25,000. F. G. Lynch, city engr.

W. Va., Huntington — City will issue $600,000 bonds for sewers, bridge and municipal improvements. W. H. Chapman, mayor.

N. C., Burlington—See "Streets and Roads."

Fla., Leesburg—Election July 17, to vote on $25,000 bonds extending sanitary sewers and $25,000 bonds extending storm sewers. W. E. Harkness, clk.

O., Columbus—See "Streets and Roads."

O., Massillon—Election in August to vote on $300,000 bonds for sewers. F. C. Tolles, Genl. Del., Akron, sanitary and civil engr.

Wis., Madison—Plans vitr. clay sewers in Johnson St. $35,000. H. C. Buser, city clk. Engineer not selected.

Wis., Milwaukee—Sewerage Comn., 508 Market St., soon takes bids on concrete foundations for 200 x 225 ft. filter house and 120 x 180 ft. drier house, both on Jones Island. T. C. Hatton, c/o owner, engr. Noted May 17.

Kan., Manhattan—Plans storm sewer in various streets. $60,000. H. W. Alexander, Manhattan, engr.

Kan., Salina—Election soon to vote on bonds for 2 mi. of 24 in. mains, pumping station and disposal plant. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engr.

Mo., Burlington Junction—See "Waterworks."

Mo., Cameron—Defeated $60,000 bonds for sewerage system. New election soon. E. E. Harper, 3031 Park Ave., Kansas City, engr. Noted June 14.

Mo., Maysville—Election soon to vote on bonds sanitary sewerage system and extensions to water system. To exceed $30,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Mo., St. Joseph—Making plans 2 mi. sanitary sewers in Brown Branch. $240,000.

Mo., St. Louis—Bd. Pub. Serv., City Hall, received no bids July 3. 8,155 ft. 8-24 in. vitr. sewers, Harlem Creek Dist. Sewer 19, Creek Dist. Sewer 23; 305 ft. 8 and 12 in. vitr. clay sewer, Ohio Ave. Dist. Sewer 26. Glaise Creek Dist. Sewer 20 and Glaise Will readvertise. Noted June 14.

Mo., St. Louis—Soon takes bids 3,770 ft. 8-27 in. vitr. clay sewer in Harlem Dist. Sewer 22. $18,750; 4,125 ft. 48 in. brick or 2 ring segmental block, and 1,975 ft. vitr. clay sewer in Oakland Ave., $40,450. W. W. Horner, 300 City Hall, engr.

Tex., Dallas—See "Miscellaneous."

Tex., Hearne—July 24, to vote on $51,000 bonds for sewer extensions and improvements. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engr. Noted May 17.

Colo., Denver—Plans 12-72 in. vitr. concrete or brick pipe in Washington Park Storm Sewer Dist. 3. $285,370. A. K. Vickery, City Hall, engr.

Wash., Seattle—Bd. Pub. Wks. received no bids June 29, 14,525 ft. 8-15 in. clay or concrete sewer in Brandon St. et al. Will readvertise. $57,465. J. D. Blackwell, city engr. Noted June 21.

Ore., Bishops Meadows—See "Miscellaneous."

Ore., Grants Pass—Election soon to vote on $26,000 bonds for main trunk sewer from 7th St. to Rogue River. C. E. Bell, city engr.

Calif., Fresno—City will appropriate $25,000 for new wells at sewer farm. W. Stranahan, city engr.

Calif., Oakland — Had plans prepared sewers in Jackson St., 1,305 lin.ft. 12-21 in. vit. pipe, 1,131 lin.ft. 30 in. concrete pipe, 1,305 lin.ft. existing sewer to be removed, etc.; Foothill Blvd., 1,055 lin.ft. 8 in. vitr. pipe, etc. W. W. Harmon, city engr.

Calif., Santa Clara—Plans to vote on $50,000 bonds outfall sewerage system, 4,900 lin.ft. 24 in., 3,100 lin.ft. 22 in. and 20,400 lin.ft. 18 in. pipe, probably concrete or vitr. H. B. Fisher, Growers Bank Bldg., San Jose, engr.

Calif., Visalia—Had plans prepared sewage disposal plant. $50,000. L. H. [illegible]dsby, city engr.

Ont., Riverside—Soon takes bids vitr. tile trunk sewerage system and sewage disposal plant, rein.-con. $150,000. R. W. Code, McGregor Bldg., Windsor, engr. Noted Mar. 8.

Ont., Sandwich—Preparing plans and will take bids about Aug. 1, new sewers in Bloomfield Rd., Perry and Alexander Sts. $40,000. E. R. Worth, city engr.

Ont., Simcoe—Having plans prepared and takes bids about middle of August, extending storm sewer in Chapel St. $32,000. G. R. Marston, engr.

Ont., Stratford—Having plans prepared and takes bids early in August extension of sewers in Lee, Victoria and River Aves. $35,000. A. B. Manson, city engr.

Ont., Todmorden—Having plans prepared sanitary sewerage system, about 15,000 ft. vitr. tile sewer, mostly 8 in., and concrete sewage disposal system. $40,000. R. O. Wynne-Roberts & Son, 88 Church St., Toronto, engrs.

Man., Winnipeg — See "Streets and Roads."

BIDS DESIRED

N. Y., Long Island City—July 19, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hayes Ave., 25th and 27th Sts., 2nd Ward.

N. Y., Niagara Falls—July 17, sewers in 5 streets. $25,000. W. Bennett, city engr.

N. Y., New York—July 16, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Pelham Parkway S, Olmstead, Matthews and Randall Aves.; excavating and removing parts of existing sewer in Exterior St.

N. J., Millville—July 20, West Millville sewage pumping station, South Millville pump house and c.i. force main. N. B. Wade, city engr.; adv. this issue.

D. C., Wash.—July 31, by Dist. Comrs., 3,200 lin.ft. sewers; adv. this issue.

Tenn., Knoxville—July 19, by J. L. Geer, recdr. of deeds, sewers in South Knoxville. $60,000. F. M. Maloney, city engr.

O., Columbus—See "Streets and Roads."

Ia., Des Moines—July 16 by A. E. McGlothlen, clk., Southwest Sewerage System, 37,317 lin.ft. 10-24 in. vitr. clay pipe and 27,100 lin.ft. 27-48 in. segmental clay block, brick or concrete circular sewer, etc. $600,000. K. C. Kastberg, city engr. Noted July 5.

Mo., Carrollton—July 24 to vote on $50,000 bonds 6-21 in. sewers. Private plans.

Colo., Arvada—Aug. 13, by City Clerk, 30,000 ft. 8 in. vitr. pipe, necessary manholes, etc., in Sanitary Sewer Dist. 1. $49,000. Brew & Sydow, Kittridge Bldg., Denver, engrs.

Sewers (Continued)

Calif., Los Angeles—July 23, by Supervs. Los Angeles Co., furnishing and installing 2 sewage pumps with piping, and equipment for septic tank, 1 Imhoff tank, etc.

Calif., Sacramento — July 19, by City Comrs., sewers in 7th St. alley between D and E Sts. to U St., removing and replacing 22,930 sq.ft. pavement, 6,930 lin.ft. ditching and backfilling trench, 4,360 lin.ft. vitr. ironstone sewers, 3,570 lin.ft. monolithic rein.-con. sewers, etc. $50,000. A. Givan, city engr.

Calif., Tracy—See "Streets and Roads."

Ont., Toronto—July 24, by C. A. Maguire, mayor, City Hall, supplying and erecting two 2,880,000 gal. centrifugal sewage pumps direct connected to electric motors. $30,000. R. C. Harris, city engr.

BIDS RECEIVED

O., Akron—W. F. Peters, dir. Pub. Serv., July 2, 890 ft. 12-24 in. vitr., 790 ft. 30 and 39 in. (a) brick or (b) segmental block sewer in (1) Aqueduct St.; 1,010 ft. 12-20 in. vitr. and 400 lin.ft. 30 in. (a) brick or (b) segmental block sewer in (2) North Main St., 2,115 ft. vitr. and 1,595 ft. 30-54 in. (a) brick or (b) segmental block sewer in (3) West Market St., 330 ft. 12 in. vitr. and 1,025 ft. 48 in. (a) brick or (b) segmental block sewer in (4) Palisades Dr., from E. and W. McShaffrey Co., 514 Rhodes Ave., (1a) $13,735 (1b) $13,578 (2a) $10,438 (2b) $10,088; C. Ruhlin, 518 Metropolitan Bldg., (3a) $53,843 (3b) $45,312 (4a) $21,255 (4b) $13,235. Noted June 21.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., July 2, sewer in west side of Amsterdam Ave., etc., from Melrose Constr. Co., 230 East 162nd St., $55,000. Noted June 28.

O., Cleveland—Cuyahoga Co., June 27, 4,000 ft. of 27 x 33 in. egg shape outfall sewer in Ridge Rd. Impvt. 20, Sect. C. of Co. Sewer Dist. 1, from Manson Co., Sewer Contractors Exch., The Arcade, $56,000. Noted June 21.

O., Garfield Heights (Bedford, P. O.)—For 7,000 ft. 30 and 36 in. outfall sewer, from Manson Co., Sewer Contractors Exch., The Arcade, Cleveland, segmental block, $78,363, brick $84,804. Noted June 14.

Mich., Springwells—Constructing sewers, from Cusino-Mercier, 616 Hammond Bldg., Detroit, Sect. 2, 8,845 ft. 12-22 in. sewer, 28 manholes, $20,280, Sect. 5 5,234 ft. 12-24 in., 14 manholes, $13,000, Sect. 6 6,287 ft. 12-24 in., 21 manholes, $15,175, Sect. 7, 6,097 ft. 12-24 in., 24 manholes, $21,500; from Hammen & Co., 2631 Woodward Ave., Detroit, Sect. 3, 7,230 ft. 8-12 in., 23 manholes, $18,755; from Coolsaet Bros., 911 Detroit Savings Bank Bldg., Detroit, Sect. 4, 2,983 ft. 12-27 in, 11 manholes, $14,729; from A. Arcari, Detroit, Sect. 8, 5,248 ft. 12-22 in., 23 manholes, $20,923.

Mo., St. Louis—Bd. Pub. Serv., City Hall, 3,700 ft. 8-36 in. vitr. sewer, South Gravois Sewer 4, from United Constr. Co., Pontiac Bldg., $22,391, engrs. est. $19,785; 9,920 ft. 8-42 in. vitr. and brick sewer, Harlem Creek Dist. Sewer 18, from Hogan Contg. Co., Chemical Bldg., $56,286, $50,700; 4,080 ft. 12-24 in. vitr. clay sewer, Rock Creek Dist. Sewer 8, from Blackburn-Creamer, Syndicate Trust Bldg., $20,679, $20,800; 4,045 ft. 8-18 in. vitr. clay sewer, Arloe Dist. Sewer 3, from Grant-Meinert, St. Louis, $11,588, $14,520; 1,150 ft. 8-21 in. vitr. clay sewer, Grand Ave. Dist. Sewer 27, from Frazier-Davis Constr. Co., Arcade Bldg., $5,959, $5,000; 2,500 ft. 24-42 in. brick and vitr. clay sewer, Sublette Ave., from G. G. Prendergast, 6157 Wagner St., $20,406, $21,320. Noted June 14.

CONTRACTS AWARDED

N. Y., Gloversville—For 5,186 ft. 8-15 in. vitr. tile sewer in East 9th and Kingsboro Aves., Newman and East State Sts., also West 12th Ave., to F. Sheehan, 446 Yates St., Albany, $33,744 and $3,233 respectively.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., storm sewer in 32nd Ave., to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $125,786. Noted July 5.

N. Y., New York—J. Miller, pres. Manhattan Boro Municipal Bldg., sewers in west side of Amsterdam Ave. from West 190th St. to Ft. George Ave., to Melrose Constr. Co., 103 East 125th St., $55,000. Noted June 28.

Fla., Miami Beach—To J. B. McCrary Eng. Co., 3rd Natl. Bank Bldg., Atlanta, Ga., extending sanitary sewers, 8 in. terra cotta pipe, $55,149, 15 and 21 in. concrete pipe, $30,000; extending storm sewers, 24 in. concrete pipe, $21,993.

O., Columbus—See "Streets and Roads."

Mich., Springwells — To Cusino-Mercier, 616 Hammond Bldg., Detroit, sewers in Sect. 2, 8,845 ft. $20,280, Dist. 5, 5,234 ft. $12,000, Dist. 6, 6,287 ft. $15,175, Dist. 7, 6,197 ft. $21,500; to Hammen & Co., 4612 Woodward Ave., Detroit, Dist. 3, 7,578 ft. $18,755; to Coolsaet Bros., 911 Detroit Savings Bank Bldg., Detroit, Dist. 4, 3,483 ft. $14,729; to A. Arcari, Detroit, Dist. 8, 5,248 ft. $20,923. Noted July 5.

Tex., Ft. Worth—For 2 extra filter beds in sewage disposal plant on Trinity River near Sycamore Heights, to McKinzie Constr. Co., 302 West Mulberry St., San Antonio, $400,000.

Okla., Oklahoma City—For 1 mi. storm sewers in Pottawatomie Ave. from Lee St. to Atchison, Topeka and Santa Fe R.R. tracks, to Municipal Excavator Co., 200 East Main St., $30,000.

Wyo., Casper—To Gordon Constr. Co., Casper, 15,856 ft. 8 in. vitr. clay pipe in trenches from 0-30 ft. deep, prices range from $0.82 to $8.80, 2,500 cu.yd. earth fill $0.66, etc., total $41,473 (cash).

Ont., Hamilton—Vitr. tile sewers in Paisley, Barclay and Vansittart Aves., to Webster Constr. Co., 136 Carling St., London, and J. D. Armstrong, 871 Main St., E., Engrs. est. $45,000. Noted June 14.

Ont., Owen Sound—For 5,000 ft. of 12-42 in. sewers, to Mitchell Contg. Co., 43 Elmwood Ave., London. Prices wanted on concrete and vitr. pipe. Engrs. est. $38,000. Noted May 31.

Waste Disposal

PROPOSED WORK

Wis., Racine—City, c/o W. W. Johnston, health comr., City Hall, plans 1 story, 60 x 90 ft. addition to garbage disposal plant, rein.-con., brick and steel, plain foundation. Architect and engineer not selected.

BIDS DESIRED

O., Lakewood (Cleveland P. O.)—July 26. garbage disposal plant, 100,000 lb. daily capacity. $88,500. E. A. Fisher, City Hall, engr. Noted May 10.

CONTRACTS AWARDED

Tex., Austin—Election soon to vote on $25,000 bonds for incinerator. W. D. Yett, mayor.

Bridges

PROPOSED WORK

N. Y., Far Rockaway—Atlantic Beach Associates, Inc., making plans 1,900 ft. rein.-con. highway bridge, wood trestle approaches, double leaf bascule span. $300,000. J. R. Spelman, 405 Lexington Ave., New York City, consult. and superv. engr.

W. V., Huntington—See "Sewers."

N. C., Charlotte—Mecklenburg Co. plans bridges on its highway system. $100,000. T. Griffith, chn. co. Hy. Comn.

Fla., Jacksonville — Florida East Coast Ry., St. Augustine, takes bids about Aug. 10, reconstructing bridge over St. Johns River, here, present bridge is single track, new one to be double track, concrete piers, 3 of which will probably be placed by pneumatic caisson and remaining in open coffer dams, H. N. Rodenbaugh, St. Augustine, genl. mgr.

Fla., Sarasota—Manatee Co. election July 17, to vote on $25,000 bonds for several concrete bridges along State Rd. 5. O. E. Roesch, co. clk.

Ala., Eufaula—Plans ½ mi. bridge over Chattachoochee River. $400,000.

O., Akron—City plans steel and concrete bridge, 10 ft. wide, Buchtel Ave., $250,000; steel and concrete bridge, 66 ft. wide, near Center St., $800,000; steel and concrete bridge, 88 ft. wide, Exchange St., $950,000. M. P. Tucker, mgr.

Michigan—See "Streets and Roads."

Wis., Madison—Plans rein.-con. bridge over Illinois Central R.R. tracks on Allen St. $25,000. H. C. Buser, city clk. Engineer not selected.

South Dakota—State Hy. Dept., Pierre, plans, 1,484 ft. concrete and steel bridge over Missouri River, near Mobridge, on Federal Aid Project 155, Corson and Walworth Counties. $281,565. F. D. Hudgins, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans one 75 ft. steel truss, six 40 ft. rein.-con. deck girder and three 20 ft. rein.-con. slab spans, etc., over tracks of Missouri, Kansas & Texas Ry., Callaway Co. To exceed $25,000. B. H. Piepmeier, state highway engr.

Mo., Mexico—Making plans 700 ft. rein.-con bridge with steel span, 24 ft. roadway, 5 ft. walks. $75,000-$100,000. E. Flad & Co., Chemical Bldg., St. Louis, engrs.

Tex., Marlin—See "Streets and Roads."

Oregon — Oregon, Washington Ry. and Navigation Co., Wells-Fargo Bldg., Portland, plans bridge over Columbia River at Kennick, $1,012,221; also other bridges to cost $984,809. S. Murray, asst. ch. engr., in charge of work.

Ore., Portland—Had plans prepared East 33rd St. viaduct, rein.-con. $10,000. O. Laurgaard, city engr.

Calif., Los Angeles—City, Los Angeles Co. and Railways, having plans prepared rein.-con. viaduct over Los Angeles River on 9th St., 70 ft. wide, 3 arches, long approaches and 6 piers. $1,000,000. City's share $200,000.

Ont., Toronto—York Twp. plans 400 ft. bridge, 20 ft., probably rein.-con., on Bathurst St. north of St. Claire Ave. $140,000. F. B. Goedike, 40 Jarvis St., engr.

BIDS DESIRED

Rhode Island—July 18, by State Bd. Pub. Roads, Providence, constructing state bridges 27, 45, and 189 in West Warwick, Hopkinton-Richmond and Cumberland; adv. this isue.

Conn., Ansonia—Aug. 1, by Bd. Pub. Wks., City Hall, reconstructing bridge on Maple St. P. B. Clarke, city engr.; adv. this issue. Noted Mar. 15.

N. Y., Arlington—July 23, by L. Jackson, town supt. of Poughkeepsie, at Arlington Fire House, Arlington, constructing Manchester Bridge over Wappingers Creek, adv. this issue.

New York — July 23, by Bronx Parkway Comn., 72 West Penfield Rd. Bronxville, driveway bridges 38, 39, and 40, north of White Plains railroad station. Contr. 66, Bridges 42, 43 and 47, near North White Plains, Contr. 67; Bridge 35, over Bronx River Parkway Dr., Main St., White Plains, Contr. 57; Bridge 16, Tuckahoe Rd., near Tuckahoe, Contr. 49. L. G. Holleran, deputy ch. engr.; adv. this issue.

Pa., Waynesburg—July 21 by Comrs. Greene Co., rein.-con. bridge over Ten Mile Creek; R. I. Lemley, clk. T. B. Dinsmore, co. engr.; adv. this issue.

Virginia—See "Streets and Roads."

Fla., Clearwater—Aug. 14, by Bd. Comrs. Pinellas Co., 7 concrete deck girder bridges, 10 concrete flat slab bridges, also 1 creosoted timber bridge, in connection with 25 ft. single leaf steel lift span, etc. C. E. Burleson, co. engr.; adv. this issue. Noted May 10.

Alabama—July 31, by W. S. Keller, state highway engr., Montgomery, bridges on Dublin-Orion Rd., Montgomery Co., alternate bids on (1) using treated timber 230,080 ft. treated timber structures, 8,000 lin ft. treated timber piles, 3,308 sq.yd. 1½ in. bituminous surfacing cold mix (2) 1,670 cu.yd. concrete, 235,581 lb. reinforcing, 3,848 lin.ft. concrete piles, 1,714 sq.yd. 1 in. concrete surfacing, 1:2:3½ mix. Noted June 21.

Kentucky—July 25, by State Hy. Dept., Frankfort, concrete bridge over Blackwater Creek, Federal Aid Project 95, Morgan Co., five 40 ft. spans; 170 concrete bridge over Graney Creek, Federal Aid Project 95, Morgan Co., five 34 ft. spans; 100 or 120 ft. bridge over Triplett Creek, Federal Aid Projct 67, Rowan Co., 100 ft. steel span or four 30 ft. concrete spans; 108 ft. concrete bridge over Bank Lick Creek, State Project 62, Kenton Co., two 34 ft. and one 40 ft. spans. J. S. Boggs, state highway engr.

O., Cleveland—July 21, by Cuyahoga Co. concrete bridge, Hillside Rd., 1,119 cu.yd. concrete, 37,800 lbs. steel, etc., $68,385. F. Lander, Court House, engr.

Indiana—July 24, by J. D. Williams, dir. State Hy. Comn., Indianapolis, one 150 ft. and one 198 ft. steel truss bridge, over Eel River, on State Rd. 9-1, Clay Co. $75,000. G. F. Burch, state bridge engr. Noted Apr. 26.

Michigan—See "Streets and Roads."

Wis., Milwaukee—July 20, by Dept. Pub. Wks., double leaf trunnion, 267 ft., bridge (1 span) on State St., concrete and pile abutments and piers. $400,000. M. C. Cutler, City Hall, engr.

Minnesota—See "Streets and Roads."

Calif., Requa—July 23, by State Hy. Comn., Sacramento, 100 ft. bridge over Wilson Creek near here, Del Norte Co., two 30 ft. and two 20 ft. rein.-con. girder spans, rein.-con. bents, etc. R. M. Morton, Forum Bldg., Sacramento, state highway engr.

Bridges (Continued)

BIDS RECEIVED

Maryland—State Rds. Comn., Baltimore, rein.-con. arch span over Catoctin Creek, near Middletown, Frederick Co., 85 ft. span, 24 ft. clear roadway, Contr. F-58, from Luten Bridge Co., York, Pa., $24,599; 40 ft. clear span, 24 ft. clear roadway, at Bynum Run, near Belair, Hartford Co., Contr. H-35, from P. C. Streett Eng. Co., 406 St. Paul St., Baltimore, $14,035. Noted June 21.

North Carolina — State Hy. Comn., Raleigh, rein.-con. bridges and culverts on State Project 702 B, Alleghany Co. and State Project 672, Rowan Co., from Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $28,232 and $29,631 respectively; State Project 750 B, Stokes Co., from Atlantic Bridge Co., Roanoke, Va., $87,681; State Projects 189, 230 and 293, Pitt, Greene and Wilson Counties, from Public Service Production Co., Terminal Bldg., Newark, N. J., $58,644; State Project 836, Henderson Co., from W. M. Brown & Co., Sylva, $47,573; State Projects 851 and 889, McDowell Co., from R. W. Curtis, Lynchburg, Va., $40,742; State Project 141, Edgecombe and Halifax Counties, from J. A. Peterson, Wadesboro, $64,008; State Project 302, Bladen Co., from Hardaway Constr. Co., 909 Elizabeth Ave., Charlotte, $334,713; State Project 213, Craven Co., from Eagle Eng. Co., New Bern, $55,287. Noted June 21.

North Carolina—State Hy. Comn., Raleigh, clearing and grading 18.98 mi. road between Marion and Micaville on Route 19, State Projects 851 and 889, McDowell Co., from W. H. Anderson Constr. Co., Spruce Pine, $386,254, 9.1 mi. between Hendersonville and Buncombe Co. line on Route 29, State Project 836, Henderson Co., from J. B. Hawkins, 310 South Cedar St., Charlotte, $58,870; clearing, grading and topsoiling 11.58 mi. between Boxboro and Granville Co. line on Route 57, State Project 464, Person Co., from Michaux Constr. Co., Morganton, $56,604, 18.93 mi. between Whitakers and Halifax on Route 40, State Project 141, Edgecombe and Halifax Counties, from J. R. Dicus, Robersonville, $128,143, 6.42 mi. between Northampton Co. line and Aulander on Route 305, State Project 146, Bertford and Bertie Counties, from J. F. Mulligan, North Wilkesboro, $35,165; grading and topsoiling 3.83 mi. between Person Co. line and Berea on Route 57, State Project 431, Granville Co., from Michaux Constr. Co., Morganton, $23,599, 1 mi. approaches to brige over Cape Fear River near Elizabethtown, State Project 302, Bladen Co., from Y. F. Bamber, Bamberg, S. C., $33,240, 6.49 mi. between Sparta and Ashe Co. line on Route 69, State Project 702 B, Alleghany Co., from Turner-Hartsoe Constr. Co., Warrensville, $146,075; clearing, grading, rein.-con. bridges and culverts and topsoiling 16.29 mi. between Jackson and Hertford Co. line toward Ahoskie, State Project 168, Northampton Co., from N. L. Teer, Durham, $87,390, 8.64 mi. between Big Creek and Danbury via Moores Springs, State Project 750 B, Stokes Co., from R. E. Martin, Mountain City, Tenn., $17,962; grading and concrete paving 3.83 mi. between Duke and Dunn on Route 60, State Project 438, Harnett Co. and 3.54 mi. between Cleveland and Iredell Co. line on Route 70, State Project 672, Rowan Co., from J. M. Gregory, Pittsboro, $119,577 and $128,061 respectively, 19.69 mi. between Wilson and Bynum via Farmville on Routes 91 and 12, State Projects 189, 230 and 293, Pitt, Greene and Wilson Counties, from Smith Bros. Inc., Dallas, Tex., $680,075; clearing, grading and rein.-con. bridges and culverts on 3.83 mi. between Peachland and Polkton on Route 20, State Project 608 B, Anson Co., from B. F. Teeter, Harrisburg, $29,780, 4.89 mi. between Glen Alpine and Bridgewater on Route 10, State Project 812, Burke Co., from M. A. Kollock, Morganton, $46,489; grading, reconstructing and asphaltic paving 9.92 mi. around town of Wilson, State Project 295, Wilson Co., from R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $200,593; grading, waterbound macadam paving, rein.-con. bridges and culverts on 5.68 mi. between Newland and Elk Park on Route 175, State Project 802, Avery Co., from Hughes & Ray, Newland, $174,005; grading and waterbound macadam paving 10.43 mi. between Ft. Barnwell and Jasper on Route 10, State Project 213, Craven Co., from Eagle Eng. Co., New Bern, $351,125, 3.07 mi. in and near Mt. Gilead on Route 51, State Project 556, Montgomery Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $61,558, 4.03 mi. between Graham and Randolph Co. line on Route 62, State Project 507, Alamance Co., from J. M. Gregory & Co., Pittsboro, $118,227; grading and asphaltic paving 5.83 mi. between Hendersonville and Tuxedo Station on Route 29, State Project 837 B, Henderson Co., from Dixon Contg. Co., Real Estate Bldg., Savannah, Ga., $75,557. Noted June 14.

Ia., Newton—Jasper Co., two 32x18 ft., two 32x20 ft. and one 36x18 ft. I-beam spans, one 40x18 ft. concrete girder, one 60x18 ft. pony truss and re-erection two truss spans, from Jensen Constr. Co., $38,445.

Ore., Mt. Vernon—State Hy Dept., Salem, 5 concrete and steel bridges over John Day River, here, from Monson-Trierweiler Co., Ry. Exch. Bldg., Portland, 40 cu.yd. Class A and 215 cu.yd. Class B concrete $28, 270,000 lb. structural steel $0.109, etc., total, $53,315.

CONTRACTS AWARDED

Mass., Haverhill—Haverhill Lower Bridge Comn., bridge across Merrimac River, to H. P. Converse & Co., 161 Devonshire St., Boston, $779,833. Contract does not include draw span, same will be advertised. Noted June 21.

N. Y., Gouverneur—St. Lawrence Co. (Canton) concrete arch bridge over Oswegatchie River, at Scotts Bridge, to G. W. Thompson Co., Gurney Bldg., Syracuse. $31,500.

N. Y., Norwich—S. C. Nelson, Jr., clk., South Broad St. bridge over Canasawacta Creek, to F. M. Lewis Son, Afton, $25,228. Noted June 7.

Pa., Elizabethville—Dauphin Co. (Harrisburg), rein.-con. bridge, three 38 ft. 5 in spans, 20 ft. roadway, here, to Whittaker & Diehl, Union Trust Bldg., Harrisburg, $33,890.

Maryland—State Rds. Comn., Baltimore, rein.-con. arch bridge, 85 ft. span, 24 ft. clear roadway, over Catocin Creek near Middletown, Frederick Co., Contr. F-58, to Luten Bridge Co., York, Pa.; $24,599; 40 ft. span, 24 ft. clear roadway, at Bynum Run near Bel Air, Harford Co., Contr. H-35, to Consolidated Eng. Co., Calbert Bldg., Baltimore, $8,874. Noted June 21.

Alabama—See "Streets and Roads."

Alabama—State Hy. Dept., Montgomery, small creosoted timber bridges on Gadsden-Birmingham Highway, St. Clair Co., to W. C. Howten, Oneonta, $49,196; engrs est. $50,000; on Gadsden-Birmingham Highway, Marengo Co., to Bosworth, Smith & Co., 1st Natl. Bank Bldg., Montgomery, $75,438; engrs. est. $80,000. Noted June 7 and 28.

Alabama—State Hy Dept., Montgomery, concrete slab, Village Creek, Blount Co., to W. T. Weaver, Collinsville, $47,432. Noted June 7.

Mississippi—See "Streets and Roads."

Ky., Louisville—Bd. Park Comrs., Bridge 6, near Barnet Hill in Cherokee Park, concrete arch, stone coping, etc., to H. Bickel Co., 443 Garden St. Archts. est. $25,000. Noted May 17.

Ohio—See "Streets and Roads."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing bridges **c means concrete, s steel, c s concrete span, sub. substructure, super superstructure,** to D. W. Carmine Constr. Co., Sullivan, **1 c 4-26-26B Sangamon** means **(1 concrete, Route 4, Federal Aid Project 26, Sect. 26B Sangamon Co.),** $9,583; Hartman-Clarke Bros. Co., Dwight, 1 sub and 1 c 7-55-13B Bureau, $16,313; L. C. Kessler, Herrick, 4 c and 1 sub 2-0-21B Fayette, $19,003, 3 c 2-0-22B Fayette, $26,651; St. Louis Structural Steel Co., 802 Bank of Commerce Bldg., St. Louis, Mo., 1 super 2-0-21C Fayette, $7,645, 2 super 3-0-52C Greene, $14,497; F. E. Marsh Co., Jefferson, Ia., 3 c 2-0-37B Ogle, $49,371; A. Culberson, Oconee, 2 c 2-0-43B Christian, $8,084; C. Taggart, Martinsville, 1 c 2-0-44B Christian, $8,220, 1 c 2-0-45B Christian, $19,510; C. H. Schadt, Silvis, 1 c 3-0-19B Rock Island $4,484; Herrick Constr. Co., Carlinville, 1 c 3-51B and 1 s and 6 c 3-0-52B Greene, $57,213; F. Kaney, Forreston, 1 c 5-0-24B Jo Daviess, $9,419; D. Warner, Polo, 4 c 6-0-51B Lee, $8,198; Continental Bridge Co., Monadnock Blk., Chicago, 1 super 7-55-13C Bureau, $5,942; D. Keef, Low Point, 1 c 8-0-34B Woodford, $9,329; J. B. Lyon, Robinson, 4 c, 19 c s and 3 sub. 12-0-9B Richland-Clay, $162,133, 7 c 33-0-1B Crawford, $32,765; Vincennes Bridge Co., Vincennes, Ind., 3 super 12-0-9C, Richland-Clay, $34,274; W. Behridt & Son, St. Peter, 2 c 12-0-13B Marion, $36,231; W. H. Shons, South Liberty Ave., Freeport, 1 sub. 16-0-11B Shelby, $26,034; Illinois Steel Bridge Co., Jacksonville, 1 super 16-0-11C Shelby, $36,497; M. Frazier, Louisville, 3 c 25-0-10B Wayne, $14,427; Sheldon Constr. Co., Putnam Bldg., Davenport, Ia., 2 c 28-0-10B Henry, $14,884; V. O'Connor, Newton, 14 c s and 1 s 33-0-4B Jasper, $56,514. Noted May 24.

Ia., Des Moines—Polk Co., one 40 x 24 ft., one 38 x 18 ft., two 36 x 18 ft. and one 40 x 18 ft. concrete girder spans, one 10 x 10 ft. concrete box culvert and one 100 x 18 ft. steel truss, to N. M. Stark & Co., 1213 Mulberry St., $37,212. Noted June 28.

Ia., Tipton—Cedar Co., to V. L. Hanssen, Monticello, 34 box and 1 circular culvert, 2 I beams, 3 pair abutments, $22,791; A. P. Munson, Marion, 29 box and 1 circular culvert, 2 I beams and 2 pair abutments, $21,928.

South Dakota—See "Streets and Roads."

Colorado—See "Streets and Roads."

Wash., Toledo—Van Ness Lumber Co., 600 ft. steel and concrete bridge across Cowlit River, two 150 ft. steel spans on concrete piers, with 300 ft. trestle approaches, to Union Bridge Co., Central Bldg., Seattle, $62,000.

Oregon—State Hy. Comn., Salem, embankment approaches to Lewis and Clark Bridge, on Roosevelt Coast Highway, Clatsop Co., 36,500 cu.yd. embankment and 3,000 cu.yd. riprap, to Pacific Bridge Co., foot of East Salmon St., Portland, $26,148; concrete and steel bridge over Applegate River, Grants Pass, Josephine Co., to Union Bridge Co., Fenwick St., Kenton, Portland, $21,768. Noted June 14.

Dams

PROPOSED WORK

N. Y., East Creek—See "Miscellaneous."

Ky., Danville—See "Miscellaneous."

Wisconsin—See "Miscellaneous."

Calif., Oroville—Thermalito Irrigation Dist. having plans prepared Concow Dam, 75 ft. high (ultimately 166 ft.), 240 long on crest, concrete, arch type, involving 3,000 cu.yd. concrete. To exceed $45,000. S. J. Norris, Oroville, engr.

CONTRACTS AWARDED

N. Y., Glens Falls — Moreau Mfg. Co., dam and power house, at Feeder Dam, 1½ mi. north of here, to Parklap Constr. Co., Glens Falls, $1,000,000.

N. Y., Heuvelton — See "Industrial Works."

Railways

PROPOSED WORK

Connecticut—Connecticut Co., 185 Church St., New Haven, plans laying 1,000 ft. track on Huyshope Ave. from Masseek to Aricombe Sts., and also spur tracks in Hartford. $100,000.

Kentucky—Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans second tracking 15.47 mi. from Perritt to Lennut on Eastern Kentucky Div. $1,596,000. W. H. Courtenay, ch. engr.

Tex., Ft. Worth—See "Industrial Works."

Oregon—Oregon, Washington Ry. and Navigation Co., Wells-Fargo Bldg., Portland, will expend $1,228,345 for cars and engines, $893,482 rails and renewals, $757,820 roadway, $181,825 shops and tools, $136,600 stations, $224,425 fuel oil stations, and $547,754 miscellaneous work. S. A. Murray, asst. ch. engr., in charge of work.

Ore., Bishops Meadows—See "Miscellaneous."

BIDS DESIRED

Louisiana—July 15, at Superintendents Office of Alexandria & Western Ry. Co., Alexandria, new extension from McFarland to connect with Thomas Gravel Co. tracks, approximately 5 mi. west, also roadbed for yard tracks and sidings, 31,533 cu.yd. earth excav., 29,000 ft. creosoted lumber, 18,000 ft. untreated pine culverts, etc.

CONTRACTS AWARDED

New York—Transit Comn., 49 Lafayette St., New York City, switch back track and other miscellaneous work east of Queensboro Plaza Station, Corona Branch, Queensboro Rapid Transit R.R., Queensboro, Routes 36 and 37, Sect. 1, to B. T. and J. J. Mack, Inc., 200 Bway., New York City, $28,562. Noted June 28.

Missouri—St. Louis & San Francisco R.R., Frisco Bldg., St. Louis, approximately 8 mi. mechanical and storage tracks (75 lb. and 90 lb. rails), in conjunction with new Lindenwood roundhouse and repair shops, to List & Gifford Constr. Co., Merchants-Laclede Bldg., St. Louis.

Texas—Northern Texas Traction Co., 3 mi. track extension to Oakland Div. through Sycamore Heights to city limits, paving and double tracking part of Forest Pk.

Railways (Continued)

Blvd., also 14,000 ft. extension to Riverside Line, in Ft. Worth, to Stone & Webster, Inc., 147 Milk St., Boston, Mass., $416,000.

California—Atchison, Topeka & Santa Fe Ry. Co., Kerchkoff Bldg., Los Angeles, 3 mi. spur in vicinity of Torrance oil fields, to Sharf & Fellows, Central Bldg., Los Angeles, $175,000.

Excavation, Drainage Irrigation

PROPOSED WORK

N. Y., Far Rockaway—Atlantic Beach Associates, Inc., plans dredging 600,000 cu. yd. sand fill. J. R. Spelman, 405 Lexington Ave., New York City, consult. and superv. engr.

N. Y., New York—J. H. Delaney, comr. Docks, Pier "A" North River, rejected bids on item 4, dredging at street cleaning dumps in Boros of Manhattan and Brooklyn; received no bids on item 2. Will readvertise. Noted July 5.

Ky., Owensboro—Daviess Co. Drainage Comn. soon takes bids 250,000 cu.yd. earth excav., small bridges, ditches, etc. $75,000. R. H. Ford, Owensboro, drainage comr.

Wis., Cedarburg—Farm Drainage Bd. plans 2½ mi. 8-12 in. tile drain west of here. $25,000. G. S. Hales, Court-House, Port Washington, secy. Engineer not selected.

Wis., Ixonia—Jefferson Co. Drainage Bd. (Jefferson) plans system to drain 4,160 acres, 6-22 in. tile drain and several miles open ditch. $53,000. J. W. Puerner, Jefferson, secy.

Wis., Mequon—Farm Drainage Bd. plans 22,000 ft. 6-22 in. vitr. tile drain, Ozaukee Co. $25,000. G. S. Hales, Court House, Port Washington, secy. Engineer not selected.

Minn., Houston—Houston Co. Drainage and Conservancy Dist. 1, having preliminary plans prepared 1,292,644 cu.yd. in levees, 219,365 cu.yd. in ditch excav. and 63,500 cu.yd. much excav., also pumpong station 80,000 g.p.m. capacity. $428,000. Central States Eng. Co., 602 Laurel Bldg., Muscatine, Ia., engrs.

Kan., Wichita—City having preliminary surveys made on north end of drainage district near here, to afford flood protection to industrial section. C. E. Jacoby, Shuckert Bldg., Kansas City, Mo., engr.

Tex., Ft. Hancock—Hudspeth Co. Irrigation Dist., c/o J. S. Spears, plans irrigation canal with neecssary laterals to reclaim approximately 30,000 acres. Engineer not selected.

Ore., Sutherlin—Comrs. Sutherlin Valley Irrigation Project take bids in August or September, for system to drain and irrigate 4,225 acres in Calapooia Valley. $200,000. W. J. Ladd, pres. Stevens & Koon, 1202 Spalding Bldg., Portland, engrs.

BIDS DESIRED

N. Y., New York—July 17, by J. H. Delaney, comr. Docks, Pier "A," foot of Battery Pl., dredging slip between Piers 61 and 62, North River, Contr. 1812.

La., New Orleans—July 16, by Bd. Port Comrs., 200 New Court Bldg., hydraulic dredging from 750,000-1,500,000 cu.yd. in Inner Harbor Navigation Canal between lock and Louisville & Nashville R.R. bridge.

Ia., Sioux City—Aug. 1, at office W. M. Pritchard, and Woodbury Co., improvements in Garretson D. D. 1; adv. this issue.

Minn., Albert Lea—July 20, by C. Holway, aud. Freeborn Co., Judicial Ditch 6, 300,000 cu.yd. excav., 200,000 lin.ft. 6-42 in. tile. $80,000. Midwest Eng. Co., Albert Lea, engrs.

BIDS RECEIVED

Calif., Los Angeles—Harbor Comn., dredging slips 148, 149 and 150, 290,000 cu.yd. excav., from United Dredging Co., Central Bldg., $0.294 per cu.yd.

Calif., Montebello—See "Waterworks."

CONTRACTS AWARDED

N. Y., New York—Dredging—J. H. Delaney, comr. Docks, Pier "A," North River, dredging at street cleaning dumps in Boros of Manhattan and Brooklyn, Contr. 1808, to Columbia Dredging Co., 30 Church St., Item 1 $0.75, Item 3 $1. Noted July 5.

Miss., Rolling Fork—Otter Bayou D. D. of Sharkey, Washington and Issaquena Counties, 3,425,000 cu.yd. excavation, 25% floating dredge and balance dry land work, to Canal Constr. Co., McCall St., Memphis, Tenn., and F. C. Morgan, 3175 Washington Blvd., Indianapolis, Ind., $0.134 per cu. yd. Engrs. est. $500,000. Noted May 10.

Ky., Calhoun — McLean Co. Drainage Comn., 35 mi. ditch from near Central City to Pond River, to J. B. Wilson, Hartford. Est. cost $250,000.

O., Conneaut Harbor (Conneaut, P. O.) —See "Miscellaneous."

Streets and Roads

PROPOSED WORK

N. Y., Jamestown—Plans paving Beechview Ave. and West 7th St., warrenite bitulithic on 5 in. concrete. $25,000. L. Bergman, city engr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., rejected bids June 27, sheet asphalt paving Woodhaven Ave., also Hillside Ave. from Queens Blvd. to Bergen Ave. Will readvertise. Noted July 5.

N. Y., Rochester — Group of Rochester business men sponsoring and backing project to construct 10 ft. sidewalk on each side of Stone St. $200,000. C. A. Poole, city engr.

New Jersey—State Hy. Dept., Trenton, plans improving approaches to all State Institutions, $194,000, and road between Trenton and Princeton, concrete, $600,000, both Mercer Co.; constructing 10 mi. highway between Swainton and Cedar Springs, Cape May Co., $500,000. W. G. Sloan, state highway engr.

N. J., Trenton—State Hy. Dept. and Mercer Co. plan improving Sullivan Way, concrete, near here. $62,000. W. G. Sloan, state highway engr. H. F. Harris, co. engr.

W. Va., Parkersburg—Harris Dist., Wood Co., voted $88,000 bonds improving various roads. C. E. Pahl, co. clk. Noted June 14.

W. Va., Williamson — Hardee Dist., Mingo Co., voted $160,000 bonds improving 3 mi. Tug River Highway. L. C. Linkous, co. engr. Noted June 14.

North Carolina—State Hy. Comn., Raleigh, received no bids grading and waterbound or penetration macadam paving 8.27 mi. State Project 961 A and extension, between Project 960 and Franklin on Route 286, Macon Co.; grading and concrete or asphaltic paving 4.39 mi. State Project 151 B, between Swan Quarter and Rose Bay on Route 91, Hyde Co.; reconstructing old macadam, using penetration macadam on 4.31 mi. State Project 541, between Greensboro and Liberty on Route 60, Guilford Co. will readvertise. C. M. Upham, state highway engr. Noted June 14.

N. C., Burlington—Plans grading, curbing, guttering, sanitary sewers and concrete pasing various streets. $40,000-$50,000. C. B. Horner, mayor.

S. C., York—York Co. plans to vote on $2,000,000 bonds for building roads. L. A. Harris, sec.

Florida — State Rd. Dept., Tallahassee, soon takes bids compacted rock base on 8.25 mi. road from Okeechobee City and Kissimmee River, 17 ft., Project 523, Okeechobee Co. W. F. Cocke, state highway engr.

Florida — State Rd. Dept., Tallahassee, soon takes bids bituminous macadam surfacing 8 mi. road from Sta. 342 to Sta. 762 plus 396, Project 37, Sect. E, Alachua Co., 18 ft. W. F. Cocke, state highway engr.

Fla., Sarasota—Manatee Co. election July 17, to vote on bonds to hardsurface and widen State Rd. 5. McElroy Eng. Co., 32-34 Giddens Bldg., Tampa, engrs.

Fla., Tallahassee—Soon takes bids paving portions North and South Park Aves., North Monroe, North Adams and North Calhoun Sts., 3.45 mi. M. Walston, city engr.

Ala., Birmingham—Plans improving Cotton Ave., 23rd St. N., Walnut Hill Circle, 16th and 17th Sts., 19 blocks of 2 in. asphaltic concrete on 5 in. concrete and 6 blocks cement sidewalks. $56,200.

Tenn., Shelbyville—Voted $25,000 bonds for improvements to various streets.

Kentucky—State Rd. Dept., Frankfort, having plans prepared waterbound macadam surfacing 5.405 mi. Hodginsville-Glasgow Rd., Larue Co.; grading 8.56 mi. Owensboro-Hawesville Rd., Federal Aid Project 105, Daviees Co.; constructing and surfacing 7 mi. Falmouth-Newport Rd., State Project 21, Pendleton Co. J. S. Boggs, state highway engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids June 28, improving Sects. "Maumee," "N-1" and "N-3" Toledo-Napoleon Rd., Lucas Co.

O., Akron—W. F. Peters, dir. Pub. Serv., opens bids about Aug. 1, grading, laying walks and paving 9,130 ft. Mt. Vernon and Murray Aves., brick or asphalt on concrete. $69,000. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—S. Porter, clk. Summit Co., rejected bids June 20, grading and paving 4.2 mi. Cleveland-East Liverpool Rd. 12, 16 ft., macadam; 4.82 mi. Richfield Hudson Rd. 19, 16 ft., 2.5 mi. Barberton-Springfield Rd., Sects. A, B and C, 17.4 ft. Noted July 5.

O., Columbus—Making plans grading laying necessary water services and sewer connections and paving 765 ft. Hamlet St. 17 ft., and 3,130 ft. Ann St., 24 ft., brick asphalt or concrete. R. H. Simpson, city engr.

O., Dayton—Plans paving 10,000 sq.yd. North Main St., brick on concrete. $40,000. W. O. Pease, co. surv.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and asphalt, concrete or bituminous concrete surfacing 5½ mi. Federal Aid Project 125, 18 ft., Gratiot Co. 4½ mi. Federal Aid Project 50, Sect. B, 20 ft. Monroe Co.; grading and gravel surfacing 3½ mi. State Trunk Line Rd. 66-16, 16 ft. Missaukee Co.; Bridge 331,004 near Okemos, Ingham Co., 90 ft. concrete girder, 20 ft. roadway, 5 ft. walk. F. F. Rogers, comr.

Mich., Grosse Pointe Farms (Grosse Pointe P. O.)—Making plans grading and paving 4,700 sq.yd. Oak St., 9 in. one course concrete, concrete curbs and gutters, etc. $25,000. R. H. Erley, Village Hall, engr.

Wis., Madison—Making plans concrete paving 5,000 sq.yd. Jenifer St. $25,000. E. E. Parker, City Hall, engr.

Ia., Bedford—Plans paving 10 blocks. $25,000. J. E. Lovell, clk.

Ia., Red Oak—Plans paving 12 blocks. $35,000. R. Roberts, clk.

Minnesota—Following counties authorized issuance of bonds for road improvements: Carlton Co. $175,000, N. C. Nickerson, Carlton, engr.; Steel Co. $250,000, R. W. Hosfield, Owatonna, engr.; Wabasha Co. $100,000, G. A. Larson, Wabasha, engr.; Carver Co. $250,000, L. A. Zeman, Chaska, engr.; Meeker Co. $180,000, G. H. Martz, Litchfield, engr.; Dodge Co. $50,000, D. P. Poboisk Mantorville, engr.; Goodhue Co. $250,000, J. A. Prior, Red Wing, engr.; Beltrami Co. $250,000, S. D. Snyder, Bemidji, engr.; Nicollet Co. $100,000, H. W. Daniels, St. Peter, engr.

Neb., Fairbury—Plans paving 5 mi. in Dists. 2, 4, 6, 7, 8 and 9. $75,000.

Mo., Hannibal — Making plans grading and concrete surfacing Mark Twain Ave. $40,000. W. R. Gettler, City Hall, engr.

Mo., St. Louis—Soon takes bids grading granite curbing and paving 8,105 sq.yd. San Francisco, Klock, Alcott and Finkman Sts., Kentucky rock asphalt, $41,450; 15,625 sq.yd. Bell, Sacramento and Maffitt Aves., asphalt on concrete, $75,300; resetting existing granite curbing, taking up old granite block, cutting same and relaying in concrete, on 9,260 sq.yd. Easton Ave., $41,700. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv., City Hall, soon takes bids granite curbing and paving 4,375 sq.yd. Madison St., $37,500; paving 1,470 sq.yd. Compton Ave., asphaltic concrete, $4,500; 8,475 sq.yd. Pendleton Ave., willite, $23,000. W. W. Horner, city engr.

Mo., St. Louis—Soon takes bids grading and paving 14,290 sq.yd. Meramec St., willite on cement, $69,000; subgrading and paving 16 alleys, about 22,000 sq.yd. concrete, $61,500. W. W. Horner, 300 City Hall, engr.

South Dakota—State Hy. Comn., Pierre, plans grading, etc., 33.95 mi. roads in Jones, Hutchinson, Brown and Fall River Counties. $179,032. F. D. Hudgins, state highway engr.

Tex., Austin—Travis Co. making plans grading, etc., 5.6 mi. Round Rock Rd., 16 ft. $26,500. O. Leonard, co. engr.

Tex., Center—City Comn. takes bids in summer paving public square and various streets. $125,000. P. A. McCarthy, Lufkin, engr.

Tex., Clarksville—Red River Co. making plans grading and gravel surfacing 5.9 mi. Clarksville-Bogata Rd., 18 ft. $36,545. J. B. Rieman, co. engr.

Tex., Cleburne—Johnson Co. election July 21, to vote on $40,000 bonds, grading and gravel surfacing roads in Venus Rd. Dist. O. B. McPherson, co. judge.

Tex., Dallas—See "Miscellaneous."

Tex., Ft. Worth—City Comn. takes bids in summer 2 mi. repairs to paving on 25th St. and Azle Rd., bituminous on gravel and stone. $26,000. D. L. Lewis, City engr.

Streets and Roads (Continued)

Tex., Georgetown—Williamson Co. election July 21 to vote on $30,000 bonds for grading and gravel surfacing Highway in Rd. Dist. 95. R. A. Nichols, co. engr.

Tex., Jasper—Jasper Co. making plans grading and gravel surfacing 11 mi. Buna-Evadal Rd., 16 ft. $163,139. C. P. Hunter, co. engr.

Tex., Laredo—Election soon to vote on $200,000 bonds improving streets. L. Villegas, mayor.

Tex., McKinney—Collin Co. had plans prepared concrete paving Federal Aid Project 402, 18 ft. $310,000. F. W. Cawthon, co. engr.

Tex., Marlin — Falls Co. making plans grading, gravel surfacing and bridging 19 mi. State Highway 44, 18 ft. $320,290. J. P. Wehrung, Lott, engr.

Tex., Tyler—Smith Co. soon takes bids bituminous topping State Highway 37, 21,265 sq.yd. 1½ in. and 48,991 sq.yd. 1¼ in., $35,000, State Highway 15, 14,756 sq.yd. 1¼ in., 12,800 sq.yd. 1 in. and 91,052 sq.yd. 1½ in., $60,000. D. K. Caldwell, co. engr.

Okla., Barnsdall—Had plans prepared grading and paving 3rd, 4th and 7th Sts.; 12,000 sq.yd concrete, 4,500 lin.ft. concrete curbing, 4,200 cu.yd. excav., $60,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Chickasha—Soon takes bids paving various roads, different types. $51,000 J. C. Milliken, Chickasha, engr.

Okla., Fairfax — Having plans prepared grading and paving Main, Elm and Milberry Sts., 7,000 lin.ft. concrete curbing, 7,000 lin.ft. concrete gutter, 21,000 sq.yd vertical fibre brick, etc. $140,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Marlow — Having plans prepared grading and paving Bway. Ave., 24,000 sq. yd. asphalt. $80,000. V. V. Long & Co. 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Sapulpa—Creek Co. election soon to vote on $500,000 bonds for new roads and road improvements. C. J. Howard, Sapulpa, engr.

Okla., Waurika—Having plans prepared grading and paving 24 blocks, Main St. Bway., C, D, E, F and G Aves., 16,000 lin. ft. concrete curbing, 15,000 cu.yd. excav. 50,000 sq.yd. concrete. $250,000. F. E. Devlin, Wichita, Kan., engr.

Colo., Denver—Plans asphalt paving 2 mi. North Denver Paving Dist. 4, $98,265; concrete paving 11,500 sq.yd. Alley Paving Dist. 102, $25,412, 9,000 sq.yd. Alley Paving Dist. 103, $19,223, 8,550 sq.yd. Alley Paving Dist. 104, $18,360, 11,650 sq.yd. Alley Paving Dist. 105, $25,165, 9,600 sq. yd. Alley Paving Dist. 106, $20,682, 9,630 sq.yd. Alley Paving Dist. 107, $20,833, 11,900 sq.yd. Alley Paving Dist. 108, $25,872. A. K. Vickery, City Hall, engr.

Wash., Seattle—Bd. Pub. Wks. received no bids June 29, grading and curbing 15th Ave. S, et al. $44,636. Will readvertise.

Calif., Fresno—Had plans prepared improving Carmen and Lucerne Sts. 86,510 sq.ft., grading, 78,187 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 12,245 sq.ft. walks, etc. W. Stranahan, city engr.

Calif., Fresno—Fresno Co. will levy $668,000 tax to complete highway system. C. P. Jensen, co. surv.

Calif., Inglewood—Had plans prepared improving Forest St., etc., 223,560 sq.ft. grading, etc., 142,323 sq.ft. 5 in. macadam. 7,373 lin.ft. curb, etc. A. Cory, city engr.

Calif., Monterey—Had plans prepared improving Pacific and El Dorado Sts., 87,300 sq.ft. 5 in. and 113,000 sq.ft. 4 in. asphaltic concrete, 80,500 sq.ft. gravel sidewalks, 7,100 lin.ft. concrete curb, etc. To exceed $50,000. H. D. Severance, city engr.

Calif., Porterville — Having plans prepared paving 30 blocks, probably concrete. F. Pease, city engr.

Calif., Richmond—Had plans prepared grading, concrete curbing, guttering, sidewalks and paving with Richmond standard macadam portions Stege Ave., 36th, 37th and 38th Sts., etc. $25,000 or more. H. D. Chapman, city engr.

Calif., San Diego—San Diego Co. had plans prepared paving 3 mi. road between present pavement at Lake Hodges and south city limits of Escondido, etc., warrenite, willite, asphaltum and concrete.

Calif., San Diego—San Diego Co. plans improving Adams Ave. between Boundary St. and Kensington Park Bridge, 224,387 sq.ft. 1½ in. asphaltic concrete on 5 in. concrete, etc. F. C. Martin, co. supt. of streets.

Calif., San Francisco—City will appropriate $500,000 to construct portion Peninsula Highway. M. M. O'Shaughnessy, city engr.

Calif., San Mateo—City Trustees rejected bids grading, concrete curbing, sidewalks and paving with 1½ in. asphaltic concrete on 4½ in. concrete, portions of 1st, 2nd, 3rd and 4th Aves., etc. Noted July 5.

Calif., Santa Barbara — Santa Barbara Co. to vote on $300,000 bonds oil macadam paving Santa Ynez Permanent Rd. Div. O. H. O'Neill, co. surv.

Calif., Tracy — Having plans prepared asphalt paving on waterbound macadam base, also water and sewer extensions in Bolita Park Sub-Division. $25,000. W. D Harrington, city engr.

Ont., Goderich — Huron Co. preparing plans highway improvements, incl. resurfacing, widening and cutting away hills. $132,000. Portion of money will be spent for road machinery and repairs. T. R. Patterson co. engr.

Ont., Hamilton—Wentworth Co., Council and Hamilton Suburban Rds. Comn. soon take bids 9,500 sq.yd. concrete paving. $30,000. H. A. Lumsden, County Buildings, engr.

Ont., St. Thomas—Having plans prepared and takes bids about Aug. 1, asphalt paving, curbing and guttering Gladstone Ave. $40,000. A. Miller, city engr.

Ont., Ottawa—Soon takes bids curbing, guttering and paving 28,000 sq.yd. Wellington St., asphalt and wood block. $112,000. A. F. Macallum, city engr.

Ont., Sandwich—Having plans prepared and takes bids about July 28, concrete paving Fanchette, King and Rosedale Sts. $48,000. E. R. Worth, city engr.

Ont., Toronto—York Twp. plans 16 mi. sidewalks. $176,352. F. B. Goedike, 40 Jarvis St., engr.

Man., Winnipeg—City Council plans improvements incl. granolithic sidewalks, asphalt pavement, boulevards, watermains and sewers. $300,000.

BIDS DESIRED

Mass., Great Barrington—July 14, by Bd Selectmen, 8,650 sq.yd. concrete, 7,000 cu.yd. excav. and filling, 60,000 lb. ½ in. deformed reinforcing steel rods, etc.

New York—July 20, by F. S. Greene, comr. highways, Albany, reconstructing roads in Albany, Allegany, Erie, Herkimer, Jefferson, Monroe, Montgomery, Oneida, Steuben, Sullivan, Suffolk and Wyoming Counties. W. A. Patton, secy.; adv. this issue.

N. Y., Brooklyn—July 18, by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Dumont Ave., Lenox Rd., 48th St.; paving Dumont, Greene, Hegeman and 15th Aves., permanent asphalt on concrete; regrading, recurbing and reflagging Hegeman Ave.; resurfacing Oriental Blvd. and West End Ave., bituminous macadam; repaving 4th and South 5th Sts., asphalt on concrete; Bway. and Gold St., granite on 6 in. concrete; grading sidewalk space and flagging where necessary Highlawn Ave.

N. Y., New York—July 16, by H. Bruckner, pres. Bronx Boro., 3rd and Tremont Aves., grading, etc., Balcom Ave.; grading, setting curb, laying sidewalks, etc., on Exterior St., Grand, Bronxwood, Walton, Thierot, Mace and Paulding Aves.; paving Morris Park Ave. and East 172nd St., bituminous concrete, Rogers Pl. and West 192nd St., sheet asphalt, West Tremont Ave., granite blocks; repaving Jerome and Burnside Aves., granite blocks, Crotona Ave., asphalt.

N. Y., Niagara Falls—July 17, paving 7 streets, various materials, incl. asphalt and granite block, $75,000. W. Bennett, city engr.

N. Y., St. George—July 17, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading Van Buren St.; repaving Jewett Ave., Broad and Bay Sts., granite block on present concrete foundation, Boyd St., granite block on new concrete base.

N. Y., White Plains—July 23, by Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, paving Bronx River Parkway Dr. between Woodland Pl. and Main St., here. L. G. Holleran, deputy ch. engr.; adv. this issue.

N. J., Freehold—July 23, by Mayor and Boro Council, repaving East Main St. C. A. Niles, boro engr.; adv. this issue.

N. J., Trenton—Jan. 17, by Mercer Co., paving 1 mi. Upper River Rd. from Scudders Falls to Wilburtha, 8 in. rein.-con. $48,000. H. F. Harris, Court House, engr.

Pa., Wind Gap—July 31, by Bor. Council, improving paved highways on Lehigh and Park Aves. and Bway. W. D. Werkheiser, secy.; adv. this issue.

Maryland—July 24, by State Rds. Comn., Baltimore, gravel surfacing highway in Anne Arundel, Charles and St. Marys Counties, Contrs. AA-33, Ch-27 and Sm-26; concrete surfacing in Worcester Co., Contr. Wo-31. J. N. Mackall, chn.; adv. this issue.

Virginia—July 25, by State Hy. Dept., Richmond, constructing roads 8.7 mi. Project S 263, 10.66 mi. Project F 257, 6.27 mi. Project S-318 B, 2.1 mi. Project F 184, 0.89 mi. Project S 278 A, 6.17 mi. Project F 265, 1.41 mi. Project S 314, 2.7 mi. Project S 223, 1.57 mi. Project S 131, overhead bridge Project F 192 C, bridge over Roanoke River, Project S 329. H. G. Shirley, chn.; adv. this issue.

W. Va., Huntington—July 24, 50,000 yd. resurfacing. F. S. Chapman, mayor; adv. this issue.

W. Va., Williamson—July 27, by Mingo Co. Court, shaping, etc., 4.26 mi. Four Pole-Gilbert Creek Rd., 22,546 ft. clearing, 62,000 cu.yd. excav., etc.; 4.5 mi. War Eagle-Four Pole Rd., 23,836 ft. clearing, 61,300 cu.yd. excav., etc. A Bishop, pres.

Florida—July 17, by State Rd. Dept., Tallahassee, grading and surfacing 7.963 mi. road from Paynes Prairie to Marion Co. line, Project 37 E, Alachua Co., bituminous macadam on 8 in rock, sheet asphalt with binder course on 8 in. rock, or plain concrete. W. F. Cocke, state highway engr.

Fla., Clearwater—Aug. 14, by Bd. Comrs Pinellas Co., paving Rds. 1, 2, 3, 4, 6, 7 and 8, vitr. brick with bituminous filler, asphalt block, sheet asphalt, concrete, bituminous macadam penetration or inverted penetration method, all on compacted lime rock base, with concrete curb; Rd. 5, relaid vitr. brick with bituminous filler and double bituminous surface-treated lime rock shoulders. C. E. Burleson, co. engr.; adv this issue. Noted Apr. 19.

Fla., Sebring—July 20, by Highlands Co., grading and shaping 16 mi. Bassenger Rd., 20 ft., 85,000 cu.yd. excav. $25,000. Peacock & Hood, Sebring, engrs.

Fla., Tallahassee—Aug. 2, by B. H. Bridges, aud. and clk., grading, paving, storm sewers and structures. W. A. Smith, city mgr.; adv. this issue.

Alabama—July 31, by W. S. Keller, state highway engr., Montgomery, improving 11.32 mi. Dublin-Orion Rd., Montgomery Co., 79,652 cu.yd. excav., 28,818 sta.yd. overhaul, 289 cu.yd. concrete, 20,904 lb. reinforcing, alternate bids on surfacing (1) 26,200 cu.yd. gravel surfacing, 502,200 ½ mi. units overhaul (2) 59,770 sq.yd. one course plain concrete, 16,760 cu.yd. sand-clay shoulders (3) 40,000 cu.yd. sand-clay Noted June 21.

Miss., Pascagoula—July 30, at Chancery Clerks office, grading, paving and bridging 14.009 mi. various roads, 18 ft. $471,998. H. Dietzer, Jackson, engr.

Miss., Senatobia—July 18, 12,000 lin.ft. combined concrete curb and gutter, 18,000 sq.yd. gravel surfacing, etc. H. Johnson, town clk. J. H. Dorroh, University, engr.

La., Napoleonville—July 24, by Police Jury Assumption Parish, hardsurfacing approximately 8½ mi. Attakapas Canal Rd., Rd. Dist. 1. F. J. Rodigue, secy.

O., Akron—July 16, by W. F. Peters, dir Pub. Serv., grading, laying sidewalks and paving 2,200 ft. Noah Ave., 24 ft., 6,100 sq.yd. vitr. brick $49,678, or 5,000 sq.yd asphalt $47,398; 1,075 ft. Reutschler Court and Power St., 22 ft., 2,700 sq.yd. vitr. brick $27,141, 2,150 sq.yd. asphalt $26,821 E. A. Kemmler, Delaware Bldg., engr.

O., Brooklyn Heights (Independence P. O.)—See "Waterworks."

O., Columbus—July 17, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 727 ft. Charles St., 40 ft., 491 ft. alley north of Mt. Vernon Ave., 16 ft., 655 ft. alley west of Miller Ave., 15 ft., 460 ft. Wyandotte Ave., 26 ft., 2,812 ft. Leonard Ave., 36 ft., 3,372 ft. alley west of Douglass St., 2nd alley north of Leonard Ave., and alley west of Oakwood Ave., 20 ft., brick, concrete or asphalt.

Ill., Olney—July 16, by City Council, 50,000 sq.yd. paving, either sheet asphalt, stone filled asphalt, asphaltic concrete or brick or either portland cement or asphaltic cement concrete, 31,000 ft. concrete curb, 14,000 cu yd. excav. C. Edmiston, city clk.

Ill., Urbana—July 18, at office of F. Hise, clk., Champaign Co., constructing 29.372 mi. road, R. F. Fisher, supt. of highways; adv. this issue.

Streets and Roads (Continued)

Wisconsin—July 18, by State Hy. Comn., at div. office 9, Teller Bldg., Lancaster, grading and surfacing Fennimore-Montfort Rd., Grant Co., 7,000 sq.yd. one course concrete surfacing, etc. A. R. Hirst, Madison, highway engr.

Wis., Whitewater—July 21, concrete paving 5,000 sq.yd. Wisconsin and Milwaukee Sts. $25,000. C. Inman, clk. Private plans.

Michigan—July 18, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 26-7, Sect. B, Gogebic Co., 80,860 sq.yd. gravel, etc.; State Trunk Line Rd. 21-22 in Lyons, 11,592 sq.yd. asphalt, concrete or bituminous concrete; Bridges 270,604 and 270,605 near Waterfield, Gogebic Co., 40 ft. and 60 ft. spans, concrete girders. F. F. Rogers, comr.

Michigan—July 19, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 116, 50,057 sq.yd. asphalt, concrete or bituminous concrete, 48,154 cu.yd. earth excav., Federal Aid Project 98, 85,098 sq.yd. asphalt, concrete or bituminous concrete, 54,038 cu.yd. earth excav., both Kent Co.; State Trunk Line Rd. 12-38, in Norway, 21,709 sq.yd. concrete or bituminous concrete on macadam or bituminous macadam, 23,023 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 23, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd., 11-16 in Alanson, 11,841 sq.yd. concrete, bituminous macadam or waterbound macadam, 3,250 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 24, by State Hy. Dept., Lansing, fine grading, surfacing etc. State Trunk Line Rd. 47-10, Sect. B, Saginaw Co., 8,598 sq.yd. concrete; grading and gravel surfacing State Trunk Line Rd. 10-30, Iosco Co., 46,292 sq.yd. gravel, 9,338 cu.yd. earth excav.; grading, surfacing, etc. State Trunk Line Rd. 53-6 in Inlay City, 21,276 sq.yd. asphalt, concrete or bituminous concrete, 6,812 lin.ft. concrete curb and gutter, 9,646 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—July 26, by State Hy. Dept., Lansing, grading and gravel surfacing 28,475 sq.yd. State Trunk Line Rd. 10-22, Alpena Co. F. F. Rogers, comr.

Ia., Creston — July 19, by B. Tallman, clk., 27,000 ft. curbing, 9,500 yd. surfacing and 34,000 yd. concrete, asphaltic concrete, sheet asphalt or brick pavement. P. K. De Voe, city engr.

Minnesota—July 24, by State Hy. Dept., St. Paul, State Project 3-31, Federal Aid Project 283, between Lake City, Wabasha Co. and Red Wing, Goodhue Co., 242,000 cu.yd. excav., 3 concrete bridges, $80,000; State Project 49-21, Federal Aid Project 279, Kandiyohu Co., 154,000 cu.yd. excav., 3 bridges, $45,000; State Project 9-33, Federal Aid Project 311, Martin Co., 125,000 cu.yd. excav. and one 40 ft. deck girder, $32,000; State Project 1-26, Federal Aid Project 321, Steele Co., 166,000 cu.yd. excav., 2 bridges, $40,000; State Project 22-24, Federal Aid Project 254, Meeker Co., 272,000 cu.yd. excav., $70,000; State Project 55-21, Federal Aid Project 229, Carlton Co., 22,000 cu.yd. excav., 24,327 sq.yd. concrete pavement, 1 bridge, $105,000; State Project 1-42, Federal Aid Project 325, Carlton Co., 37,000 cu.yd. excav., 90,000 sq.yd. concrete paving, Bridge 4004, three 162 ft. spans, Bridge 4005, one 75 ft. low truss, $260,000; State Project 45-21, Federal Aid Project 12 and 326, Washington Co., 95,000 cu.yd. excav., 114,000 sq.yd. concrete paving, $290,000; State Project 22-23, Federal Aid Project 324, Nicollet Co., 125,000 cu.yd. excav., 1 bridge, $30,000; State Project 12-23, Federal Aid Project 284, Carver Co., 256,000 cu.yd. excav., Bridge 4069, total beam spans 85 ft., $62,000.

Minn., East Grand Forks—July 16, by city, 10,409 sq.yd. rein.-con., asphaltic concrete or vibrolithic pavement, etc. $40,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Minn., St. Paul—July 16, by H. W. Austin, city purch. agt., paving 21 blocks Cleveland St. from Randolph St. to Marshall Ave., $85,000; paving 12 blocks Minnehaha St. from Cable Ave. to Etna St., asphaltic concrete and vertical fibre brick, $50,000. G. M. Shepard, city engr.

Minn., St. Paul—July 16, by G. J. Ries, aud. Ramsey Co., grading and paving 38,240 sq.yd. North St. Paul Rd., one course 7½ in. rein.-con., Project 23-54. $100,000. P. N. Coates, co. surv. This corrects report in June 28 issue.

Kan., Iola—July 16, by A. R. Stroup, co. engr. Allen Co., paving and grading 13 mi. Humbold-Elmore Rd., 16 ft., bituminous macadam.

S. D., Mitchell—July 16, paving about 7 blocks. $25,000. F. McGovern, city aud.

N. D., Hillsboro—July 23, by N. G. Nyhus, city aud., 36,000 sq.yd. paving various type. $108,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, Minn., engrs.

Wyo., Casper—July 16, curbing, sewers and rein.-con. or asphalt paving 7,724 sq.yd. in Paving Dist. 28, and 4,724 sq.yd. in New Paving Dist. 33. F. S. Knittle, city engr.

Wyo., Casper—July 23, curbing, building sewers and paving New Paving Dist. 29, concrete or asphalt, $19,975; New Paving Dist. 34, rein.-con. or asphalt, $19,665. Noted Apr. 19.

Mo., Clayton—July 18, by St. Louis Co., macadamizing 4,045.76 squares Hancock Ave., Sappington, Chambers and McKelvey-Creve Coeur Rds., 32,577 cu.yd. excav. W. Elbring, co. engr.

Mo., St. Louis—Aug. 7, by Bd. Pub. Wks., City Hall, clearing 14.6 acres timber, 31,850 cu.yd. embarkment, 2,010 cu.yd. cinders, 5,800 cu.yd. macadam, and 6,700 lin.ft. 6 in. c.i. mains. $57,100. E. E. Wall, 312 City Hall, water comr.

Tex., Johnson City—July 25, by W. Martin, judge Blanco Co., grading and gravel surfacing 7.19 mi. State Highway 20 A, 676 cu.yd. concrete, 12,271 cu. yd. gravel, 56,280 lb. reinforcing, etc., $58,000; grading and surfacing 14.08 mi. State Highway 46, 3,970 cu.yd. adobe, hauled and placed, 2,459 cu. yd. gravel hauled and placed, 17,877 cu.yd. gravel, screened, hauled and placed, $25,500; 5.53 mi. State Highway 20 A, 11,527 cu.yd. shale adobe, etc., $50,000. J. W. Puckett, co. engr.

Tex., Roscoe — July 16, by City Com., paving and waterworks, $55,000. Montgomery-Ward, City Natl. Bank, Wichita Falls, engrs.

Okla., Sayre—Aug. 6, grading and paving Bway., Walnut and Main Sts., 13,200 sq.yd. concrete. $56,040. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Former bids rejected. Noted June 28.

Utah—July 16, by State Rd. Comn., Salt Lake City, grading, gravel surfacing and bridging 11½ mi. Castle Dale-Ferron Highway, Emery Co., one 100 ft. concrete and one 75 ft. steel bridges, etc. Former bids rejected. H. C. Means, state highway engr. Noted June 21.

Calif., Escondido — July 23, by Bd. Supervs. San Diego Co., (San Diego), paving 1.6 mi. of Nutmeg and Lime Sts., 18 ft., portland cement concrete, asphaltic concrete, willite or warrenite. G. E. Heath, Courthouse, San Diego, engr.

Calif., Fairfield—July 17, by City Clerk, grading, concrete curbing, and paving with warrenite bitulithic on asphaltic concrete Texas St. and Union Ave. $25,000. E. N. Eager, city engr. Noted Mar. 8.

Calif., Oakland — Supervs. Alameda Co. taking bids and opens same about July 30, improving Livermore-Pleasanton Rd., 1,028,000 sq.ft. Class A grading, 9,000 cu.yd. Class B grading, 1,150,000 sq.ft. Class C grading, 300 cu.yd. concrete, 75,000 lb. reinforcing, 66,300 sq.ft. oil macadam pavement, 2,400 lin.ft. 12-18 in. corrugated pipe, 655,000 sq.ft. pavement, alternate bids on 5 and 5 to 7 in. concrete, 2, 3, 4 and 5 in. warrenite bitulithic, etc. $220,000. G. A. Posey, co. surv. Noted June 1.

Calif., Sacramento—See "Sewers."

Calif., San Diego — July 23, by Bd. Supervs. San Diego Co., grading and paving with 5 in. concrete with 8 in. edge or 3½ in. asphaltic concrete base, 1½ in. wearing surface, Route 2 of Mission Rd., from Buena to Vista, 37,960 sq.yd. paving, etc.; Route 1 of Mission Rd., from Barnardo to Escondido, 32,208 sq.yd. paving, etc. G. E. Heath, Courthouse, engr. Noted July 5.

BIDS RECEIVED

Connecticut—State Hy. Dept., Hartford, June 26, from P. Bacco, 300 State St., Stamford, paving Norwalk Rd. in Danbury, 6,100 cu.yd. concrete, 5,000 lin.ft. cobble gutter, 4,000 cu.yd. borrow, 28,000 cu.yd. dry earth and 2,600 cu.yd. rock excav., $123,494, engrs. est. $123,657; from J. Arborio, 82 Church St., New Haven, paving Southbury Rd., in Woodbury, 18,850 sq.yd. 3 in. bituminous macadam, 5,000 cu.yd. dry earth excav., $44,639, engrs. est. $40,041, 36,900 sq.yd. Bethlehem Rd. in Woodbury, 8 in. native stone, $80,214, engrs. est. $91,225; from Lane Constr. Co., 37 Colony St., Meriden, 51,000 sq.yd. road in Sharon and Salisbury, 7 in. macadam, 9,000 lin.ft. cobble gutter, 67,300 cu.yd. dry, 660 cu.yd. wet excav., 11,000 cu.yd. borrow, $300,544, engrs. est. $316,552. Noted June 21.

N. Y., Buffalo—Paving Bryant St., Taunton Pl., Pembroke Ave., Wyoming Ave. from Delevan to Kensington Sts., Wyoming Ave. from Northland to Delevan Sts., asphalt, from H. P. Burgard Co., 1968 Fillmore Ave., $7,740, $33,165, $21,625, $73,143 and $26,440 respectively; Franklin St. and repaving East Delevan Ave., asphalt, from Rock Asphalt & Constr. Co., Morgan Bldg., $9,554 and $148,380 respectively; paving Pembrooke Ave., brick, from Erie Contg. Co., Morgan Bldg., $21,600.

N. J., Newton—Com. Sandystone Twp. of Sussex Co. at Grange Hall, Layton, macadamizing Sandystone Twp. Rd. 2, from Richards & Gaston, 110 South Bridge St., Somerville, $32,413. Noted June 14.

Pa., Elensburg — Cambria Co., paving 16,136 lin.ft. Wilmore Plank Rd., Cambria Twp., from Bell-Bockel Co., Inc., 543 Vine St., Johnstown, asphalt $152,003, brick on concrete $181,644; G. T. Morgan, Woolf Blk., Johnstown, brick on concrete $158,204. Noted June 21.

Pa., Erie—Paving 5 drives in Frontier Pl. Subdivision, Shore, Shawnee and Seminole Drives, from M. A. McCormick, Erie, $3.15 per sq.yd., Frontier and Mohawk Drives, from J. and M. Doyle Constr. Co., Erie, $3.15. Above work involves 57,672 sq.yd. asphalt on concrete. Engrs. est. $250,000. Noted June 14.

Md., Baltimore—Bd. Awards, Contr. 240-NA, 11,330 sq.yd. old granite block redressed and relaid, from G. Long Contg. Co., 1st Ave. and 12th St., $59,280. Noted June 28.

Alabama—State Hy. Dept., Montgomery, asphalt paving 2.35 mi. highway from Gadsden to Guntersville, 15 ft., Etowah Co., from Etowah Co. Court of Comrs., Gadsden, $62,767. Noted June 21.

Tennessee—State Hy. Dept., Nashville, surfacing with bituminous macadam 10.7 mi. highway between Springfield and Davidson Co. line, 16 ft., Robertson Co., from Texas Rd. Constr. Co., Great Southwestern Life Bldg., Dallas, Texas, $147,658; oil surface treatment on 5.1 mi. highway between Tullahoma and Moore Co. line, 16 ft., Coffee Co., from B. Williams, Murfreesboro, $45,493. Noted July 28.

O., Cincinnati—Hamilton Co., June 29 paving 60,000 sq.yd. Cleves-Warsaw Rd., concrete, from Gradison Constr. Co., 701 1st Natl. Bank Bldg., $370,528; bitoslag, from Scully Bros. Constr. Co., Clifton Ave. and Riddle Rd., $492,549; bitulithic, from A. J. Brehm, 57 Wiggins Blk., $491,496. Noted June 21.

O., Garfield Heights (Bedford P. O.)—Grading, curbing and pacing 30,000 cu.yd. East 107th, 108th, 109th and 111th Sts., Runnymead, Langton and Wadsworth Aves., from Enterprise Paving & Constr. Co., 8436 Bway., Cleveland, brick $211,435; Freshwater Constr. Co., Natl. Bldg., Cleveland, asphaltic concrete $232,803. Noted June 14.

Mich., Detroit—Grading and paving (1) 1,200 sq.yd. E. St. (2) 3,000 sq.yd. Maywood Ave. (3) 1,010 sq.yd. Rankin Ave. (4) 9,700 sq.yd. Van Court Ave. (5) 3,500 sq.yd. Byron Ave. (6) 3,500 sq.yd. Cedarhurst Ave. (7) 8,100 sq.yd. Cortland Ave. (8) 1,400 sq.yd. Edison Ave. (9) 5,200 sq.yd. Elmhurst Ave. (10) 5,100 sq.yd. Monterey Ave. (11) 950 sq.yd. Gilbert Ave. (12) 3,800 sq.yd. Tuxedo Ave. numbers 1 to 4 inclusive are 3 in. sheet asphalt, numbers 5 to 12 inclusive 3½ in. sheet asphalt all on 6 or 8 in. concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $6,764 (2) $17,201 (3) $5,695 (4) $5,151 (5) $22,219 (6) $21,449 (8) $9,579 (9) $35,097 (11) $5,815 (12) $25,999; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., (7) $48,790 (10) $34,360.

Wis., Menacha—Paving 10,091 sq.yd. 3rd and De Pere Sts., from A. C. Simpson, 534 Franklin St., Appleton, vibrolithic concrete $2.59 per sq.yd., integral curb $0.35, grading $1; J. Schneider Contg. Co., Nenasha, rein.-con. $2.63, integral curb $0.34, grading $1.

Ariz., Tucson—Paving East 6th St., 47,386 sq.yd. (a) 1½ in. warrenite bitulithic (b) 1½ in. asphaltic concrete, (c) 1½ in. coarse type Willite, all on 2½ in. bituminous base, from Borderland Constr. Co., Tucson, (a) $143,334 (b) $138,595; G. B. Singleton Co., Tucson, (c) $150,182; improving Helen and Mabel Sts., from Borderland Constr. Co., Tucson, $136,969. Noted June 7.

Nevada—State Hy. Dept., Carson City, grading and gravel surfacing 9.16 mi. Deeth-Wells Rd., Federal Aid Project 54-A-2, Elko 1-D, Elko Co., from Brown & Stafford, Robertson Bldg., Madera, Calif., $74,592.

Calif., Sausalito — Improving various streets in 1st Dist., 14,000 cu.yd. excav., 110,000 sq.ft. 5 in. concrete pavement, 132,000 sq.ft. bituminous macadam pavement, 15,000 lin.ft. granite rubble gutter, etc., from Macdonald Impvt. Co., 567 Pacific Bldg., San Francisco, $99,945. Noted June 7.

Streets and Roads (Continued)

CONTRACTS AWARDED

Rhode Island — State Bd. Pub. Wks., Providence, rein.-con. paving 11,340 cu.yd. Federal Aid Projest 18, Contr. 2305, to A. D. Bridges Sons, Inc., Hazardville, Conn. $232,605. Noted June 28.

N. Y., Binghamton—Asphaltic concrete paving Mygatt St. and Newton Ave., to Municipal Constr. Co., Binghamton, $21,469 and $7,321 respectively. Noted June 28.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, grading, curbing and sheet asphalt paving Fort Hamilton Parkway, here, to Broklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $107,281. Noted June 28.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., paving Rocky Hill Rd. and Flushing Ave., sheet asphalt, to W. P. McDonald Co., 17 West 42nd St., New York City, $130,595 and $70,390 respectively; Hillside Ave. from Lefferts Ave. to Queens Blvd., sheet asphalt, to Uvalde Asphalt Paving Co., 1 Bway., New York, $109,069; Roosevelt Ave., concrete, to Kennedy & Smith, Inc., 93 Amity St., Flushing, $27,974. Noted July 5.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., repaving Spruce and Dey Sts., granite block, to J. Meehan & Sons, 74 Cortland St., $18,856 and $21,297 respectively; 78th St., sheet asphalt, to Asphalt Constr. Co., 208 Bway., $28,467; 112th St., sheet asphalt, to J. E. Gaffney, 438 East 91st St., $41,199. Noted June 28.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro., Boro. Hall, repaving Richmond Rd., granite block, to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $107,613. Noted July 5.

N. Y., Watertown — Jefferson Co. will pave with bituminous macadam 34.72 mi. roads in towns of Antwerp, Cape Vincent, Clayton, Ellisburg, Henderson, Hounsfield, Le Roy, Lorraine, Lyme, Orleans, Pamelia, Philadelphia, Rutland, Theresa, Watertown, Wilna and Worth, by day labor under supervision of W. Eggleston, co. supt. highways. $225,730.

N. J., Freehold—Monmouth Co., rein.-con. paving 1.25 mi. Englishtown-Jamesburg Rd. 19, to Thompson & Glickman, Freehold, $75,271. Noted May 31.

N. J., Trenton—Mercer Co., paving 22,080 sq.yd. Hamilton Ave., to J. J. Barrett, 601 Greenwood Ave., $102,310.

Pennsylvania—State Hy. Comn., Harrisburg, let contracts to lowest bidders paving with bituminous on reconstructed base (R 118, Westmoreland, means Route 118, Westmoreland Co.,) R 69 Westmoreland, R 247 Westmoreland and Fayette; bituminous macadam penetration method on reconstructed base R 53 Blair, R 152 Bucks, R 281 Bucks, R 141 Berks; one course rein.-con., 7 in thick (A 2112 Beaver, means application 2112 Beaver Co.,) A 2202 and 2203 Northampton, A 2309 and 2310 Northampton, R 204 Beaver; one course rein.-con., 6 in. thick, R 88, A 2307 Erie, A 1950 Beaver; rein.-con. and bituminous macadam penetration method A 2025 Dauphin. For contractors and prices see June 14 issue.

Pennsylvania—State Hy. Comn., Harrisburg, paving with bituminous macadam penetration method on reconstructed base 17,858 ft. Route 161, Coal Twp., Northumberland Co., 32,236 sq.yd. paving, to Highway Constr. Co., Phila., $70,605.

Pennsylvania—State Hy. Dept., Harrisburg. 35,567 sq.yd. of 6 in. rein.-con. resurfacing on Route 230, Hidelberg Twp., York Co., to W. T. Staats, 5403 Diamond St., Phila., $127,825. Noted May 10.

Pa., Pittsburgh — Allegheny Co. brick paving 4,226 ft. North Braddock and Forest Hills Rd. from North Braddock to Ardmore Blvd., to McCrady Bros., 300 6th Ave., Braddock. Engrs. est. $94,718.

Md., Baltimore — Paving Comn., 13,215 sq.yd. sheet asphalt paving, 940 sq.yd. granite blocks redressed as liners, Contr. 239-OANA, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $62,857; 2,070 sq.yd. concrete, 750 sq.yd. old granite blocks relaid, Contr. 237-OCOANA, to A. Apicella, 224 Albemarle St., $8,313; 10,810 sq.yd. concrete, Contr. 238-OANA, to Ryan Constr. Co., Real Estate Trust Bldg., Phila., Pa. Noted June 21.

N. C., Henderson—Vance Co., hardsurfacing 3 mi. Dabney, Oxford and Cooper Rds., to R. G. Lassiter, Oxford, $81,000.

Alabama—State Hy. Dept., Montgomery, improving various sections of Gadsden-Birmingham Highway, 15 ft. wide, as follows, grading and gravel surfacing 23.6 mi., Marengo Co., to W. K. Saulsbury & Co., 1322 South 19th St., Birmingham, $368,031; grading, gravel surfacing and small bridges on 12.64 mi., Crenshaw Co., to Fountain & Mayers, Hattiesburg, Miss., $254,335; grading and macadamizing 32 mi., St. Clair Co., using chert, 16 mi. to Phillips & Co., Birmingham, $167,570, and 16 mi. to Donahue & Co., Tuscaloosa, $177,490; grading and small bridges on 6.19 mi., Clarke Co., to Stanley & Singer, Lafayette, $80,205. Noted June 7 and 28.

Alabama—State Hy. Dept. Montgomery, grading and macadamizing 22.79 mi. Bankhead Highway from Jasper to Marion Co. line Rd., 15 ft., Walker Co., and grading and gravel surfacing 10.74 mi. road from Marion to Dallas Co. line, 15 ft., Perry Co., to Stanley & Singer, La Fayette, $513,983 and $157,710 respectively. Noted June 21 and 28.

Alabama—State Hy. Comn., Montgomery, grading and surfacing with chert 16 mi. Oneonta-Village Springs Rd., 20 ft., to W. C. Hill, Birmingham, $127,264. Noted June 7.

Mississippi—State Hy. Dept., Jackson, 12.1 mi. Carthage-Philadelphia Rd., concrete, to Central Constr. Co., Carthage, common excav. $0.30 per cu.yd. borrow $0.28, concrete, $26.50, sand clay, $0.70, etc.; 12 mi. Jefferson Davis Rd., Tate Co., to McElwrath & Rodgers, Grenada, common excav. $0.25, borrow, $0.235, concrete, $20, gravel 1 mi. haul, $0.75, etc.

Tenn., Dickson—Dickson Co. will grade and gravel or chert surface 15 mi. highway between Burns and Humphrey Co. line, by day labor and county forces, under supervision State Hy. Dept., Nashville.

Ky., Ashland—For 6,740 sq.yd. concrete paving and 5,600 lin.ft. curbs and gutters in South Ashland, to Hunt-Forbes Constr. Co., Ashland, $53,000.

Ky., Louisville—Grading 2 mi. Western Parkway, 24 ft., to H. Bickel Co., 443 Garden St., $29,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 3.843 mi. Sect. "A" Painesville-Ravenna Rd., Geauga Co., bituminous macadam, tar, to Mahoning Constr. Co., Warren, $108,196; 2.526 mi. Sects. "D and G" Bryan-Defiance Rd., Williams Co., bituminous macadam, asphalt, to R. Stone Constr. Co., Lima, $23,714; 4.368 mi. Sect. "A" and 5.475 mi. Sect. "E" Toledo-Grand Rapids Rd., Wood Co., warrenite bitulithic, to Russell-Jennison Co., Toledo, $186,031 and $206,081 respectively; 1.1776 mi. Sect. "C" Findlay-Bowling Green Rd., Hancock Co., bituminous macadam, asphalt, to Frost Constr. Co., Findlay, $29,866. Noted July 5.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 5.736 mi. Sect. "M-1" Athens-Pomeroy Rd., Athens Co., brick, to H. E. Pratt Constr. Co., Mt. Blanchard, $303,866; 5.789 mi. Sects. "G-1 and 2" Springfield-Xenia Rd., Clark Co., rein.-con., to D. M. Roach, Defiance, $163,599; 4.33 mi. Sect. "F" and 2.5 mi. Sect. "H" Springfield-Xenia Rd., Greene Co., rein.-con., to Lewis & Copeland, Lima, $134,484 and $70,980 respectively; 3.402 mi. Sect. "A" Urbana-West Jefferson Rd., Madison Co., brick, to W. H. Ringwald Co., Chillicothe, $132,733; 4.109 mi. Sect. "O" Medina-Norwalk Rd., Medina Co., rein.-con. and brick, to S. Mellert-Weidner Co., Medina, $135,449; 5.084 mi. Sects. "S-1" and "U-1" Ohio River Rd., Scioto Co., brick, to S. Monroe & Sons Co., Portsmouth, $240,702; 1.761 mi. Sect. "H" Ohio River Rd., Hamilton Co., bitulithic, to Henkle & Sullivan, Cincinnati, $97,295. Noted June 28.

O., Akron—W. F. Peters, dir. Pub. Serv., to V. Olson Constr. Co., 501 Herberich Bldg., grading, laying sidewalks and paving 3,700 ft. River, Johnston and Factory Sts., 10,740 sq.yd. vitr. brick, $2.55 per sq.yd., etc., total $93,578; to Hollinger & Davidson, 435 South Bway., 1,000 sq.yd. Annadale Ave., asphalt, $8,410; to T. E. McShaffrey Constr. Co., 171 Forge St., 2,162 ft. South Main St., 3,430 sq.yd. vitr. brick $2.35 per sq.yd., 4,750 sq.yd. asphalt $1.40, etc., total $58,863, 3,600 ft. Madison Ave., 8,720 sq.yd. 3 in. asphalt $1.70, $72,783, 4,000 ft. South Main St., 15,440 sq.yd. asphalt $1.70, $96,879; to J. Angelo, 264 Emerald St., Youngstown, 1,100 cu.yd. Bacon Ave., cinders, $14,895, 2,200 ft. Noble Ave., cinders, $14,124. Noted June 14.

O., Cleveland — Cuyahoga Co., concrete paving 14,000 sq.yd. Lander Rd., to Ohio Contg. Co., Elyria, $63,416. Engrs. est. $67,240. Noted July 5.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 1,314 ft. Bellows Ave., 26 ft., 1,400 ft. Brevoort Rd., 60 ft., and 2,044 ft. 3rd St., 50 ft., all asphalt, to L. L. Aller, Worthington, $20,129, $20,978 and $24,816 respectively; 1,753 ft. Rich St., 82.5 ft. asphalt, to Cleveland and Trinidad Paving Co., Grand Theatre Bldg., $46,127; 4,476 ft. Oak St., 33 ft., asphalt, and 457 ft. alley north of Mithoff St., 20.68 ft., concrete, to R. J. Dienst, 480 South 5th St., $70,498 and $3,028 respectively; 590 ft. alley north of 7th Ave., 16 ft., concrete, to Columbus Constr. Co., 1471 West Broad St., $3,047; 390 ft. alley west of Woodland Ave., 20 ft., concrete to A. G. Pugh, Commerce Bldg., $1,965; 461 ft. alley north of Rich St., 16 ft., concrete, to Yale Constr. Co., 146 Yale Ave., $2,517. Noted June 21.

O., Columbus — Franklin Co. surface treating about 30 roads, bituminous macadam, to C. and C. Haulage Co., 330 Dublin Ave., $64,183.

O., Columbus—Franklin Co. grading and waterbound macadamizing 2.95 mi. Hard Rd., 16 ft., Perry and Sharon Twps., to D. C. Jones, Worthington, $45,978; 0.85 mi. Harrison Rd., 18 ft., Franklin Twp., to A. W. Burns & Co., 316-25 South High St., $11,382. Noted June 7.

O., East Cleveland (Cleveland P. O.)—Grading and paving 3 streets, vitr. brick and asphalt, to River Constr. Co., 2402 Mapleside Ave., Cleveland, $71,955; paving 4 streets, asphaltic concrete, to Rieley Bros., The Arcade, Cleveland, $31,796. Noted May 24.

O., Euclid—Grading, curbing and asphalt paving Mallard Rd., East Bowne Ave., Shoreview, Overlook and Oriole Drives, to Gould & Maybach, 823 East 150th St., Cleveland, $174,009; 11,600 sq.yd. Cushman Rd., Bell and Iddings Aves., to H. G. Herring, Pavers Exch., Cleveland, $60,224; Bayard and Chelsea Rds., Sunnycliff Dr., Naumann, Liberty, Independence and Edgecliff Aves., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $173,115. Noted July 5.

O., St. Clairsville—Belmont Co. paving Neff-Glencoe Rd., tar bound macadam, to Foy & Nixon, Columbus, $99,030.

O., Wauseon—Fulton Co. grading and concrete paving 9,347 sq.yd. Archbold-Fayette Rd., Sect. E, and 31,590 sq.yd. Toledo-Angola Rd., to La Boiteaux & Hayes, 343 Spitzer Bldg., Toledo, $28,406 and $94,119 respectively, engrs. est. $30,000 and $105,010 respectively.

Ind., Jeffersonville—Clark Co., resurfacing 5.7 mi. Wm. Schleicher Rd., 16 ft., Wood Twp., to J. Nangle, c/o K. P. Barnes, co. surv., Jeffersonville, $67,000. Engrs. est. $71,465. Noted May 24.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving various roads to Alzina Constr. Co., Springfield, 4.55 mi. **4-26-25 Sangamon means (Route 4, Federal Aid Project 26, Sect. 25 Sangamon Co.)** and 2.1 mi. **4-26-26 Sangamon** $133,696, W. O'Neil & Sons Co., Faribault, Minn., 3.66 mi. **3-0-7 Rock Island,** $83,185, Powers-Thompson Constr. Co., Joliet, 3.06 mi. **44-0-19 Will,** $63,965, M. Hayes & Son, 634 Rookery Bldg., Chicago, 4.93 mi. **1-53-41 Massac,** $114, 588, Trompeter & Sons, Peru, 0.38 mi. **7-7-I 3, La Salle,** $12,722, Monmouth Gate & Mfg. Co., Monmouth, 1.02 mi. **8-0-2C, Warren,** $20,719, C. E. Hamilton, Carbondale, 6.06 mi. **13-57-8 Saline,** $135,850, Cameron, Joyce, Smith & Elder Co., Keokuk, Ia., 3.7 mi. **30-64-12 Stark,** $87,583; grading following roads, to H. E. Hauh, Richview, 0.3 mi. **2-0-43A Christian,** $1,763, 0.47 **2-0-44A Christian,** $2,474 and 0.49 mi. **2-0-45A Christian,** $5,678, W. Amman, Decatur, 2.12 mi. **2-0-48A** Macon, $17,828, Cameron, Joyce & Co., Keokuk, Ia., 2.67 mi. **2-0-55A McLean,** $17,566; Jenner Bros & Co., 1120 West Lombard St., Davenport, Ia., 3.61 mi. **3-0-19A Rock Island,** $23,061, Armstrong Eng. Co., Taylorville, 1.18 mi. **3-0-52A** Greene, $15,014, 3.92 mi. **12-0-9A Richland-Clay,** $41,108, 2.08 mi. **24-0-4A Christian** $29,951, Tritt Bros., Belleville, 6.8 mi. **3-0-74A** and 7.92 mi. **3-0-75A Randolph,** $74,767, H. G. Althoff, Teutopolis, 1.37 mi. **12-0-13A Marion,** $21,510, M. Frazier, Louisville, 2.18 mi. **28-0-10A Wayne,** $14,591, E. P. Olson, 2901 Monterey St., St. Joseph, Mo., 4.13 mi. **28-0-10A Henry,** $36,050. Noted Apr. 26 and May 24.

Wis., Lake Mills—Sidewalks, curb and gutters on Franklin, Scott, Washington, Oak, North, Greenwood and Foote Sts., to A. Glassel & Co., Lake Mills. Engrs. est. $25,000.

Wis., Milwaukee—Concrete paving various alleys, etc., 7,317 sq.yd. to A. E. Retzlaff, 948 4th St., $21,154; 7,566 sq.yd. to F. Hildebrand, 1040 23rd Ave., $20,570; 3,746 sq.yd. to Schwerm Bros., 50 Lee St., $7,772; 1,360 sq.yd. to Dean Constr. Co., 382 East North Ave., $5,680; 4,242 sq.yd. to J. C.

Streets and Roads (Continued)

Bluhm & Sons, 1298 Achilles Pl., $12,729; 754 sq.yd. to Kroening Constr. Co., 39th Ave. and Mitchell St., $2,475; 4,212 sq.yd. to F. W. Blodgett, 204 Grand Ave., $12,948.

Wis., Milwaukee—Dept. Pub. Wks., to Milwaukee General Constr. Co., 427 Mitchell St., 15,913 sq.yd. vibrolithic concrete on Atkinson Ave., $61,986, 4,124 sq.yd. one course concrete, etc., Fernwood Ave., $16,-521, 9,397 sq.yd. vibrolithic concrete etc. 15th Ave. $36,273, 7,400 sq.ft. cement walks, etc., Lapham St., $2,458, 2,012 sq.yd. one course concrete, etc., Oklahoma Ave. $6,981, 705 ft. concrete curb and gutter 27th Ave. $1,437; to Badger Constr. Co., 97 Wisconsin St., 825 sq.yd. asphaltic concrete, etc., Dover Pl. $3,369, 4,500 sq.yd. sheet asphalt, etc., 16th St. $21,325; to Schwerm Bros., 50 Lee St., 4,308 sq.ft. cement walks, etc., Lake St. $1,433; to A. E. Retzlaff, 948 4th St., 1,974 sq.yd. one course concrete, etc. Melvina St., $7,309; to Dean Constr. Co., 382 East North Ave., 2,463 sq.yd. vibrolithic concrete, etc., 16th St., $10,152; to Kroening Constr. Co., 39th Ave. and Mitchell St., 1,134 sq.yd. one course concrete, etc., Wright St., $4,109; to R. H. Gumz, 831 13th Ave., 1,078 sq.yd. granite block, etc., Lake St., $7,417.

Ia., Boone—Boone Co., to Munson & Sons, Boone, gravel surfacing Dists. 25 and 15, 10,500 cu.yd. gravel 1 mi. haul $0.40, 99,-750 units additional ½ mi. haul $0.105, 3,300 cu.yd. gravel 1 mi. haul $0.42, 12,900 units additional ½ mi. haul, $0.11; G. E. Sargent Co., Hampton, Dist. 52, 4,200 cu.yd. gravel 1 mi. haul, $0.41, 52,800 units additional ½ mi. haul, $0.11; Pestotnik Bros., Boone, Dist. 14 and 34, 2,400 cu.yd. gravel composition, $1.35 and 1,200 cu.yd., $1.47; Dolson & Anderson, Geneva, Dist. 44, 56 and 42, 6,700 cu.yd. gravel 1 mi. haul, $0.38, 12,750 units additional ½ mi. haul, $0.095 and 54,000 units additional ½ mi. haul, $0.09.

Ia., Marion—Linn Co. distributing gravel for surfacing 20.75 mi. on Dist. 1, to J. A. Milner, Marion, 4,875 cu.yd. gravel 1 mi. haul, and 86,625 units additional ½ mi. haul, $10,320; J. S. Thraves, Mason City, 14,160 cu.yd. gravel 1 mi. haul, 146,490 units ½ mi. haul, $19,463; Wishard & Smalley, Charles City, 12,000 cu.yd. 1 mi. haul, 78,000 units additional ½ mi. haul, $12,360.

Ia., Sioux City — Curbing and concrete paving 51,000 sq.yd. Paxton St., to Western Asphalt Paving Corp., 1st and Nebraska Sts., $2.08.

Minn., Faribault—Rice Co., gravel surfacing 4.6 mi., Job 2305, State Rd. 19, to H. C. Farmer, Faribault, $7,636; 10.5 mi. Job 2306, State Rd. 20, to Northwestern Constr. Co., 1819 Jackson St. N., Minneapolis, $12,125; 4.7 mi. Job 2307, State Rd. 26, to P. N. Reber, Marshall, $8,498; 7.7 mi. Jobs 2314 and 2315, State Rds. 32 and 33, to P. N. Reber, Marshall, $13,586. Noted May 31.

Minn., Moorhead — Paving 13,000 sq.yd. 1st Ave. N., 9th St. N. and 8th St., vibrolithic concrete, to W. E. Kennedy, Fargo, N. D., $45,587.

Minn., Waseca—Waseca Co., 6.9 mi. Job 2306, State Aid Rd. 14, 100,000 cu.yd. excav., to J. Brown, Madison Lake, $30,863.

Kan., Paola — Paving various streets, 6,000 sq.yd. asphaltic concrete, 4,500 lin.ft. curb and gutter, etc., to J. B. Watts, Concordia, $35,900. Engrs. est. $40,000.

Kan., Valley Falls—Street improvements to McGuire & Cavender, Leavenworth, 12,-000 cu.yd. excav. $0.75, 25,000 sq.yd. 3 in. vertical fibre brick on 5 in. base $3.15, etc., total $104,120.

South Dakota—State Hy. Comn., Pierre, grading 7.68 mi. Federal Aid Project 114, Bon Homme Co., to W. Geddes, Ellendale, N. D., $20,172; 7.82 mi. Federal Aid Project 144, Union Co., to Union Co., Elk Point, $25,961; 3.11 mi. Federal Aid Project 130A, Custer Co., to W. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, $44,177; 67 ft. concrete and steel viaduct on State Aid Project 73, Tripp Co., to J. L. Lynn, Winner, $3,757. Noted June 21.

Wyoming—State Hy. Comn., Cheyenne, grading, surfacing, etc., 5.3 mi. Yellowstone Highway "Glendo-South," Federal Aid Project 142-A, Platte Co., to S. L. Smith, Henry, Neb., $31,190; 4 mi. Lincoln Highway from Medicine Bow River to East Co. Line, Federal Aid Project 148, Carbon Co., to Ames, Braisted Constr. Co., Laramie, $27,171; 9.2 mi. Newcastle-Moorecroft Rd., Federal Aid Project 151-A, Newcastle Co., to Wickham Bros. & Swigert, Lovell, $84,523

Wyo., Casper — To Warren Constr. Co., Casper, paving 4,605 sq.yd. Dist. 30 and 9,680 sq.yd. also 144 sq.yd. under railroad tracks Dist. 31, 2 in. Warrenite bitulithic on 4 in. bituminous concrete, $15,224 and $34,934 respectively; to Lloyd Building Co., Casper, 3,732 sq.yd. Dist. 32, 6 in. rein.-con., $10,236.

Nevada—State Ry. Dept., Carson City, asphalt macadam surfacing 4.99 mi. Federal Aid Project 64-A, from Fallon south, Churchill 2-C-3, Contr. 80, Churchill Co., to Christensen Constr. Co., Palo Alto, Calif.; graved surfacing 9.16 mi. road from Deeth, east, Federal Aid Project 54-A-1, Elko, 1-D, Contr. 81 Elko Co., to Strahan, Bishop & Brooks, Sacramento, Calif., $108,773. Noted July 5.

Tex., Colorado—Paving 2nd and Walnut Sts., 16,120 sq.yd. 2 in. warrenite bitulithic on 5 in. base, to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $3.18 Engrs. est. $50,000. Noted June 21.

Tex., Dallas—S. A. Temple, 3659 Maplewood St., paving Kessler Sq., 14,000 sq.yd. Uvalde rock asphalt, to Uvalde Paving Co., Insurance Bldg., Dallas, $2.80. Engrs. est $35,000.

Tex., Ft. Worth—To West Texas Constr. Co., Cotton Exch. Bldg., paving 8,730 sq.yd. Evans and New York Aves. 2 in. warrenite bitulithic on 5 in. concrete $3.18, 4,951 ft. curb $0.45, 10,080 ft. gutter $0.275, etc.

Tex., Ft. Worth—Repaving 13,860 sq.yd. Jennings Ave., to General Constr. Co., Cotton Exch., Bldg., 1½ in. cold mix Uvalde rock asphalt $1.50 per sq.yd., etc. Engrs. est. $40,000. Noted June 21.

Tex., Hillsboro—Hill Co. graveling King of Trails Rd. north of here, to Womack Constr. Co., Sherman, $26,018.

Tex., Hillsboro—Hill Co. grading, gravel and rock surfacing 3.91 mi. State Highway 6, 157.6 cu.yd. concrete, 3,691 cu.yd. roadway, 24,284 cu.yd. borrow, 9,845 cu.yd. solid and 454 cu.yd. loose rock excav., 12,075 lb. reinforcing, to Womack Constr. Co., Sherman, $26,019; 8,258 cu.yd. rock and 44,356 cu.yd. gravel furnished by county. Engrs. est. $40,000.

Tex., Lufkin — Angelina Co. grading, gravel surfacing and bituminous topping 15 mi. State Highway 37, to J. S. Moore & Sons, Lufkin, $238,115. Noted July 5.

Okla., Wynnewood — Improving Commercial Ave., 5,800 sq.yd. vertical fibre brick, 3,100 lin.ft. concrete curbing and guttering, etc., to Cook & Stucker, Ottawa, Kan., $34,014. Noted June 28.

Colorado—State Hy. Dept., Denver, to H. M. Fox, Florence, gravel surfacing and bridging 0.587 mi. Federal Aid Project 229, Fremont Co., $34,647, engrs. est. $37,930; to White & Johnson, Chamber Commerce Bldg., Denver, paving 2.868 mi. Federal Aid Project 226-B, Weld Co., $81,749, engrs. est. $106,611; to D. Hinman, 3358 Race St., Denver, gravel surfacing 4.748 mi. Federal Aid Project 208 C, Mesa Co., $39,019, engrs. est. $59,830, 2.082 mi. Federal Aid Project 214, La Plata Co., $48,556, engrs. est. $60,-211; to Colorado Bridge & Constr. Co., Gas & Electric Bldg., Denver, concrete paving, 5.0659 mi. Federal Aid Project 135, Jefferson Co., $161,962, engrs. est. $212,445, 2.702 mi. Federal Aid Project 255 A. Morgan Co., $77,967, engrs. est. $89,988, 150 ft. truss bridge over Clear Creek, with approaches Federal Aid Project 120, Jefferson Co. $30,055, engrs. est. $36,708. Noted July 5.

Colo., Denver—Concrete paving 12 blocks Alley Paving Dist. 98 and 12 blocks Alley Paving 97, to W. F. Pigg & Son, Engineers Bldg., $16,800 and $18,236 respectively.

Colo., Denver—Curbing, grading and surfacing 6 mi. North Side Dist. 32, to J. F. Roberts Constr. Co., Tramway Bldg., $114,-445. Noted June 28.

Utah—State Rd. Dept., Salt Lake City, to Reynolds Ely Constr. Co., Springville, improving various sections Moroni-Jubb Rd., 18 ft., Sanpete Co., concrete paving Sects A and C, $37,254 and $31,862 respectively; gravel surfacing and small structures on Sects B and D, $41,973 and $40,968 respectively.

Utah—State Rd. Comn., Salt Lake City, grading and gravel surfacing 7.395 mi. Woodruff-Wyoming State Line Rd., Rich Co., to Kroft & Bundy, Kiesel Bldg., Ogden, $51,537. Noted June 7.

Oregon — State Hy. Dept., Salem, to Schull & McKay, Bridge, grading 2.02 mi. and gravel surfacing 6.3 mi. Hunters Creek Sect. Roosevelt Highway, Curry Co., 11,400 cu.yd. common excav. $0.60, 8,500 cu.yd. intermediate $0.80, 24,500 cu.yd. solid rock $1.25, 6,150 cu.yd. crushed gravel $2.50, etc., total using rein.-con. pipe $77,880; Wallowa County Constr. Co., Court House, Enterprise, grading and gravel surfacing 6.05 mi. Enterprise-Flora Highway, Wallowa Co., 34,000 cu.yd. common excav. $0.37, 16,000 cu.yd. intermediate $0.54 and 5,200 cu.yd. solid rock $1.70, 2,000 cu.yd. broken stone sub surface $2.25, 6,800 cu.yd. top surface $2.40, 6,000 cu.yd. base $2.35, 625 cu.yd. maintenance $2.15, etc. total using rein-con. pipe $80,060; A. D. Kern, 519 Exchange Bldg., Portland, grading and gravel surfacing 13.44 mi. Vale Ontario Sect. John Day Highway, Malheur Co., 106,600 cu.yd. common excav. $0.15, 5,500 cu.yd. intermediate $0.40, 5,000 cu.yd. solid rock $0.80, 16,700 cu.yd. crushed gravel top $1.98, 16,700 cu.yd. base $1.[illegible], 1,350 cu.yd. maintenance, $2.[illegible] total using rein.-con. pipe, $121,314.

Washington—State Hy. Comn., Olympia, grading and paving Olympic Highway from Mill Creek to Shelton, Mason Co., to Philbrick & Nicholson, Shelton, 12,710 sq.yd. concrete $2.27 per sq.yd., etc., $47,666; Inland Empire Highway from Palouse to Pullman, to J. A. Tertering, Moscow, Idaho, 184,200 cu.yd. earth excav. $0.2[illegible], 9,570 cu.yd. loose rock excav. $0.60, 5,0[illegible] cu.yd. solid rock excav. $1.25, etc., total $108,378; Inland Empire Highway from Waitsburg northeast, Walla Walla Co., 16,720 sq.yd. concrete, to Pacific Coast Paving Co., Portland, $52,165.

Wash., Bellingham—Whatcom Co. paving Acme-Wickersham Highway, 27,000 sq.yd. 6 in. to 7½ in. concrete, to C. L. La Plant, Sedro Wooley, $69,635. Noted May 3.

Wash., Seattle—Bd. Pub. Wks., concrete paving Greenwood Ave. et al., to Fiori Bros., 3950 6th St. N. W., $126,249; Engrs. est. $132,787. Noted July 5.

Wash., Seattle—King Co., grading 5 mi. A. Solberg Rd., in Tolt and Carnation, to T. Hanson, c/o T. R. Beeman, co. engr., Seattle, $54,868. Noted June 7.

Calif., Berkeley—Improving Hearst Ave., to Oakland Paving Co., 5000 Bway., Oakland, 67,000 sq.ft. grading $0.06, 2,600 concrete curb and gutter $1.50, 60,000 sq.ft. 2 in. asphaltic concrete on 5 in. hydraulic concrete $0.285, etc.

Calif., Compton — Improving portions Coast Blvd., etc., to California Constr. Co., 58 2nd St., San Francisco, 49,738 sq.ft. 5 in. concrete $0.29, 1,705 sq.ft. 6 x 10 x 15 in. concrete curb $0.72, 6,340 sq.ft. concrete sidewalk $0.22, 8,308 sq.ft. clay and gravel surface $0.08, etc.

Calif., Los Angeles — Improving Wilton St., to G. R. Curtis, 2440 East 26th St., grading total $4,800, 104,481 sq.ft. asphalt $0.24, 2,350 sq.ft. walks $0.25, 5,952 sq.ft. concrete gutter $0.29, etc. Noted July 5.

Calif., Los Angeles—Improving Normandie Ave. between 54th St. and Florence Ave., to W. Liddington, 420 East 60th St., total for grading $8,452, 276,562 sq.ft. concrete paving $0.227, etc., total $84,670.

Calif., Los Angeles—Improving Diaz Ave. between Rita St. and Ventura Blvd., to J. P. Oswald, 1107 West Santa Barbara St., total for grading $6,500, 194,773 sq.ft. topeka pavements $0.19, etc.

Calif., Pittsburg—Paving with 5 in. concrete Black Diamond St., etc., to Hutchinson Co., 1706 Bway., Oakland, $34,425.

Calif., San Diego—Common Council, paving E St. between 16th and 25th Sts., to California Constr. Co., Union Bldg., 146,186 sq.ft. 1½ in. warrenite on 2½ in. bituminous at $0.20 per sq.ft., etc., total $30,049. Noted June 14. This corrects report in June 21 issue.

Calif., San Diego—Common Council, improving Julian and Marcey Aves., to California Constr. Co., Union Bldg., 215,171 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous at $0.163, etc., total $35,152. Noted June 28.

Calif., San Jose—T. A. J. Raisch, 46 Kearny St., San Francisco, improving 17th and Vine Sts., 183,740 sq.ft. grading and 3 in. Durite asphaltic concrete base with 1½ in surface, at $0.25, etc.

Ont., Toronto—For 8,000 sq.yd. asphalt on concrete on Howick, Alpine, Brandon and Chambers Aves., to Constructing & Paving Co., Confederation Life Bldg., $37,-201; 16,000 sq.yd. 4th St., Coxwell, Glebeholme and Iona Aves., to Kilmer & Barber, 24 Adelaide St. W., $67,438; 6,000 sq.yd. bitulithic on concrete, Glebeholme Blvd., Beck and Fawcett Aves., to Warren Bituminous Paving Co., 54 University Ave., $25,-902; 10,000 sq.yd. asphalt on concrete, Thorncliffe Ave., Ardagh and Durie Sts., to Asphaltic Concrete Co., Excelsior Life Bldg., $46,036; paving lane near Markham St., concrete, to National Contg. Co., 9 Garnock Ave., $1,791; Dept. of Works will build by day labor Glenmanor Dr., Burnside, Earlscourt and Evans Aves., asphalt, $45,779; Glenmanor Dr., brick block, $[illegible]440; Alton, Battenburg and Beres[illegible] Aves., bitulithic, $22,843; lane south [illegible] Richmond St., concrete, $1,632. Noted Apr. 12.

Ont., Windsor—Paving 17,000 sq.yd. Elsmere and Marinette Aves., asphalt and concrete, to Check Contg. Co., McDougal Ave., $67,000. Engrs. est. $70,000.

Industrial Works

PROPOSED WORK

Mass., Lynn — Eastern Massachusetts Street Ry., 1 Beacon St., Boston, having plans prepared by L. H. Brown, company engr., 50 x 100 ft. substation, 15,000 k.w. capacity. $125,000.

Conn., East Hartford (Hartford P. O.)—O. B. Herlth Mfg. Co., 22 Union Pl., Hartford, plans 2 story, 50 x 70 ft. factory, brick, plain foundation, Tolland St. $50,000. Engineer and architect not selected.

Conn., East Hartford (Hartford P. O.)—D. B. Roberts, 275 Connecticut Blvd. plans two 2 story garages and salesrooms, brick and steel, plain foundation, Connecticut Blvd. Each $40,000. Engineer and architect not selected.

Conn., Hartford—A. R. Blumenthal, 299 Greenfield St., having plans prepared by B. A. Sellew, 721 Main St., 2 story, 120 x 120 ft. garage, etc., brick, plain foundation, rear of Morgan St. $60,000.

Conn., Hartford — N. E. Laundry Co., Hawthorne St., plans 2 story factory addition, brick, plain foundation. $40,000. Engineer and architect not selected.

Conn., Plantsville—Walker Stuart Fdry. Co., Summer St., plans 2 story factory, brick and steel, plain foundation, Summer St. To exceed $40,000. Engineer and architect not selected.

Conn., Unionville—C. W. House & Sons, plan factory, several buildings, brick, plain foundations. $100,000. Engineer and architect not selected.

Conn., Unionville—J. J. Ramage, Lonerly St., plans 3 story, 50 x 100 ft. factory, brick, plain foundation. $60,000. Engineer and architect not selected.

N. Y., Binghamton—Dunn-Cooper Corp., Madison Ave., plans large factory addition. $50,000. Engineer and architect not selected.

N. Y., East Creek—See "Miscellaneous."

N. Y., Jamestown—Dahlstrom Metallic Door Co., Buffalo and East 2nd Sts., plans 3 story, brick and concrete factory addition. $50,000. Engineer and architect not announced.

N. Y., New York—Bd. Educ., 500 Park Ave., had plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, 4 story brick, steel and concrete garage, Brook Ave. $350,000.

N. Y., New York—H. Mitchell, c/o J. J. Dunnigan, archt. and engr. 394 East 150th St., had plans prepared 2 story, 115 x 120 ft., brick, steel and concrete garage, plain foundation, East 172nd St. $85,000.

N. Y., North Albany (Albany P. O.)—Adirondack Power & Light Corp., 511 State St., Schenectady, plans new sub station, here. $40,000.

N. J., North Bergen—G. Borgfeldt & Co., 16th St. and Irving Pl., New York City, soon takes new bids 2 story, brick and steel factory, here. Lockwood-Green & Co., 101 Park Ave., New York City, archts. and engrs.

N. Y., Penn Yan—Penn Yan Boat Co. plans 80 x 120 ft. concrete factory, paint shop and 60 x 100 ft. storage room, Keuka Lake. $50,000. Engineer and architect not announced.

Pa., Orangeville — Orangeville Brick & Sheet Products Co. plans brick making plant. $100,000. Architect not announced.

Pa., Lucinda—Lucinda Refining Co. plans to rebuild major portion of refinery destroyed by fire. $75,000. Architect not announced.

Pa., Rankin (Braddock P. O.)—Acheson Mfg. Co., plans 1 story, 80 x 150 ft., 100 x 150 ft. and 100 x 200 ft. factory buildings, steel beams of columns. $150,000. Private plans.

Pa., Rural Valley—Rural Valley Boro. Electric Corp. plans electric light and power plant. G. E. Murrie, c/o owner, in charge.

W. Va., Beechbottom—American Gas & Electric Co., plans to rebuild power plant, recently destroyed by fire. $50,000.

W. Va., Williamson—S. M. Goodloe having plans prepared by D. M. Good, Williamson, 3-story and basement, 50x100 ft. garage, brick and steel, $40,000.

N. C., Raleigh—See "Miscellaneous."

La., New Orleans—Todd Eng. Dry Dock & Repair Co., South Peters and Howard Sts., had plans prepared by W. E. Hart, mgr. Enterprise Electric Co., 826 Baronne St., 2 steel frame buildings and warehouses, each 129 ft. square on 6 ft. concrete wall and pile foundation. $60,000 each.

Tenn., Bristol—Cortrim Lumber Co. plans large addition to its lumber and planing mill. $50,000. Engineer and architect not announced.

Tenn., Memphis—O. K. Storage & Transfer Co., Jefferson Ave., plans 6 story, storage warehouse, on 190 x 270 ft. site on Madison Ave. near McNeill St.

Ky., Danville—See "Miscellaneous."

Ky., Louisville—Inman Co., 29th St. and Bway., plans 4 story, 200 x 750 ft. factory, brick and concrete, near 30th St. and Bway. $500,000. Engineer and architect not selected.

Ky., Louisville—E. Straus, Market and 4th Sts., plans factory, Baxter and Hamilton Aves. $200,000. Engineer and architect not selected.

Ky., Newport—F. Voss & Sons Co., plans rebuilding 2-story lumber plant, recently destroyed by fire, $125,000.

O., Cleveland—Aetna Rubber Co., 811 East 79th St., having plans prepared 2 story, 55 x 60 ft. and 2 story 33 x 133 ft., brick and steel factory. $50,000. Private plans.

O., Cleveland—J. Bassichis & Son, Society for Savings Bldg., had plans prepared by D. A. Reamer, 1612 Northland Ave., Lakewood, 1 story, 46 x 90 ft. and 1 story, 33 x 89 ft., brick and steel factories, 1535 and 1657 Hamilton Ave. $40,000.

O., Cleveland—Fisher Body Ohio Co., General Motors Bldg., Detroit, Mich., had plans prepared 1-story, 120 x 240 ft. storage plant, and 78 x 562 ft. train shed, brick and steel, East 140th St. and Colt Rd., here. $300,000. Private plans.

O., Cleveland—L. J. Hostetter, 10803 Earle Ave., had plans prepared by J. H. Graham & Co., 8201 Cedar Ave., 1 story, 50 x 127 ft., brick and steel garage, 2024 East 70th St. $40,000.

O., Cleveland—M. Rubin, c/o A. F. Janowit, archt., Standard Theatre Bldg., plans 1 story, brick and steel garage, Lakefront and Hartshorn Rds. $40,000.

O., Cleveland—H. S. Thomas of Stutz Motor Co., 4310 Carnegie Ave., plans 1 story, brick, steel and concrete garage and salesroom addition, on 66 x 186 ft. lot, 4211 Carnegie Ave. $50,000.

O., Euclid—K. F. Spieth, 3439 East Scarborough Rd., Cleveland Heights, had plans prepared by A. C. Wolf and F. M. Griffith, Swetland Bldg., Cleveland, 1 story, 40 x 100 ft., brick and steel commercial building and garage, here. $40,000.

O., Lima—Ohio Power Co. purchased 8 acres land northwest of city in Bath Twp. and plans high tension sub-station. $100,000.

O., Sycamore—Blue Bar Mfg. Co. plans rebuilding plant. $50,000. Engineer and architect not announced.

Ind., Laporte—Bastian-Morley Co. plans 2 story addition to plant. $42,500.

Ind., Valparaiso—Smith & Smith Lumber Co. plans to rebuild portion of mill recently destroyed by fire. $50,000. Engineer and architect not announced.

Mich., Detroit — A. H. Gould & Son, archts., 602 Empire Bldg., preparing plans 1 story and basement, 100 x 150 ft., garage and show room, brick, steel and concrete, plain foundation. $75,000. Owner's name withheld.

Wis., Baraboo—H. H. Mueller having plans prepared by E. Tough, Conklin Bldg., Madison, 2 story, 60 x 65 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Belgium — Krier Preserving Co. plans to rebuild main building recently destroyed by cyclone, brick and timber. $40,000. Private plans.

Wis., Cuba City—Connecting Link Mining Co. having plans prepared 1 story, 60 x 90 ft., mill, brick and rein.-con., plain foundation. $40,000. Private plans.

Wis., Cuba City—Scott-Sellick Co. having plans prepared 1 story, 60 x 150 ft., brick and stone mill, plain foundation. $50,000. Private plans.

Wis., Janesville — Chevrolet Motor Co. having plans prepared by C. E. Wilson, engr. c/o owner, 1 story, 90 x 288 ft., brick, rein.-con. and steel factory, plain foundation. $100,000.

Wis., Port Washington — City having plans prepared by E. E. Dillon, engr., Washington Bldg., Madison, central heating plant, rein.-con., brick and steel, plain foundation. $125,000.

Wis., Shawano—E. H. Kuester had plans prepared by C. C. Fritz, Shawano, 2 story, brick and timber laundry, plain foundation $40,000.

Minn., St. Cloud—A. Peter and A. J. Durupt, making plans 2 story and basement, 66 x 150 ft., brick and concrete garage. $40,000.

N. D., Minot—White Ice Cream Co., c/o E. White, Sr., plans brick and concrete factory, probably 2 story. $40,000. Engineer and architect not announced.

Mo., Carthage—Liggett & Platt Spring Bed & Mfg. Co., plans 2 story slow combustion type factory. $50,000. Engineer and architect not announced.

Mo., Clayton—H. V. Grover, 7919 Forsythe Blvd., plans 2 story, 80 x 200 ft. garage and two 3 story apartments, rein.-con. and brick, plain foundation, Meramec St. $150,000. Engineer and architect not announced.

Mo., Springfield—Springfield Packing Co., 741 South Weller St., plans 2 story plant, Weller St. $300,000. Engineer and architect not announced.

Mo., St. Louis—Hannibal—Brown Shoe Co., 12th and Washington Sts., had plans prepared by W. A. Thum, Granite Bldg., 3 story, 60 x 225 ft. and 60 x 80 ft., brick and timber factory, plain foundation. $150,000.

Mo., St. Louis—St. Louis Coffin Co., 1821 Chouteau Ave., plans 2 and 3 story, 102 x 125 ft. factory addition. $75,000. Private plans.

Tex., Dallas—B. E. Keith Co., Cadiz and Preston Sts., having plans prepared and takes bids this summer 3 story and basement, 90 x 135 ft., produce and fruit storage building, brick and concrete. $175,000-$200,000. Engineer and architect not announced.

Tex., Ft. Worth—Texas & Pacific R.R., Union Station, plans new shops, roundhouses, yards, etc. $500,000. E. F. Mitchell, Texas & Pacific Bldg., Dallas, ch. engr.

Wyo., Casper—White Eagle Oil & Refining Co., plans large oil refinery, 3,000 bbl. capacity. $55,000. Architect not announced.

Ore., Bishops Meadows—Store, Theatre, etc.—See "Miscellaneous."

Ore., The Dalles—Oregon, Washington Ry. and Navigation Co., Wells-Fargo Bldg., Portland, plans tie treating plant, here. $348,766. S. Murray, asst. ch. engr., in charge of work.

Oregon—See "Railways."

Calif., Los Angeles—Acme White Lead & Color Wks., 345 East 3rd St., had plans prepared by Swasey & McAfee, Hibernian Bldg., 1 story factory, brick, Alosta St. $50,000.

Calif., Los Angeles—City had plans prepared warehouses, mill, etc., rein.-con., San Pedro St., for Bd. Educ., $175,000. E. H. Cline, of Architectural Dept., Bd. Educ., Citizens Natl. Bank Bldg., in charge.

Calif., Los Angeles—Southern Pacific Co., Southern Pacific Bldg., having plans prepared 1 story, 34 x 498 ft. locomotive erecting shop, brick and steel, with 24 concrete engine pits served by 250 ton and two 15 ton traveling cranes. $600,000. Private plans.

Calif., Oakland—J. W. Murray Mfg. Co., 5-140 General Motors Bldg., Detroit, Mich., plans factory, here. $250,000 or more.

Calif., Orange—Central Lemon Growers Assn., Villa Park Rd., Villa Park, plans packing plant. $60,000.

Calif., San Pedro—Los Angeles Warehouse Co., 316 Commercial St., Los Angeles, soon takes bids 5 story and basement 100 x 150 ft. warehouse, rein.-con., Commercial and San Pedro Sts., here. A. C. Martin, Higgins Bldg., Los Angeles, archt.

Calif., San Francisco—J. D. Phelan, c/o A. G. Scholz, arch., Phelan Bdg., had plans prepared 1 story, 222x312 ft. garage, rein.-con., 17th and Valencia Sts., $200,000.

Calif., Sacramento — Ochsner Estate, Ochsner Bldg., having plans prepared by E. C. Hemmings, Ochsner Bldg., 1 story, 40 x 160 ft. garage, concrete and brick, K and 14th Sts. $40,000. Reo Motor Car Co., 1309 K St., lessee.

Calif., San Francisco — Hotel Owners Laundry Co., 722 York St., having plans prepared by Meyer & Johnson, Bankers Investment Bldg., 1 story, laundry, rein.-con., Folsom St. $40,000.

Calif., San Francisco—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 1 story garage, rein.-con., 7th and Bryant Sts. $40,000. Pickwick Corp. and Pacific Auto Stage Lines, 3730 Mission St., lessees.

Calif., San Francisco — Pacific Gas & Electric Co., 445 Sutter St., had plans prepared 2 story, 42 x 80 ft. electric sub-station, concrete and steel, Minna St. near 8th St. $40,000. Private plans.

Calif., San Francisco—Williams Bros. Aircraft Corp., 1211 Van Ness Ave., had plans prepared by R. R. Irvine, 736 New Call

Industrial Works (Continued)

Bldg., 2 story, 100 x 200 ft., concrete factory, 25th St. between Potrero Ave. and Utah St. $40,000.

Calif., Vallejo—San Pablo Ice Co., foot of York St., plans ice plant, on 100 x 100 ft. site.

Man., St. Boniface — Dominion Tar & Chemical Co., Ltd., soon takes bids 69 x 175 ft., 50 x 60 ft. and 60 x 100 ft. factory buildings, concrete and brick, Norwood Rd. $250,000. L. O. P. Walsh, vice pres.

BIDS DESIRED

N. Y., New York—July 18, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., housing station, Cromwell Ave. south of West 170th St., for Street Cleaning Dept.

Md., Baltimore—July 17, by J. K. Stack, archt., 308 East Lafayette Ave., 2 or 3 story, 103 x 150 ft. laundry, Eutaw and St. Marys Sts., for Archers Laundry, c/o J. Archer, Howard and Mulberry Sts. $300,000. H. F. Doelman, 507 North Charles St., engr. Noted March 15.

O., Cleveland—Lees-Bradner Co., 6210 Carnegie Ave., taking bids 1 story, 55 x 100 ft. machine shop, and 1 story, 30 x 100 ft. storage plant, brick and steel, 6210 Carnegie Ave. $50,000. W. J. Wefel, Union Bldg., archt. Noted June 21.

Ill., Chicago—M. Binz, c/o Harders Fireproof Storage & Van Co., Calumet and 40th Sts., taking bids 1 story, 130 x 175 ft. garage, fireproof. $40,000. L. E. Russell, 25 North Dearborn St., archt.

Wis., Fond du Lac—H. W. Voell, 59 North Main St., taking bids 2 story, 50 x 60 ft., brick, concrete and steel garage, plain foundation. $40,000. Private plans.

Wis., Madison—Small & Flad, archts., Ellsworth Bldg., taking bids 1 story, 60 x 87 ft., brick, rein.-con. and steel garage, plain foundation, for Madison Ford Garage, 210 East Washington Ave. $40,000. Noted June 14.

Wis., Milwaukee—P. J. Fischer, 241 Rusk Ave., taking bids and opens same about July 16, 1 story, 60 x 100 ft., plant, concrete, plain foundation. $40,000. Private plans.

Mo., Farber—Farber Fire Brick Co. taking bids 1 and 2 story plant. $100,000. A. Seelig, c/o owner, archt.

Calif., Los Angeles—A. C. Martin, archt., Higgins Bldg., receiving bids 5 story warehouse, rein.-con., Commercial and San Pedro Sts., for Los Angeles Warehouse Co., 316 Commercial St. Noted May 10.

Calif., San Francisco — Williams Bros. Aircraft Corp., Van Ness Ave., taking bids 1 and 2 story factory, concrete, 25th St. between Potrero Ave. and Utah St. $40,000. R. R. Irvine, 736 Call Bldg., archt.

CONTRACTS AWARDED

Mass., Cambridge—Harvard Sq. Garage Co., Harvard Sq., 2 story, 75 x 130 ft. top addition to garage, terra cotta and steel, Dunster St., to S. C. Sperry, Inc., 299 Main St., $55,000. Archts. est. $60,000.

Mass., Holyoke—Farr Alpaca Co., 2 story, 63 x 73 ft. boiler house and 63 x 73 ft. steam turbine plant, Jackson St., to D. O'Connells Sons Co., 480 Hampden St., $150,000.

Conn., East Hartford (Hartford P. O.)—New York, New Haven & Hartford R.R., 100 x 105 ft. roundhouse, brick and steel, plain foundation, to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $40,000.

Conn., Hartford—Parker Shirt Co., Walnut St., New Britain, 2 story, 40 x 80 ft. garage and storage building, brick and steel, plain foundation, Walnut St., here, to A. P. Leavitt, 87 West Main St., New Britain. Archts. est. $40,000.

N. Y., Brooklyn—C. Katz, c/o T. Goldstone, archt. and engr., 50 Graham Ave., will build 1 story, 120 x 200 ft., brick, steel and concrete garage, plain foundation, Grand St., by day labor. $50,000.

N. Y., Brooklyn—J. Cervansky, c/o T. Goldstone, archt. and engr., 50 Graham Ave., will build 1 story, brick, steel and concrete garage, plain foundation, Stockholm St., by day labor. $55,000.

N. Y., Glen Falls—See "Dams."

N. Y., Heuvelton—St. Lawrence Transmission Co., brick, concrete and steel power house and concrete dam, on Oswegatchie River, here, to G. W. Thompson Co., Gurney Bldg., Syracuse, $50,000.

N. Y., New York—Wilfred Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 1 story, 100 x 140 ft., brick and concrete garage, plain foundation, Kingsbridge Rd., by day labor. $60,000.

N. Y., Owego—Buffington Co., Inc., 60 x 200 ft., concrete and steel factory, Elm St., to Austin Co., 16112 Euclid Ave., Cleveland, O. Archts. est. $50,000.

Pa., Beaver Falls—Beaver Falls Art & Tile Co., 4 story, 180 x 300 ft. factory addition, brick and steel, 10th Ave., to Farris Eng. Co., Empire Bldg., Pittsburgh.

D. C., Wash.—M. M. Crawford, 230 Bates St. N. W., garage, to Fletcher Fireproofing Co., Davidson Bldg. Archts. est. $50,000.

W. Va., Beckley—W. C. Agge, will build 2-story and b asement, 50x115 ft. garage, brick and steel, by day labor. $40,000. G. C. Seib, Rose Turner Bldg., archt.

N. C., Greensboro—Rucker Warehouse Co., 2 story warehouse, to Hunt & Saddler, Greensboro, $150,000. Noted Mar. 29.

S. C., Greenville — Southern Worsted Corp. Co., 1 story, 180 x 578 ft. rein.-con. mill, also boiler house, water tank, small dam and pump house, to Gaston Constr. Co., Gastonia, N. C., $150,000; 84 cottages, to Minter Homes Co., Greenville, $135,000. Noted May 17.

La., New Orleans—H. M. Field, garage, Howard Ave. and Carondelet St., to C. F. Owen, New Orleans, $40,800.

La., LeCompte—See "Waterworks."

Tenn., Clarksville—Dark Tobacco Growers Co-operative Assn., Hopkinsville, Ky., 1 story, 215 x 280 ft., brick warehouse, here to Sumner Constr. Co., Broad St., Nashville, $60,000.

Ill., Cahokia—Union Electric Light & Power Co., 12th St. and Locust Blvd., St. Louis, Mo., second unit of plant which will eventually measure 345 x 800 ft. and generate 320,000 hp.; steel work (including erection) to Fort Pitt Steel & Iron Wks., Fulton Bldg., Pittsburgh, $350,000; two 40,000 hp. turbines, 1 to Westinghouse Electric & Mfg. Co., East Pittsburgh, and other to General Electric Co., River Rd., Schenectady, N. Y., cost of both approximately $1,000,000. Noted Jan. 11.

Ill., Robinson—Zwermann Co., 225 ft. dry kiln, to Russell Eng. Co., Ry. Exch. Bldg., St. Louis, Mo. Engrs. est. $50,000.

O., Gallipolis—See "Buildings."

Wis., Appleton — Badger Printing Co., Adkins St., will build 2 story, 32 x 40 ft., brick and concrete addition to plant, plain foundation, by day labor. D. Smith, pres. Private plans.

Wis., Hurley — Montreal Mining Co., 2 story dry house, brick and steel, plain foundation, to Worden-Allen Co., 208 South La Salle St., Chicago. Archts. est. $150,000. Noted July 5.

Wis., Madison—Schmidt Bros. Co., c/o A. J. Schmidt, 2611 Monroe St., will build 1 story, 60 x 125 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. $40,000. Private plans. Noted June 28.

Wis., Merrill—G. B. Cotter, 1110 3rd St., will build 1 story, 38 x 108 ft., concrete factory, plain foundation, by day labor. $40,000. H. Woller, Merrill, archt.

Wis., Milwaukee—R. L. J. Clark, 2218 Meinicke Ave., 2 story and basement, 100 x 140 ft., brick and concrete garage, plain foundation, to Byrne Bros. Co., 3112 Burleigh St. Archts. est. $60,000. Noted Feb. 1.

Wis., New London—M. J. Heinz, 2 story, 30 x 80 ft. vulcanizing shop, brick, rein.-con. and stone, plain foundation, to F. Schoenrock & Sons Co., New London. Archts. est. $40,000. Noted July 28.

Wis., Port Washington—Schmit Bros., 2 story, 50 x 100 ft. addition to garage, brick and timber, plain foundation, to J. Ubbink & Son, Port Washington. Archts. est. $40,000. Noted May 31.

Wis., Racine—Amer. Skein & Fdry. Co., 23rd and Racine Sts., 2 story, 42 x 140 ft., brick and timber foundry, plain foundation, 23rd St., to Nelson & Co., Janes Bldg. Archts. est. $40,000.

Wis., Wautoma—Waushara Co. 1 story, 50 x 90 ft. heating plant for court house, jail and garage, to Heating & Power Appliance Co., 200 Pleasant St., Milwaukee. Noted May 31 under Miscellaneous.

Mo., St. Louis—J. G. Jonah, ch. engr. St. Louis & San Francisco Ry., 900 Olive St., 1 story, brick and concrete repair shop, 20 stall round house, power house, machine shop, mill shop, store room and 2 wash rooms, Fyler Ave., to T. S. Leake & Co., 608 South Dearborn St., Chicago. Archts. est. $500,000. Noted May 31.

Mo., St. Louis—Pevely Dairy Co., 1001 South Grand Blvd., 2 story, 150 x 170 ft., brick and concrete garage, Chouteau Ave., to Fruin-Colnon, Merchants Laclede Bldg. Archts. est. $100,000.

Calif., Lincoln—Gladding-McBean Co., 360 ft. continuous railroad type dry kiln, to Russell Eng. Co., Railway Exch. Bldg., St. Louis, Mo. Engrs. est. $75,000.

Calif., Los Angeles—I. Beveridge, 1 and 2 story garage, brick, Sunset Blvd. near Wilcox Ave., to Milwaukee Building Co., Wright & Callendar Bldg. To exceed $40,000.

Calif., Oroville — Wyandotte Canneries, Inc., cannery, frame and corrugated iron, to Davison & Nicolsen, 736 West Lafayette St., Stockton, $50,000. Noted July 5.

Calif., San Francisco—Herbst Bros., 1943 Mission St., 2 story warehouse, brick, Mission St. near 11th St., to Larsen-Siegrist Co., Claus Spreckles Bldg., $43,500.

Ont., Hespeler — Hespeler Woodworking Co., 2 story factory, brick and timber, to W. Johnstone, Hespeler. Est. cost $50,000. Noted May 3.

Buildings

PROPOSED WORK

Conn., Hartford—Apartment and Stores—J. Frary, 679 Albany Ave., having plans prepared by Dunkelberger & Gilman, 721 Main St., 4 story, 55 x 140 ft. with 40 x 65 ft. ell, brick and steel, plain foundation, Albany Ave. $200,000.

Conn., Hartford—Church—Central Baptist Church having plans prepared by I. A. Allen, Jr., Inc., 100 Farmington Ave., church, Main and Elm Sts. $500,000. H. S. Spencer, 280 Sigourney St., secy. Noted Apr. 12.

Conn., Hartford — Laboratory — Trinity College Corp. plans laboratory, probably red sandstone, plain foundation, Zion St. To exceed $150,000. R. B. Ogilby, pres. Trowbridge & Livingstone, 527 5th Ave., New York City, archts.

Conn., Hartford — School — Northwest School Dist. plans brick, plain foundation, Vine St. $300,000. H. V. Tuttle, 134 Edgewood St., member School Bd. Engineer and architect not selected.

Conn., Hartford — Store and Office — Nirenstein & Schwartz, 1247 Main St., having plans prepared by Berenson & Moses, 30 Allyn St., 3 story (ultimately 5 story), 60 x 120 ft., brick and steel, plain foundation, Main St. $150,000.

Conn., Meriden — Bank, etc.—Meriden Savings Bank, 63 East Main St., having preliminary sketches made by Holmes & Winslow, 134 East 44th St., New York City, brick and stone, plain foundation, East Main and Crown Sts., $165,000. Noted May 17.

N. Y., Brooklyn—Hospital—Bikur-Cholim Hospital, Lafayette and Summer Aves., having plans prepared by A. Weiser, archt. and engr., 9 West 48th St., New York City, 7 story, brick, steel and stone, plain foundation. $1,000,000.

N. Y., Brooklyn — Synagogue—Talmud Torah of Flatbush, c/o M. Courland, archt. and engr., 389 5th Ave., New York, having plans prepared 3 story, 100 x 150 ft., brick, steel and stone, plain foundation, Coney Island Ave., here. $200,000.

N. Y., Kew Gardens (Jamaica, P. O.)—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone, plain foundation, Kew Gardens Rd., here. $300,000.

N. Y., New York — Apartment — Octo Building Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., having plans prepared 14 story, 100 x 136 ft., brick, steel and stone, plain foundation, Bway. and 88th St. $1,500,000.

N. Y., New York—Apartments—Two Hundred Forty-Five West 74th St. Corp., c/o Sugarman, Hess & Berger, archts. and engrs., 16 East 43rd St., had plans prepared two 9 story, 80 x 102 ft., brick, steel and stone, plain foundations, West 74th St.

N. Y., New York—Museum and Office—French Institute, c/o J. H. Freedlander, archt. and engr., 681 5th Ave., having plans prepared 10 story, 44 x 100 ft., brick, steel and stone, plain foundation, 20-22 East 60th St. $375,000.

N. Y., New York—Office—New York Times, Bway. and 42nd St., had plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., altering 24 story, brick, steel and stone, Bway. and 42nd St. $150,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., received no bids July 5, 5 story, brick, steel and stone addition to P. S. 30, plain foundation, Brook Ave. Noted May 21.

N. Y., New York—School—Bd. Educ., 500 Park Ave., rejected bids June 22, P. S. 73, West 166th St. Will readvertise. Noted June 28.

N. Y., New York—Womens Court and Detention House—City soon takes bids brick, steel and stone, plain foundation, 135 West 30th St. $600,000. Private plans.

Buildings (Continued)

N. Y., Sodus—High School—Bd. Educ. having plans prepared by M. Umbrecht, Fayette Park Bldg., Syracuse, brick. $195,000.

N. Y., Syracuse—School—Bd. Contr. & Supply soon takes bids Danforth Normal School, 2 story and basement, 166 x 257 ft., brick, stone, steel, concrete and rein.-con., West Kennedy St. $400,000. Randall & Vedder, S.A.K. Bldg., Syracuse, archts. Noted Jan. 11.

N. J., Newark—Store—Goerke Co., Halsey and Broad Sts., soon takes bids three 8 story brick, steel and stone additions, plain foundations. $5,000,000. W. E. Lehman & Co., 738 Broad St., archts. and engrs.

Pa., Corapolis—Church—Corapolis Methodist Episcopal Church having plans prepared by T. B. and L. Wolfe, Century Bldg., Pittsburgh, 1 story, 65 x 142 ft. stone, State St., here. $150,000.

Pa., Franklin—Bank—Exchange Bank of Franklin, having plans prepared by W. L. Stoddard, 50 East 41st St., New York City, 3 story and basement, 68 x 85 ft., limestone or artificial stone, brick, granite and marble, 13th and Liberty Sts. $200,000.

Pa., Oil City — Church — Holy Trinity Methodist Episcopal Church plans brick and stone church. $200,000. C. W. Bolton & Son, Witherspoon Bldg., Phila., archts. Noted Feb. 22.

Pa., Williamsport — Lodge — Knights of Malta 112 West 4th St., raising fund with which to construct 3 story and basement, 100 x 110 ft., brick, steel and limestone. $150,000.

Pa., Windber—School—Bd. Educ. takes bids this summer, 3 story and basement, 100 x 120 ft., brick and concrete. $170,000 bonds voted. W. F. Kerr, Windber, archt.

Md., Baltimore — Apartment — B. L. Brown, Wash., D. C., having plans prepared by F. A. Fletcher, 407 North Charles St., 10 story, 80 x 135 ft., concrete and brick, plain foundation, Charles and 34th Sts., here. $400,000.

D. C., Wash.—Apartment—Stern & Tomlinson, archts., Continental Bldg., preparing plans apartment house, 2745 Connecticut Ave., N.W. $250,000. Owners name withheld.

W. Va., Bluefield — Municipal — Voted $850,000 bonds for municipal building, paving, sewers and parks. E. C. Barton, city engr.

W. Va., Fairmont—Club—B.P.O.E. having preliminary plans prepared by J. C. Burchinal, Fairmont, 4 story and basement, 80 x 160 ft., brick and steel, Adams St. $250,000.

W. Va., Huntington—School—Huntington Independent School Dist. sold $225,000 bonds for school. W. H. Chapman, mayor.

W. Va., Institute — Educational — West Virginia Bd. of Control, Charleston, having plans prepared by Warne, Tucker & Patterson, Masonic Bldg., Charleston, 3 story and basement, 72 x 212 ft., brick, stone, steel and tile, here. $300,000.

N. C., Charlotte—Office—Southern Ry. Co., 4th and Sycamore St., Cincinnati, O., having sketches made by S. S. and G. H. Godley, 307 East 4th St., Cincinnati, O., 3 story, 107 x 138 ft., rein.-con., brick and stone, West Trade St. along tracks of Southern Ry. $150,000.

N. C., Greensboro—College—North Carolina College for Women plans music building on campus. $175,000. J. T. Foust, pres. Engineer and architect not announced.

N. C., Greensboro—College—North Carolina College for Women, plans physical education building on campus. $225,000. J. I. Foust, pres. Engineer and architect not announced.

N. C., Greensboro—Office—Cone Export & Commission Co., having plans prepared by H. Barton, Greensboro, 3 story, 100 x 100 ft., Greene St. $150,000-$200,000. J. W. Cone, pres.

N. C., Hickory—High School—City election July 31, to vote on $300,000 bonds for high school, on Claremont property.

Fla., Miami—Hotel—Ponce De Leon Co., c/o F. V. Newell, archt., Miami, plans 9 story, 85 x 110 ft., rein.-con., 227-235 Flagler St. $500,000.

Ala., Tuscaloosa—Schools—Voted $250,000 bonds for new high school and $250,000 bonds for remodeling old buildings and other improvements. Noted May 10.

La., Baton Rouge—Hotel—S. I. Raymond, Istrouma Hotel, plans 8 story, 200 room, rein.-con. and brick, plain foundation. $500,000. Engineer and architect not announced.

WATER MAIN—CLEVELAND, OHIO

Following are lowest three bids opened by Dept. Pub. Utilities, Div. of Water, June 22, for furnishing and laying Random Rd. Main, Contr. No. 31, Baldwin-Fairmount Project (A) Joseph Co., 3081 West 14th St.; (B) P. F. Connolly Co., 2029 East 102nd St.; (C) Langenhan Constr. Co., 408 Marshall Bldg.; contractors all of Cleveland. The unit bids were as follows:

	A	B	C
8,500 cu.yd. excavation and backfilling	$5.00	$5.90	$7.20
12 M.Ft.B.M. lumber and wooden sheeting, left in place	50.00	100.00	50.00
1,045 ton furnishing and laying cast iron, straight, bell and spigot pipe	83.00	93.00	90.00
12 ton furnishing and laying cast iron flanged, flanged and spigot, and flanged and bell pipe	180.00	200.00	190.00
40 ton furnishing and laying cast iron, bell and spigot standard fittings	150.00	200.00	180.00
8 ton furnishing and laying cast iron, bell and spigot special fittings	190.00	225.00	190.00
3 ton furnishing and laying cast iron, flanged fittings	200.00	225.00	190.00
Setting three 24-in. valves furnished by City	90.00	100.00	100.00
Setting eight 20-in. valves furnished by City	90.00	100.00	90.00
Setting one 16-in. valve furnished by City	80.00	25.00	70.00
Setting two 12-in. valves furnished by City	70.00	25.00	50.00
Setting two 10-in. valves furnished by City	40.00	25.00	50.00
35 cu.yd. brick masonry	28.00	30.00	40.00
30 cu.yd. concrete masonry	20.00	30.00	40.00
500 lb. steel reinforcement and miscellaneous wrought iron	.10	.20	.10
250 ft. furnishing and laying 12-in. vitrified pipe drains	2.50	5.00	3.00
200 ft. furnishing and laying 10-in. vitrified pipe drains	2.50	4.00	2.80
200 ft. furnishing and laying 8-in. vitrified pipe drains	2.25	3.00	2.50
300 ft. furnishing and laying 6-in. vitrified pipe drains	2.00	2.00	2.00
300 ft. furnishing and laying 4-in. vitrified pipe drains	1.00	1.00	1.50
9 sets furnishing and setting 2-in. brass drains; and setting 2-in. valves and valve-boxes, furnished by the City	35.00	50.00	20.00
200 ft. furnishing and laying 2-in. galvanized iron pipe	1.00	1.50	2.50
8 ton furnishing and delivering surplus 24-in. cast iron pipe, and fittings	50.00	50.00	50.00
Extended totals	$146,425	$169,385	$175,300

PIPE LINE—SAN FRANCISCO, CALIF.

Following are lowest three bids opened by City and County of San Francisco for Bay Crossing pipe line, Contr. No. 90, Hetch Hetchy Project, (A) Western Pipe & Steel Co., 444 Market St., (awarded contract); (B) Bethlehem Shipbuilding Corp., 20th and Illinois Sts.; (C) Moore Shipbuilding Co., Balfour Bldg.; contractors all of San Francisco. The unit bids were as follows:

Groups R. L. W and X	A	B	C
31,040 lin.ft. pipe of 7/16 in. plate not including pipe on trestle and bridge	$19.72	$21.74	$29.00
17,560 lin. ft. pipe of 7/16 in. plate, Newark Sect., on trestle and bridge	20.15	21.74	29.00
32,000 lin.ft. pipe of 7/16 in. plate, Redwood Sect., not including pipe on trestle	19.72	21.74	29.00
6,000 lin.ft. pipe of 7/16 in. plate, Redwood Sect., on trestle and bridge	20.15	21.74	29.00
5,370 lin.ft. pipe of ⅜ in. plate, Redwood Sect	17.68	19.89	28.50
10,670 lin.ft. pipe of 5/16 in. plate, Redwood Sect	16.78	18.24	28.73
All Groups			
5 expansion joints for pipe of 5/16 in. plate	$559.00	$1,587.00	$600.00
30 expansion joints for pipe of ⅜ and 7/16 in. plate	589.50	1,587.00	624.00
55 manholes	96.00	178.40	197.00
8,000 lb. reinforcing plates, bumped heads, and structural steel	0.23	0.01½	0.10
*15,000 lb. installing castings furnished by city	0.17	0.01½	0.03
*30,000 lb. laying c. i. pipe furnished by city	0.03	0.02	0.03
30,000 lb. installing metal work furnished by city, not included in items marked *	0.09	0.03	0.05
63,000 cu.yd. earth excavation, Newark Sect., Group R	1.08	1.00	1.10
50 cu.yd. rock excavation, Newark Sect	4.03	4.00	4.40
100,000 cu.yd. earth excavation, Redwood Sect., Group R	1.08	1.00	1.10
500 cu.yd. rock excavation, Redwood Sect	4.03	4.00	4.40
100 cu.yd. dry rubble masonry	5.05	5.00	5.50
650 cu.yd. concrete, Class A	30.25	35.00	38.50
50 cu.yd. concrete, Class B	40.30	50.00	55.00
15 bbl. extra cement	5.05	5.00	5.50
8,000 lb. reinforcing steel	0.10	0.15	0.16½
150 cu.yd. crushed rock in drains	5.05	5.00	5.50
1,000 lin.ft. 6 in. underdrains	0.50	1.25	1.37½
6,000 sq.ft. broken rock pavement	0.20	0.20	0.22
1,000 sq.ft. asphaltic surface on broken rock pavement	0.30	0.30	0.33
Extended totals (approximate)	$2,231,661	$2,450,115	$3,225,397

COAGULATION BASINS—CLEVELAND, OHIO

Bids were opened by Dept. of Pub. Utilities, Div. of Water, May 25, for coagulation basins at Baldwin Filtration Plant, Contr. No. 44, Baldwin-Fairmount Project, (A) Stange-Walsh Constr. Co., 2315 Fairmount Rd., Cleveland, (awarded contract); (B) P. F. Connolly Co., 2029 East 102nd St., Cleveland; (C) E. J. Gass, 1636 Calvert Ave., Detroit, Mich. The unit bids were as follows:

	A	B	C
21,800 cu.yd. excavation	$5.00	$2.50	$4.50
85,800 cu.yd. backfill	.40	2.00	1.00
12,800 cu.yd. concrete in foundations and drains	23.00	20.00	20.00
3,260 cu.yd. concrete in sub-floors	23.00	20.00	17.00
6,450 cu.yd. concrete in floors of basins	23.00	20.00	17.00
7,350 cu.yd. concrete in walls, beams and slabs	23.00	25.00	31.00
10,410 cu.yd. concrete in arches, columns and stiffening walls	23.00	25.00	38.00
50 cu.yd. miscellaneous concrete	23.00	30.00	31.00
50 bbl. additional portland cement	4.00	5.00	3.00
810 cu.yd. crushed stone around drains and weepers	5.00	5.00	4.00
360 cu.yd. cinders around drains	3.00	3.00	1.50
2,812,000 lb. reinforcing steel	.05	.07	.045
34,000 lb. structural steel	.10	.10	.10
82,400 lb. miscellaneous wrought iron and steel	.10	.12	.13
44,000 lb. miscellaneous cast iron	.10	.10	.12
275 lb. miscellaneous bronze	1.00	1.00	1.00
108 ton straight B. and S. cast iron pipe	80.00	80.00	115.00
5 ton standard B. and S. cast iron fittings	170.00	160.00	225.00
1 ton special B. and S. cast iron fittings	230.00	225.00	285.00
70 ton cast iron drains	80.00	70.00	120.00
31 ton flanged pipe and fittings	250.00	300.00	315.00
18 5 x 7 ft. sluice gates	1,800.00	3,000.00	2,450.00
6 5 x 7 ft. wall castings	300.00	400.00	390.00
24 20-in. mud valves	300.00	400.00	355.00
4 16-in. sluice gates	300.00	400.00	400.00
8 12-in. sluice gates	300.00	350.00	325.00
6 4-in. flush hydrants	100.00	100.00	75.00
3 8-in. valves, bell ends	50.00	100.00	60.00
10 6-in. flanged valves	30.00	50.00	45.00
6 4-in. flanged valves	20.00	40.00	25.00
112 2½-in. hose gates and fittings	15.00	25.00	12.00
Miscellaneous valves and W. I. pipe, (lump sum)	100.00	200.00	35.00
1,870 lin.ft. 6-in. vitrified pipe drains	.50	1.00	.40
Stop and weir planks (lump sum)	1,000.00	1,250.00	2,300.00
11,500 lb. copper expansion joints	.50	.50	.34
58,700 lb. bituminous filler	.05	.08	.05
320 sq.ft. brass screens	1.50	1.00	1.15
95 lin.ft. 2-in. iron pipe hand rail	4.00	5.00	5.80
Main drain (lump sum)	50,000.00	30,000.00	35,000.00
Extended totals	$1,365,425	$1,485,249	$1,519,663

Buildings (Continued)

La., New Orleans—Store—M. Barnett Furniture Co., Inc., Baronne St., plans 8 story, modern construction, Carondelet and Lafayette Sts. $300,000.

Tenn., Dyersburg — Bank and Office — First Citizens Bank Bldg., soon takes bids 6 story, 50 x 75 ft., brick, concrete and stone. $250,000. Spencer & Phillips, Goodwyn Institute Bldg., Memphis, archts.

Tenn., Memphis—Fire Houses—City sold $150,000 bonds 3 fire houses, one on 3rd and Linden Sts., one on Binghampton St. and other on Tri-State Fair Grounds. W. B. Fowler, city engr.

Tenn., Memphis—Hospital—H. J. Kramer, archt., 632 Goodwyn Institute, takes bids about Oct. 1, 3 story, and basement, 50 x 210 ft., rein.-con., tile and brick, Summer Ave., for Sisters of St. Francis. $300,000.

Tenn., Memphis—Jail—City voted $300,000 bonds jail on Washington St. W. B. Fowler, city engr.

Ky., Ashland — Library — Bd. Directors Pub. Library plan library. $150,000. J. O. Mathewson, pres. Engineer and architect not selected.

Ky., Louisville—Club—Knights of Columbus, 816 4th St., plans 130 x 200 ft. club house, probably 6 story, 4th St. near York St. $600,000. Engineer and architect not selected.

Ky., Louisville—Hospital—D. X. Murphy & Bro., archts., Louisville Trust Bldg., take bids about Aug. 10, 5 story, on 19 acre site, Eastern Parkway and Preston St., for St. Josephs Infirmary, 637 4th St. $1,500,000.

O., Canton—Store and Parish House—First Methodist Episcopal Church having plans prepared by W. T. Mills, 67 East Long St., Columbus, 4 story, 65 x 100 ft., 2nd Ave. and Cleveland Ave. S. W. $155,000 or more.

O., Cleveland—Apartment—Adler Bros., 11516 Temblett Ave., having plans prepared by M. Weis, 617 Union Bldg., 2 story and basement, 100 x 138 ft., brick and timber, Lake Ave. near West 117th St. $150,000.

O., Cleveland—Apartment, etc.—Euclid-81st Realty Co., c/o J. H. MacDowell, archt., Court House, having plans prepared 1 and 4 story, brick, steel and concrete garage and apartment addition, 8104 Euclid Ave. $150,000.

O., Cleveland—Y.M.C.A., 2200 Prospect Ave., plans brick, steel and concrete, on lot 136 x 181 ft., Carnegie Ave. and Fairmount Rd. $300,000. Hubbell & Benes, 4500 Euclid Ave., archts.

O., Columbus—Hotel—Neil House Co., Majestic Bldg., cancelled contract for hotel, about 17 story, 162 x 187 ft., brick, stone and terra cotta, South High St. $4,000,000. New Plans to be drawn by G. Drach, 1701 Union Trust Bldg., Cincinnati.

O., Shaker Heights (Cleveland P. O.—School—University School, c/o A. C. Brown, 4403 St. Clair Ave., Cleveland, having plans prepared by Walker & Weeks, 1900 Euclid Ave., Cleveland, group of school buildings, 2 and 4 story, brick, steel and concrete, North Woodland Rd. here. $1,000,000.

O., Sylvania—High School—Bd. Educ. plans 2 story and basement, fireproof. $150,000. Engineer and architect not selected.

O., Wapakoneta — High School — Bd. Educ. having sketches made by F. L. Packard, New Hayden Bldg., Columbus, brick and concrete. $165,000.

O., Zanesville—High School—Bd. Educ. having sketches made by F. L. Packard, New Hayden Bldg., Columbus, brick and concrete. $150,000 or more.

Mich., Detroit—Bank—First State Bank, Griswold St. and Lafayette Blvd., having plans prepared by A. Kahn, 1000 Marquette Bldg., 4 story and basement, brick, steel, rein.-con. and stone, plain foundation. $500,000. Noted Dec. 28.

Mich., Ypsilanti—High School—Bd. Educ. having plans prepared by Smith, Hinchman & Gryllis, 800 Marunette Bldg., Detroit, 2 story and basement, 75 x 400 ft., brick, steel and rein.-con., plain foundation.

Ill., Duquoin — Church — First Baptist Church having plans prepared by Dougherty & Gardener, Stahlman Bldg., Nashville, 2 story, 97 x 118 ft., brick, $150,000. R. C. F. Kelly, pastor.

Ill., Edwardsville — High School — Bd. Educ. having plans prepared by M. Kane, Bohn Bldg., 2 story and basement, rein.-con. and brick, for Dist. 77. $300,000.

Ill., Edwardsville—Hospital—Madison Co. Tuberculosis Sanitarium, c/o C. H. Dorris, secy., Collinsville, plans 2 and 3 story, rein.-con. and brick, near here. $200,000. Architect not announced.

Wis., Kenosha—Church—St. Matthews Episcopal Congregation, c/o M. J. Van Zandt, 256 Park Pl., having preliminary plans prepared by H. C. Haeuser, 445 Milwaukee St., Milwaukee, altering and building 2 story addition, stone and concrete, plain foundation. $150,000.

Wis., Madison—Apartment—M. Woldenburg, 54 West Kinzie St., Chicago, plans 5 story, rein.-con., brick and steel, plain foundation, State and Hawthorne Sts. $300,000. Engineer and architect not selected.

Wis., Madison — Auditorium — Madison Auditorium Co., 357 Washington Blvd., having plans prepared by Balch & Lippert, Gay Bldg., 3 story, 84 x 88 ft., brick, rein.-con. and steel plain foundation, Main St. $350,000. Noted May 17.

Wis., Madison—Church—Grace Episcopal Church, c/o H. H. Lumpkin, 116 West Washington St., having plans prepared by Otis & Fuller, 6 North Michigan Ave., Chicago, 3 story, 60 x 95 ft., rein.-con., steel and brick, plain foundation, Carroll St. $150,000. Noted July 28.

Wis., Madison—Church and Auditorium—Parkside Presbyterian Church, c/o W. D. Williams, pastor, 1418 East Dayton St., having plans prepared by E. Tough, Conklin Bldg., 3 story, 60 x 112 ft., brick, rein.-con. and stone, plain foundation, Few St.

Wis., Madison — Sanitarium — Madison Medical & Benevolent Assn., c/o R. S. Ingersoll, Lakeside, plans 3 story, 45 x 105 ft., brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Dormitory—Milwaukee-Downer College, 530 Hartford Ave., plans brick, tile and concrete, plain foundation. $150,000. Engineer and architect not selected.

Wis., North Milwaukee—High School—Joint School Dist. 17, having plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., Milwaukee, 2 story and basement, brick, tile and concrete, plain foundation, Custer Ave. $150,000.

Wis., Oshkosh—Bank—Old Commercial Natl. Bank, Main and Washington Sts., plans brick or stone and concrete, plain foundation, Main St. and Algoma Blvd $200,000. Engineer and architect not selected.

Wis., Oshkosh—School—Bd. of Normal Regents, Capitol, Madison, plans 4 story, rein.-con., brick and steel, plain foundation. $155,000 appropriated by State Legislature. W. J. Kettle, secy. Engineer and architect not selected.

Wis., Racine—Church—Holy Communion English Lutheran Congregation, 1013 Center St., plans 2 story, brick and tile, plain foundation, 8th St. and Park Ave. $150,000. Engineer and architect not selected.

Wis., Racine — Church — Holy English Lutheran Congregation, c/o G. W. Genszler, pastor, 1013 Center St., plans 1 or 3 story, 120 x 120 ft. brick, rein.-con. and steel, plain foundation, 8th and Park Sts. $155,000. Engineer and architect not selected.

Wis., Wauwatosa — Home — Evangelical Lutheran Kinderfreund Society, West Milwaukee Ave., had plans prepared by R. Messmer & Bros., 221 Grand Ave., Milwaukee, 3 story and basement, 80 x 165 ft., brick and concrete, plain foundation, West Main St. $150,000. Architects taking bids on excavation.

Ia., Marion—High School—Election soon to vote on $150,000 bonds for 3 story and basement, rein.-con., brick and stone, for Bd. Educ. W. J. Brown, 201 Amer. Trust Bldg., Cedar Rapids, archts. Noted June 14.

Minn., Fosston—High School—Bd. Educ. having plans prepared by C. B. Funk, 1st Natl. Bank Bldg., Bemidji, 3 story and basement, rein.-con., brick and stone. $150,000.

Kan., Dodge City—Hospital—Sisters of St. Joseph having preliminary plans prepared by Lorentz, Schmidt & Co., 516 4th Natl. Bank, Wichita, brick, here. $150,000.

Kan., Iola—School—Bd. Educ. had plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 90 x 140 ft., rein.-con. brick and stone. $150,000. Noted May 10.

Kan., Topeka—Hospital—Amer. Hospital Assn. having preliminary plans prepared rein.-con., brick and stone, 6th St. $500,000. Private plans.

Kan., Wichita—Office—W. L. Mattheus, 511 1st Natl. Bank Bldg., plans 12 story, 100 x 140 ft., rein.-con. and steel, North Main St. $700,000. Engineer and architect not selected.

Mo., Bowling Green—High School—Bd. Educ. rejected bids June 8, 2 story, rein.-con. and brick, plain foundation. $150,000. Will modify plans and readvertise. Noted May 24.

Mo., Hannibal—Schools—Bd. Educ. having plans prepared by M. S. Ma[illegible], Holmes Bldg., new schools incl. 1 high and 2 grade schools, also improving and re[illegible] other schools. $600,000 bonds voted.

Mo., Joplin—Memorial—July [illegible] to vote on $250,000 bonds for memorial. Engineer and architect not selected.

Mo., Kansas City—Hospital—J. O. Hogg, archt., 22nd and Oak Sts., preparing plans and takes bids in fall, 12 story and basement, 190 x 230 ft., rein.-con., brick and steel, 31st and Tracey Sts., for Heart of America Hospital, c/o architect. $2,000,000. W. E. Gillham, 409 Interstate Bldg., mechanical engr. Noted May 17.

Mo., Kirksville—High School—Bd. Educ. having plans prepared by I. Dunbar, c/o owner, 2 story and basement, rein.-con. and brick, plain foundation. $150,000. Noted Feb. 22.

Mo., St. Charles—Hospital—Sisters of St. Mary, 2nd and Clay Sts., having plans prepared by V. J. Klutho, 915 Syndicate Trust Bldg., St. Louis, 3 story and basement, 50 x 75 ft., brick and concrete, plain foundation. $150,000.

Ark., Conway—Gymnasium and Dormitory—Hendrix College having plans prepared by H. C. Hibbs, 4th and 1st Natl. Bank Bldg., Nashville, Tenn., for gymnasium and dormitory. $200,000.

Tex., Dallas—Apartment—Clarke & Reed 2525 Oak Lawn Ave., having plans prepared by D. D. Swindle, archt. and engr. 1707½ Main St., 4 or 5 story and basement, concrete and brick, plain foundation. $400,000.

Tex., Dallas—Arts and Auditorium—J. P. Burrus, Interurban Bldg., F. Wozencraft, Wilson Bldg., and others, having plans prepared by R. H. Hunt & Co., archts. and engrs., Great Southwestern Life Bldg., 6 story and basement, 125 x 200 ft., steel, concrete and brick, Johnson and Poydras Sts. $750,000.

Tex., Dallas—Office—Lone Star Gas Co., Southwestern Life Bldg., having plans prepared by Lang & Witchell, archts. and engrs., Amer. Exch. Natl. Bank Bldg., and takes bids about Aug. 20, 4 story and basement, (ultimately 12 story), 83 x 90 ft., brick and concrete, plain foundation, Harwood and Wood Sts. $175,000.

Tex., Denton—Schools—Bd. Educ. having plans prepared by W. G. Clarkson, engr. and archt., 1st Natl. Bank Bldg., Ft Worth, and takes bids in late summer Ward School and High School, 2 and 3 story and basement, brick and rein.-con. plain foundation. $40,000 and $160,000 respectively.

Tex., Eastland—Hotel—A. and C. Garner, Dublin, plan 4 story and basement, hotel and chamber of commerce auditorium, brick and rein.-con., plain foundation, West Main St., here. $200,000. Engineer and architect not announced.

Tex., San Antonio—Hotel—Daly-Moffatt Hotels Inc. plans 3 story, 140 x 160 ft., rein.-con., tile and stucco, concrete pile foundation. $500,000. Engineer and architect not selected.

Okla., Muskogee — School — Election in October to vote on $150,000 bonds for school.

Colo., Ft., Collins—Administration—Colorado State Agricultural College rejected bids, 3 story, 55 x 137 ft., stone, terra cotta, steel and tile. $165,000. E. Groves, Foster Bldg., Denver, archt. Noted May 24.

Colo., Ft. Collins—High School—School Dist. 5, Larimer Co. having plans prepared by W. N. Bowman, Central Savings Bank Bldg., Denver, for high school. $400,000.

Ore., Bishops Meadows — See "Miscellaneous."

California—Theatre—A. A. Cantin, archt., Foxcroft Bldg., San Francisco, preparing sketches for moving picture theatre, San Mateo Co. $150,000. Owner's name withheld.

Calif., Auburn — Hospital, Jail, etc. — Placer Co. defeated $175,000 bonds for hospital and $100,000 for jail and courthouse. Noted Feb. 15.

Calif., Fillmore—High School—Fillmore High School Dist., having plans prepared by N. F. Marsh, Bway. Central Bldg., Los Angeles, high school, rein.-con. $150,000. Noted May 10.

Calif., Fresno—Courthouse—Fresno Co. had preliminary plans prepared by E. Mathewson, Cory Bldg., courthouse addition, fireproof, $200,000 or more. D. M. Barnwell, clk.

Buildings (Continued)

Calif., Glendale—Hotel and Store—H. W. Charlton, archt., San Fernando Bldg., Los Angeles, revising plans 4 story and basement, brick, Lomita St. $165,000. Owners name withheld.

Calif., Glendale—Hotel and Store—Glendale Hotel Co. (recently organized), plans 4 story and basement, brick, California St. $250,000 or more. R. F. Kitterman, 311 North Kenwood Ave., interested. Engineer and architect not selected.

Calif., Huntington Beach—School—Huntington Beach School Dist., soon takes bids 1 and 2 story school, brick. $150,000 or more. Former bids rejected. J. C. Smith, I. W. Hellman Bldg., Los Angeles, archt. Noted June 28.

Calif., Long Beach—Club—Pacific Club, c/o R. Davies and E. J. Baume, archts., Marine Bank Bldg., having preliminary plans prepared club, fireproof, probably 8 story. To exceed $150,000.

Calif., Los Angeles—Apartment—S. Reis, c/o Monaco & Bordeaux, archts., Bank of Italy Bldg., having plans prepared 4 story and basement, brick, Serrano St. $150,000.

Calif., Los Angeles—High School—City had plans prepared by Russell & Alspaugh, Story Bldg., group of 3 buildings, 1 and 2 story, for Sawtelle High School, Texas and Bonneville Sts. $350,000.

Calif., Los Angeles—Hospital—St. Vincent Hospital, 1151 Sunset Blvd., having plans prepared by J. G. Austin, Baker-Detwiler Bldg., group of hospital buildings and separate structure for heating plant, rein.-con., brick and steel, Sunset Blvd. $1,000,000 or more.

Calif., Los Angeles — Hotel — Syndicate having plans prepared by Russell & Alspaugh, Story Bldg., 11 story and basement, 60 x 96 ft., rein.-con., 6th and Columbia Sts. $400,000.

Calif., Los Angeles—Loft and Store—Revolving Fund Corp., c/o W. D. Lee, archt., Sun Drug Bldg., soon takes bids 6 story and basement, 95 x 160 ft., rein.-con., Winston and San Pedro Sts. Noted June 7.

Calif., Los Angeles—School—City had plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 3 story, brick, 24 classrooms and auditorium, Washington and Hope Sts. To exceed $250,000.

Calif., Los Angeles—School—City had plans prepared by Noerenberg & Johnson, Los Angeles Ry. Bldg., 3 story (ultimately 6 story), rein.-con. and brick, incl. gymnasium and auditorium, 16th St. To exceed $300,000.

Calif., Los Angeles—Store—E. O. Palmer, 6424 Yucca St., had plans prepared by Allison & Allison, Hibernian Bldg., 4 story and basement, rein.-con. To exceed $250,000.

Calif., Marysville—High School—Feather River Union High School Dist., having plans prepared by Dean & Dean, City Library Bldg., 9th and I Sts., Sacramento, high school, probably fireproof. $150,000 or more.

Calif., Oakland—Store and Hall—Central Bank, Central Bank Bldg., plans 2 story, fireproof, Bway. near 19th St. $150,000. Engineer and architect not selected. W. L. Sweet, 480 20th St., lessee.

Calif., Pasadena—Home—National Benevolent Assn., c/o R. H. Orr, archt., Corporation Bldg., Los Angeles, having plans prepared group of buildings, brick and stone. $250,000.

Calif., Petaluma — Bank — Sonoma Co. Natl. Bank, c/o H. H. Winner Co., Sharon Bldg., San Francisco, having plans prepared 1 story and basement, rein.-con. $150,000.

Calif., Pomona — School — Pomona High School Dist. to vote on $150,000 bonds for additional buildings at high school.

Calif., Redondo—School—Redondo High School Dist. having plans prepared by Allison & Allison, Hibernian Bldg., Los Angeles, 2 story, brick. $150,000.

Calif., Richmond—Lodge—Masonic Hall Assn., c/o J. T. Narbett, archt., 910 Macdonald Ave., having plans prepared lodge, fireproof, Nevin St. near 7th St. $150,000.

Calif., Sacramento — Club — Sacramento Athletic Club, c/o L. Starks, archt., Ochsner Bldg., having plans prepared 4 story and basement, rein.-con. $600,000.

Calif., Sacramento—Office—Lawyers Cooperative Assn. of Sacramento, c/o E. C. Hemmings, archt., Ochsner Bldg., having preliminary plans prepared 7 story and basement, rein.-con., brick and terra cotta, 7th St. between I and J Sts. $200,000.

Calif., Sacramento—Store and Lodge—Elks Club, c/o E. C. Hemmings and L. F. Starks, archts., Ochsner Bldg., having plans prepared 5 story and basement, 100 x 160 ft., fireproof, 11th and J Sts. $1,000,000.

Calif., Sacramento—Theatre—Paramount Corp., c/o L. Starks, archt., Ochsner Bldg., takes bids in September, theatre, rein.-con. and steel, K St. near 10th St. $350,000. Noted June 1.

Calif., San Francisco—Apartment—C. H. Barrett, archt., Hotel Washington, preparing plans 6 story and basement, concrete, Bush and Mason Sts. $150,000. Owner's name withheld.

Calif., San Francisco—Apartment—M. Gnecco, 180 Jessie St., having plans prepared by E. E. Young, 2002 California St., 5 story and basement, rein.-con., Bway. between Webster and Steiner Sts. $150,000 or more.

Calif., San Francisco—Apartment—L. B. Ham, 105 Montgomery St., had plans prepared 6 story and basement, concrete, Sutter and Leavenworth Sts. $150,000. Private plans.

Calif., San Francisco — Apartment — G. Perego, 159 Sutter St., had plans prepared by W. C. Mahoney, 892 Union St., 5 story and basement, brick, Washington St. near Franklin St. $150,000 or more.

Calif., San Francisco—Exchange—Pacific Telephone & Telegraph Co., 333 Grant Ave., having plans prepared telephone exchange, Bush and Larkin Sts. $300,000. Private plans.

Calif., San Francisco — Office — Pacific Telephone & Telegraph Co., 333 Grant Ave., having preliminary plans prepared 20 story, New Montgomery St. $2,000,000. Private plans.

Calif., Stockton—City Hall—City Council rescinded contract for city hall, fireproof, on block bounded by El Dorado, Center, Fremont and Lindsey Sts. $600,000. J. Pearce, J. Losekann and P. Sala, Delta Bldg., archts. Noted July 5.

Calif., Stockton—Store—F. W. Woolworth Co., Rialto Bldg., San Francisco, plans store, Main St., here. $150,000.

Calif., Ventura—Bank—Bank of Italy, Powell and Market Sts., San Francisco, plans 1 or 2 story, 50 x 100 ft., probably rein.-con. with terra cotta exterior. $150,000 or more. W. Cuneo, 550 Montgomery St., San Francisco, constr. mgr.

Que., Montreal — Office — Bleury-Concord Co., Ltd., c/o A. L. Caron, 168 St. Catherine Rd., Outremont, takes bids in July, 10 story, 112 x 136 ft., steel, Bleury St. $700,000.

Que., Montreal—Temple—Masonic Temple Order of Province of Quebec plans 100 x 130 ft. $500,000. J. J. York, 2275 Notre Dame St. E., chn. building com.

Que., Outremont—School—Bd. Protestant School Trustees plans 4 story, Lajoie St. $300,000. R. A. Eaton, chn.

Ont., Oshawa—School—Bd. Educ. having plans prepared by Hutton & Souter, Bank of Hamilton Bldg., Hamilton, 2 story and basement, rein.-con., brick and steel, Simcoe St. N. $150,000.

Ont., Timmins—School—Timmins High School Bd. receiving competitive sketches 2 story and basement, 8 room rein.-con. and brick, plain foundation. $150,000-$200,000.

Ont., Toronto — Office — Manufacturers' Life Insurance Co., Dominion Bank Bldg., having plans prepared by Sproatt & Ralph, 36 North St., 8 or 10 story, rein.-con. or structural steel and brick, plain foundation, Bloor St. E. $1,000,000.

Ont., Toronto—School—St. Columba Presbyterian Church, c/o W. A. MacTaggart, pastor, 227 Westmount Dr., plans Sunday School, rein.-con., brick and steel. $150,000. Engineer and architect not selected.

Ont., Trenton—School—Bd. Educ. plans 2 story and basement, 8 or 10 room, rein.-con., brick and steel, plain foundation. $150,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Ware—High School—July 24, by School Building Comn. at office of Ware Woolen Co., 10 Maple St., for junior high school, 2 story and basement, 60 x 100 ft. with 40 x 70 ft. addition, rein.-con. and brick, plain foundation. $200,000. J. D. Leland & Co., 41 Mt. Vernon St., Boston, archts. Noted June 21.

Conn., Hartford—Business—Nirenstein & Schwartz, 1247 Main St., taking bids and opens same about July 14, 3 story, 60 x 120 ft., brick and steel, plain foundation, Main St. $150,000. Berenson & Moses, 30 Allyn St., archts. Noted Jan. 18.

Conn., Mansfield—Hospital, etc.—July 16 by F. M. Salmon, comptroller, State Capitol, Hartford, 3 story nurses' home, $195,000; 2 story dormitory $105,000; 2 story hospital, $140,000; all foregoing brick, plain foundations, at Mansfield State Training School, here. Noted Mar. 29.

N. Y., Fultonville—School—July 17, by Bd. Educ. new Union Free School. To exeed $150,000. G. W. Conable, 46 West 24th St., New York City, archt. Noted Feb. 1.

N. Y., New York—Apartment—Bandes Bros., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., 5 story, brick, steel and stone, plain foundation, St. Nicholas and Wadsworth Aves. $150,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Schools—July 24, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 74, Crotona Ave. and East 189th St., also P. S. 79, East 181st St. between Morris and Creston Aves., here. Noted June 7.

N. Y., Palmyra—School—July 20, by Bd Educ., new school. $250,000. Tooker & Marsh, 101 Park Ave., New York, archts and engrs.

N. Y., Southold—School—Bd. Educ. taking bids and opens same about July 27, brick, steel and stone, plain foundation $150,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs.

Pa., Indiana—Theatre—Jefferson Theatre Co., c/o P. McCartney, Punxsutawney, will build 2 story, 71 x 200 ft. brick and tile, here, by separate contracts. $165,000. L. Lempert, Cutler Bldg., Rochester, N. Y., archt. Noted April 26.

Pa., Pittsburgh—Welfare—July 20, by T. Pringle, archt., Renshaw Bldg., 8 story and basement, 80 x 120 ft., brick and steel, 2nd, 3rd and Cherry Sts., for Salvation Army, 324 Diamond St. $500,000.

Ky., Louisville—Temple—July 16, by Joseph & Joseph, archts., Francis, Bldg., 7 story, 200 x 260 ft., steel, Bway., for Kosairs Assn. $1,750,000. Noted June 7.

O., Painesville—Hospital—July 18, by Lake Co. Hospital Assn., c/o L. J. Spaulding, clk., Court House, 3 story and basement, brick, steel and concrete. $200,000. F. C. Warner, Hippodrome Annex Bldg., Cleveland, archt. Noted May 17.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, receiving bids 3 story and basement, 120 x 146 ft., fireproof, Clyde St. near Howard St. $190,000. Owner c/o archt.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, taking bids 3 story and basement, 118 x 120 ft., fireproof, Clyde St. near Howard St. $150,000. Owner c/o archt.

Wis., Burlington—Memorial Hospital—July 18, by Memorial Hospital Assn., 2 story and basement, 35 x 70 ft. and 44 x 50 ft., brick, tile and concrete, plain foundation. $150,000. M. F. White, 708 Trust Co. Bldg., Milwaukee, archt. Noted Jan. 4.

Wis., Kenosha—Temple—R. G. Schmid & Co., archts., 77 West Washington St., Chicago, taking bids 2 story, 82 x 120 ft., brick, stone and concrete, plain foundation, for Masonic Temple Bldg. Assn. R. Y. Cooper, chn. building com. $150,000. Noted May 31.

Wis., Manitowoc—Hospital—E. Brielmaier & Sons Co., archts., 432 Bway., Milwaukee, taking bids 4 story and basement, 50 x 250 ft., brick and concrete addition, plain foundation, for Holy Family Hospital, c/o Franciscan Sisters, Route 1. $300,000. Noted June 7.

Wis., Weyauwega—School—Aug. 1, by School Bd., 2 story and part basement, 100 x 154 ft. brick, tile and concrete, plain foundation. Auler & Jensen, F. R. A. Bldg., Oshkosh, archts. Noted Apr. 12.

Ia., Boone—High School—July 20, by R. T. Duckworth, secy. School Bd. 2 story and basement, rein.-con., brick and stone addition, plain foundation. $155,000. Dougher, Rich & Woodburn, 320 Valley Natl. Bldg., Des Moines, archts.

Minn., Chisholm—Municipal—July 16, by G. K. Trask, mayor, 1 and 2 story and basement, 142 x 241 ft., brick and steel, $175,000. E. C. Gilinson, 600 Torrey Bldg., Duluth, archt. and engr.

Mo., Springfield—Hospital—July 15, by A. Davis, pastor Homes Methodist Episcopal Church, 608 Jefferson Ave., 3 story and basement, fireproof. $225,000. C. C. Dearing, Boston, Mass., archt. Noted May 3.

Tex., Corsicana—Schools, etc.—Aug. 7 by Bd. Educ., constructing High School, 14 class rooms, 2 study halls, 11 special rooms; Sam Houston School, 15 class rooms and auditorium; W. B. Travis School, 10 class rooms and auditorium; Fred Douglas School, 13 class rooms and auditorium; all concrete, steel and brick. $600,000. Noted Mar. 3.

Tex., Dallas—Dormitories—Flint & Broad, archts. and engrs., Andrews Bldg., taking

Buildings (Continued)

bids for four dormitories, 3 story and basement, 61 x 100 ft., brick, concrete and tile, for Buchners Orphans Home. $260,000. Noted Jan. 18.

Tex., Dallas—High School—Aug. 15, by Bd. Educ., 2 story and basement, brick, stone and rein.-con., plain foundation, Hampton Rd. $150,000. Dewitt & Lemmon, Southwestern Life Bldg., engrs. and archts.

Tex., Dennison—Hotel—July—19, by Barnett, Haynes & Barnett, archts., Century Bldg., St. Louis, Mo., 6 story, 50 x 150 ft., rein.-con. and brick, plain foundation, for Dennison Hotel Co. **$175,000. Noted Apr. 26.**

Tex., Ft. Worth—Sanitarium—Nov. 1, by Methodist Conference, c/o W. E. Williams, **Texas State Bank, 10 story and basement,** x shape, rein.-con. and brick, plain foundation. **$1,000,000. W. G. Clarkson, 1st Natl.** Bank Bldg., engr. and archt. Noted Sept. 21.

Tex., Ft. Worth—July 20, by Y. M. C. A. 914 Monroe St., 4 story and basement, 100 x 145 ft., rein.-con., concrete, steel, stone and brick, plain foundation, 5th and Lamar Sts. $300,000. W. G. Clarkson, 1st Natl. Bank, archts. and engrs. Noted June 7.

Calif., Long Beach—Hospital—July 19, by City Council, rein.-con. hospital, State St. $160,000. Davies & Baum, 514 Marine Bank Bldg., archts.

Calif., Los Angeles—High School—July 25, by Bd. Educ., Fremont High School, brick and rein.-con. To exceed $300,000. E. Bergstrom, Citizens Natl. Bank Bldg., archt.

Calif., Monterey—Hotel—O'Brien Bros., Inc., archts., 315 Montgomery St., San Francisco, receiving bids 3 and 4 story. rein.-con. and hollow tile, here, for R. Jacks, c/o architects. $250,000. Noted Mar. 29.

Calif., San Francisco—Store, Loft, etc.—O'Brien Bros., Inc., archts., 315 Montgomery St., receiving bids 2 story and basement, store, loft and auto stage terminal, rein.-con., Jessie and 5th Sts., for L. R Lurie, c/o architects. $200,000. Pickwick Corp. and Pacific Auto Stage Lines, 3730 Mission St., lessee. Noted June 14.

Calif., San Francisco—Store and Office—W. B. Wagnon, 317 Bush St., will build 3 story, basement and mezzanine, rein.-con., Market St. near 7th St. $150,000. Work will be done by separate contractors. D. C. Coleman, 1171 Market St., archt.

Calif., Los Angeles—Office and Loft—Curlett & Beelman, archts., Union Bank Bldg., receiving bids 4 story and basement, rein.-con., 7th St. and Santa Fe Ave., for Southern California Gas Co., 950 South Bway. To exceed $250,000. Noted May 10.

BIDS RECEIVED

N. Y., Arverne (Far Rockaway P. O.)—School—Bd. Educ., 500 Park Ave., New York, July 5, P. S. 42, East 66th St., here, from Hayson Constr. Co., 44 Court St., Brooklyn, $719,000.

La., Alexandria—Orphans Home—Jones, Roessle & Olschner, archts., Ardis Bldg., June 30, three 2 story buildings, brick and concrete, from J. S. Casey, Shreveport, $384,570. Noted June 21.

La., New Orleans—Clubhouse—B.P.O.E. 30 reconstructing club, Elks Pl., recently destroyed by fire, from J. V. and R. T. Burkes, Carondelet Bldg., $313,313. Improvements proposed include 66 x 124 ft., hollow tile and steel addition to present building, new auditorium, 1,500 seating capacity, and new gymnasium. R. DeBuys, Hibernia Bldg., archt. E. A. Christy, associated archt.

O., Columbus—School—E. L. McCune, clk. Bd. Educ., Town and High Sts., general contract 2 story, 72 x 166 ft., brick and concrete, Markinson and 19th Sts. from E. H. Latham, 60 East Broad St., $106,900; plumbing and heating, from S. A. Esswein Co., 96 West Broad St., $25,051 Noted June 14.

CONTRACTS AWARDED

Mass., Springfield—High School—Com. of City Property, City Hall, 3 story, 85 x 372 ft., brick, plain foundation, Spring St., general contract, to A. E. Stephens, 145 State St., $510,000. Archts. est. $750,000. Noted June 7.

N. Y., Brooklyn—Apartment—D. Weiss, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build brick, steel and stone, plain foundation, Ave. C, by day labor. $175,000.

N. Y., Buffalo—Apartment—Westbrook Corp., 574 Main St., 10 story, 100 x 200 ft., rein.-con., brick and steel, Delaware Ave., to D. P. Robinson & Co., Grand Central Palace, New York City, to exceed $600,000.

N. Y., Carthage—School—Bd. Educ. general contract brick, concrete and steel, to T. F. Breslin Co., Woolworth Bldg., Watertown, $160,000. Noted Apr. 19.

N. Y., Elmira—Theatre—Messrs. Bernstein, repairs and additions to Mozart Theatre, East Market St., to Lowman Constr. Corp., 312 Railroad Ave., $150,000.

N. Y., New York—Apartments—Ulfond & Lifton, Inc., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build three 6 story, brick, steel and stone, plain foundations, Convent Ave., by day labor. $225,000 each.

N. Y., Roosevelt—School—Bd. Educ., brick, steel and stone, plain foundation, to L. M. Neckerman, 103 Park Ave., New York. Archts. est. $150,000. Noted May 17.

N. Y., Syracuse—High School—Bd. Contr. & Supply, 17th Ward Junior High School, 2 story and basement, 200 x 300 ft., brick, steel and stone, Fellows Ave., to Jenks & Venton Constr. Co., S. A. & K. Bldg., $587,000. Noted June 28.

Fla., Tampa—High School—Hillsborough Co. School Bd., rein.-con. and brick addition, to Logan Bros., 916 Citizens Bank Bldg., $141,377.

Fla., Tampa—Store—Bentley Gray Dry Goods Co., Tampa and Twiggs Sts., 4 story, rein.-con., Zack and Pierce Sts., to Logan Bros., West and Massachusetts Sts., $150,000.

La., New Orleans—Passenger Depot and Office—Louisiana Navigation Ry. Co., 1 story, 48 x 156 ft. ticket office and waiting room station, and 1 story, 53 x 86 ft. baggage and express office, both concrete, steel and brick, Girod and South Rampart Sts., to J. Fromherz, Title Guaranty Bldg. Archts. est. $150,000.

La., Shreveport—Office—D. Ricou, Merchants Bldg., 6 story and basement, 120 x 150 ft., terra cotta, rein.-con. and brick, plain foundation, Milam and Marshall Sts., to Standard Constr. Co., Shreveport, $380,000.

Tenn., Memphis—Club, etc.—Ridgeway Golf & Country Club, 2 story, 60 x 125 ft., frame, Poplar Pike, to R. F. Creson & Co., Turley Bldg., $150,000.

Tenn., Nashville — Dormitory — Peabody College for Teachers, 3 story and basement, brick and rein.-con., to Hageman-Harris Constr. Co., Independent Life Bldg., $160,000. Archts. est. $150,000.

Tenn., Nashville — Gymnasium, etc. — Ward-Belmont College for Girls, 1 story brick, concrete and stone gymnasimu, and 2 story, stucco and tile club house, Campus, to Foster-Creighton Constr. Co., 4th and 1st Natl. Bank Bldg., $150,000.

Tenn., Nashville—Office and Bank—Natl. Baptist Sunday School Bd., 3 story, brick, rein.-con. and steel, to Windham Bros. Constr. Co., 728½ 8th Ave., Birmingham, Ala., $350,000.

Ky., Louisville — Apartment — Argonne Apartments, Inc., 4 story, 100 x 150 ft., brick, 1st and Chestnut Sts., to R. N. Struck Constr. Co., 112 East Main St. Est. cost $300,000. Noted June 6.

Ky., Louisville—Office—Avery Building Assn., 521 West Market St., 3 story, 45 x 204 ft., 515-17 West Market St., to Struck Constr. Co., 112 East Main St. Est. cost $200,000. Noted June 28.

O., Athens—High School—Bd. Educ., 2 story and basement, 83 x 171 ft., brick and concrete, to Bart & Davidson, Athens, $210,000. Noted June 28.

O., Gallipolis—Cottage, Hospital, etc.—J. E. Harper, dir. Dept. Pub. Welfare, 9th and Oak Sts., Columbus, to E. Elford, 307 East Gay St., Columbus, 2 story and basement, 30 x 130 ft. cottage $67,495, 2 story and basement hospital, $73,995, 1 story and basement, 80 x 130 ft. laundry, $36,995 brick and concrete, at Ohio State Hospital for Epileptics, here. Noted July 5.

O., Lakewood (Cleveland P. O.)—Commercial and Theatre—Greenwald & Stecker, c/o S. H. Stecker, Society for Savings Bldg., Cleveland, 2 story, 95 x 170 ft., brick, steel and concrete, Detroit and Woodward Aves., here, to Krinsky & Sadia, 1837 East 86th St., Cleveland. Archts. est. $175,000. Noted May 17.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 79 x 101 ft. and 82 x 144 ft., brick, steel and rein.-con. addition, plain foundation, Fullerton Ave., to Rosenarne, McNab & Worswick, Congress and Riopell Sts., $354,520 Noted July 5.

Ill., Chicago—Apartment—A. L. Himelblau, archt., 30 North Dearborn St., two 3 story, 120 x 125 ft., fireproof, Addison St., to S. Fishkin, 3059 Ainslie St. Archts. est. $300,000.

Ill., Chicago—Office and Sales—Owner, c/o W. H. Wilson, 845 Euclid Ave. 16 story and basement, firefroof, Lake Shore Dr., to Wells Bros. Constr. Co., 53 West Jackson St. Archts. est. $8,000,000.

Wis., Waupun—Club—Schaumburg Country Club, 1801 West 35th St., Chicago, will build 4 story, 75 x 150 ft., brick and rein.-con., plain foundation, by day labor, here $150,000. W. F. Bossman, 419 32nd St., Beaver Dam, archts. Noted June 21.

Wis., Milwaukee—Apartment—A. Dammann, 207 17th St., 3 story, 45 x 100 ft. brick and concrete, plain foundation, to Jahns & Knuth, 1915 Chestnut St. Archts est. $150,000.

Wis., Milwaukee — Science, etc.—Marquette University, 1115 Grand Ave., 4 story and basement, 100 x 150 ft. science building, to W. W. Oeflein, 86 Michigan St archts. est. $300,000; 3 story and basement 50 x 100 ft. law school, Grand Ave., to E. S. Steigerwald Co., 3603 Vliet St., archts. est. $150,000; both brick, tile and concrete, plain foundations.

Wis., Milwaukee—Store and Office—B. E Nicholl, 109 Wisconsin St., 10 story and basement, 42 x 100 ft., brick and concrete, plain and wood pile foundation, to H Schmitt & Son, 430 Farwell Ave. Archts est. $325,000. Noted June 14.

Minn., Minneapolis—Apartment—Realty Syndicate, Inc., 733 Plymouth Bldg., 3 story and basement, 112 x 130 ft., brick and tile., 1814 1st Ave. S., general contract to Fleisher Constr. Co., 1000 Builders' Exchange. Total $150,000.

Minn., Minneapolis—Apartment Hotel—H. S. Goldie, 910 Newton Ave. N., interested in syndicate which let contract 6 story and basement, 120 x 250 ft., brick and tile, West Lake St. and Dean Blvd., to Standard Home Bldg. Co., Andrus Bldg. Archts. est. $1,300,000.

Mo., St. Louis—Theatre and Store—M. Loew, 1540 Bway., New York City, 3 story and mezzanine, 125 x 150 ft., rein.-con. and brick, concrete pile foundation, Washington Ave., structural steel to Mississippi Valley Steel Co., Arcade Bldg.; erecting steel to Ben Hur Erecting Co., 4006 Natural Bridge Rd. T. W. Lamb, archt., 644 8th Ave., New York City will supervise subcontracts. Archts. est. $1,000,000. Noted May 21.

Tex., Ft. Worth—Apartment—L. E. Callicotte, Burkburnett Bldg., general contract 4 story and basement, 70 x 100 ft., rein.-con., brick and steel, plain foundation, to J. H. Rogers, 2209 College St., $100,000. Archts. total est. $150,000.

Okla., Oklahoma City—Bank—Farmers Natl. Bank, Grand and Robinson Sts., 3 story and besement, brick, to Gross Constr. Co., 619 West Main St., $150,000.

Colo., Denver—Hospital—State Hospital Comn., general contract 3 story and basement, 130 x 232 ft., brick and rein.-con., to A. Simpson, Colorado Natl. Bank Bldg., $224,857. Noted May 24.

Wash., Everett — Hospital — Providence Hospital Assn., 4 story, brick and concrete, to A. W. Quist & Co., Hoge Bldg., Seattle Archts. est. $300,000.

Wash., Seattle — Hotel—United Hotels Co., 25 West 45th St., New York City, brick, steel and stone, plain foundation, here, to Grant-Smith & Co., Henry Bldg. Archts. est. $3,000,000. Noted Nov. 2.

Calif., Los Angeles—Office—W. M. Garland, 749 South Spring St., 12 story, brick and steel, Main and 9th Sts., to P. J. Walker, Merchants Natl. Bank Bldg. Engrs. est. $850,000. Noted Feb. 22.

Calif., Los Angeles—Store, Office, etc.—Southwestern University, Wilcox Bldg., 5 story and basement, rein.-con., South Hill St., general contract to C. L. Peck, H. W. Hellman Bldg., $125,000.

Calif., Oakland—Store and Hotel—M. F. Smith, 1001 Excelsior Ave., will build 6 story and basement, rein.-con. and steel, Oak and 12th Sts., by day labor. $250,000.

Calif., San Francisco—Theatre and Store—S. S. Levin, c/o Reid Bros., archts., 105 Montgomery St., 1 and 2 story, 137 x 282 ft., rein.-con. and brick, Union St. near Buchanan St., general contract to G. B. Pasqualetti, 2330 Larkin St. Noted Mar. 29.

Calif., San Jose—Home—Home of Benevolence, 11th and Martha Sts., 2 story, frame and stucco, 11th St., to J. C. Thorp, Auzerais Bldg., $150,000.

Buildings (Continued)

Calif., Santa Barbara—Schools—Santa Barbara Grammar School Dist., constructing Washington and Franklin Schools and kindergarten structure, concrete and brick, general contract to D. R. Wagner, New Call Bldg., San Francisco, $294,579. Noted Apr. 12.

Federal Government Work

PROPOSED WORK

N. Y., Buffalo—Dredging, etc.—U. S. Engineer, rejected bids June 20, dredging and rock removal in Black Rock Channel. Noted July 5.

D. C., Wash.—Generators, etc.—Chief of Engineers, U. S. A., 2825 Munitions Bldg., rejected bids seven 150 kw. and 300 kw. Diesel generating sets complete with auxiliaries, etc. Noted June 28.

Va., Fortress Monroe—Water Development—Constructing Quartermaster plans completion and improvement Big Bethel water development.

N. C., Wilmington—Dredging—U. S. Engineer, rejected bids dredging in Scuppernong River. Noted May 24.

Ill., Great Lakes—Laundry—Spec. 4877—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans remodeling laundry at Naval Hospital, here.

Ark., Little Rock—Hospital—Constructin Quartermaster, having plans prepared 200 bed addition to present U. S. Veterans' Hospital, here.

Calif., San Diego—Quay Wall—Spec. 4880—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans quay wall at Naval Station, here.

Virgin Islands — Wharf — Spec. 4878 — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans rebuilding wharf here.

BIDS DESIRED

N. H., Concord—Remodeling—Aug. 8, by J. A. Wetmore, acting superv. archt. Treas. Dept., Wash., D. C., remodeling Post Office, here.

Pa., Williamsport—Alterations—July 24 by Treas. Dept., Wash., D. C., alterations to heating plant in U. S. Post Office, Court House, etc., here. J. A. Wetmore, acting superv. archt.; adv. this issue.

La., New Orleans—Dikes, etc.—Aug. 4 at office U. S. Engineer, 329 Custom House, dikes and mattresses at head of South Pass; adv. this issue.

Md., Annapolis — Tower — Spec. 4876—July 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., rattail anchor tower, here.

Md., Baltimore—Dredging—Aug. 13, at office U. S. Engineer, dredging 2,000,000 cu.yd. from entrance channel, here.

Va., St. Juliens Creek—Buildings—Spec. 4855—Aug. 8, by Bureau Yards & Docks, Navy Dept., Wash., D. C., buildings, here.

S. C., Spartanburg—Extension—Aug. 6, by Treas. Dept., Wash., D. C., extension to U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Tenn., Memphis—Cement—July 21, office Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., 60,000 sacks cement; adv. this issue.

Mich., Alpena—Breakwater—July 30, by U. S. Engineer, 337 Federal Bldg., Detroit, rubble mound breakwater, 1,030 ft. long at southerly side of river mouth, 11,700 tons core and 10,300 tons Armor stone, etc., here.

Wis., Fond du Lac—Driveway—Aug. 7, by J. A. Wetmore, acting superv. archt. Treas. Dept., Wash., D. C., driveway at Post Office, here.

Wis., Neenah—Water System—Aug. 7, by J. A. Wetmore, acting superv. archt. Treas. Dept., Washington, D. C., water system at Post Office, here.

N. M., Albuquerque—Remodeling—July 31, by Treas. Dept., Wash., D. C., remodeling in basement, etc. U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. this issue.

Calif., San Diego—Roads and Walks—Spec. 4871—July 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks, at NOB Hospital, here.

Calif., San Diego—Road—Spec. 4844. July 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing Training Sta. Rd., here. Noted May 18.

Calif., San Diego—Screening—Spec. 4870—July 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., screening Wards C and D and service building, at Naval Hospital, here.

BIDS RECEIVED

N. H., Manchester—Remodeling—Treas. Dept., Wash., D. C., remodeling U. S. Post Office, here, from Garber & Cissell, Bethlehem, Pa., $16,200.

Md., South Baltimore (branch of Baltimore)—Barrack, etc.—U. S. Coast Guard Serv., for barrack and accessories, at U. S. Coast Guard Sta., here, from Pamfilis Contg. Co., 415 Equitable Bldg., Baltimore, $35,400 (150 days) Alt. No. 3 $47,000.

La., New Orleans—Pumps—U. S. Engineer, 329 Custom House, furnishing two 20 in. dredging pumps, from Ellicott Machine Corp., Bush and Seyvrn Sts., Baltimore, Md., $11,530. Noted June 14.

Tex., Galveston—Jetty—U. S. Engineer, June 22 jetty repairs in Galveston Harbor, from D. M. Picton & Co., Inc., Port Arthur, $291,070. Noted May 24.

Colo., Denver — Steps — Treas., Dept., Wash., D. C., furnishing and setting granite steps, U. S. Post Office, here, from C. E. Goodhand, Ord. Neb., $4,950 (100 days). Noted June 14.

Arizona—Road—E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, clearing, grading, etc., 7.57 mi. Clifton-Springerville Highway, Apache National Forest, Apache Co., from W. M. Tenney, Jr., Alpine, 26,738 cu.yd. common excav. $0.37, 200 cu. yd. Class D concrete, $17, etc., total. Condition B, $32,534. Noted June 14.

Washington—Road—C. H. Purcell, dist. engr. U. S. Bureau Pub. Rds., Post Office Bldg., Portland, Ore., grading and surfacing 1.9 mi. Blewett Pass Project, Sect. 5, National Forest Rd., Wenatchee Forest Reserve, from Burke, Sengfelder & Berry, Wenatchee, 7,700 cu.yd. rock excav. $1.48, 13,000 cu.yd. common excav. $0.57, 4,400 cu.yd. surfacing $2.19, etc., total $49,108.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer dredging in Harbor, to Morris & Cummings Dredging Co., 17 State St., New York City, $178,840. Noted June 28.

N. Y., Geneva — Treas. Dept., Wash., D. C., remodeling Post Office, here, to Pearce Bros., Inc., 220 West 42nd St., New York City, $15,833 (4 month). Noted June 28.

N. Y., New York—Dredging, etc.—U. S. Engineer, 39 Whitehall St., dredging and rock removal in East River, to New Jersey Shipbuilding & Dredging Co., foot of 28th St., Bayonne, N. J., $468,600. Noted May 31.

Pa., Carlisle — Bakery — Constructing Quartermaster, bakery here to H. A. Lackey, Carlisle, $12,060.

Pa., Phila.—Engine Testing Laboratory—Spec. 4845—Bureau Yards & Docks, Navy Dept., Wash., D. C., engine testing laboratory, at Navy Yards, here, to Newport Contg. and Eng. Co., Law Bldg., Newport News, Va., $82,145 (180 days). Noted July 5.

Md., Perryville — Piping — Treas. Dept., Wash., D. C., installing underground steam piping, etc., at U. S. Veterans' Hospital, here, to Enterprise Steam and Hot Water Heating Co., 600 North Howard St., Baltimore, $18,625. Noted June 28.

D. C., Wash.—Altering, etc.—J. A. Wetmore, acting superv. archt., Treas. Dept., altering and repairing roof of Auditors Building, to Wolfsteiner Co., Inc., 1315 W St., N. W., $9,793 (90 days).

Va., Leesburg—Post Office—Treas. Dept., Wash., D. C., construction U. S. Post Office, here, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $34,261. Noted June 7.

Va., Norfolk—Dredging—U. S. Engineer, dredging channel in Harbor, here, to Morris & Cummings Dredging Co., 17 State St., New York City, $308,700. Noted May 24.

Ala., Anniston—Extension—Treas. Dept., Wash., D. C., extension to Post Office, here, to Algernon Blair, 11 South Lawrence St., Montgomery, $17,971 (150 days). Noted June 7.

Ala., Huntersville — Extension — Treas. Dept., Wash., D. C., extension to Post Office, here, to Garber & Cissel, Inc., Bethlehem, Pa., $16,750. Noted May 24.

La., Baton Rouge—Remodeling, etc.—Treas. Dept., Wash., D. C., remodeling and enlarging Post Office, here, to Garber & Cissel, Inc., Bethlehem, Pa., $16,700 (4 months). Noted May 24.

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging Calcasien Sabine Sect. Intracostal Waterway, to Atlantic Gulf & Pacific Co., Park Row Bldg., New York City, $350,200. Noted June 14.

Miss., Vicksburg—Levee Work—Third Mississippi River Dist., P. O. Box 404, Chicora enlargement in Arkansas, 100,000 cu.yd. excav., to Roach, Stansell & Lawrence Bros., North Memphis Savings Bank Bldg., Memphis, Tenn., $0.847; Hagaman enlargement in Louisiana 300,000 cu. yd. excav., to Clark & Aderbolt, P. O. Box 287, Natchez, $0.2875. Noted June 21.

Mich., Detroit—Remodeling—Treas. Dept., Wash., D. C., remodeling building and apparatus, Old Federal Bldg., here, to J. A. Hurley Co., Flint, $47,800.

Mich., Detroit—Widening—U. S. Engineer, widening Livingston Channel Detroit River, to J. B. Breyman, 2052 Robinwood Ave., Toledo, O., $293,780.

Mich., Marquette—Breakwater—U. S. Engineer, Custom House, Duluth, Minn., repairs to breakwater, here, to Tidurocher Co., Detour, $62,379. Noted June 28.

Ill., Belleville—Post Office—Treas. Dept., Wash., D. C., for Post Office, here, to Universal Constr. Co., Fort Wayne, Ind., $14,240 (120 days).

Minn., St. Cloud—Hospital—Spec. 4828—Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital group for U. S. Veterans Hospital, here, construction and additional work, under items 7a, 7c, 7d, 8 and 8a, to Carter-Halls-Aldinger Co., Ltd., 706 1st Ave., North Minneapolis, $519,656; heating, plumbing and boiler house equipment incl. items 10, 11a, 11b, 11c, 11d, 12, 13a, 13b, 13c and 16, to H. Kelly & Co., 925 Plymouth Bldg., Minneapolis, $197,851. This corrects report in June 28 issue.

Minn., St. Cloud—Roads and Walks—Spec. 4831—Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks at U. S. Veterans' Hospital, here, to Carter-Halls-Aldinger Co., Ltd., 706 1st Ave., North Minneapolis, $35,729 (400 days). Noted May 31.

Kan., Pratt—Post Office—Treas. Dept., Wash., D. C., for Post Office, here, to E. Zimerli, 151 Cowper St., Palo Alto, Calif., $43,200 (12 months). Noted May 31.

Mo., Columbus—Post Office—Treas. Dept., Wash., D. C., for Post Office, here, to Griffiths Constr. Co., Odd Fellows Bldg., St. Louis, $15,750 (120 days).

Tex., Ft. Bliss—Additions and Alterations—Constructing Quartermaster, William Beaumont General Hospital, here, 2 sets non-commissioned officers quarters, to Jennings Constr. and Eng. Co., Martin Bldg., El Paso, $8,971; gymnasium to Anderson Constr. Co., El Paso, $15,344.

Ark., Hot Springs—Buildings—Constructing Quartermaster, Army and Navy General Hospital, here, general contract one double set officers quarters, physiotherapy building and guard house, to J. D. Brock, Arkadelphia. Noted May 24.

Calif., Los Angeles—Alterations—J. A. Wetmore, acting superv. archt., Wash., D. C., altering building for Internal Revenue Bureau, here, to Lavery Constr. Co., 304 South Bway., $18,642 (120 days).

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

383—E. Blue and N. Traversy, Hyder, Alaska—Want preliminary permit for diversion dam in Soule Glacier River, conduit, powerhouse, and transmission line to Hyder and Stewart, B. C.

384—American Super-Power Corp., Iroquois Bldg., Buffalo, N. Y.—Wants preliminary permit 2 power dams in St. Lawrence River, one near Morrisburg, Ont., other near Massena, N. Y.

385—White & Johnson Constr. Co., Denver, Colo. (street address not available)—Wants license 1 mi. transmission line in White River National Forest, Garfield Co.

386—Unity Gold Mines Co., 120 Bway., New York, N. Y.—Wants preliminary permit diversion dam, conduit and power house in Elk River, Idaho National Forest in Idaho and Valley Counties.

387—Minnesota Utilities Co., Eveleth, Minn.—Wants license 2.5 mi. transmission line in St. Louis Co. crossing Superior National Forest.

388—Ante Up Mining Co., Nevada City, Calif.—Wants license 1.5 mi. transmission line from Middle Yuba Hydro-Electric Co. system to Brush Creek Mine, Sierra Co.

389—Aufderheide et al, 1011 Fletcher Savings & Trust Bldg., Indianapolis, Ind.—Wants preliminary permit 3 dams and powerhouse near Burnside, Ky., at Cumberland Falls, Cumberland River and in South Fork of Cumberland River.

Miscellaneous (Continued)

390—Southern California Edison Co., Edison Bldg., Los Angeles, Calif.—Wants license transmission line from applicants main line to Laguna Bell sub-station here.

391—G. H. Stetson, 8 West 40th St., New York, N. Y.—Wants preliminary permit rock fill dam, 70 ft. high, in Colorado River in Arizona at Bulls Head Rock, 40 mi. above Needles. Total development 168,000 hp.

392—G. H. Stetson, 8 West 40th St., New York, N. Y.—Wants preliminary permit rock fill dam 1,064 ft. above present water surface in Colorado River at Boulder Canyon, Ariz., to store 155,000,000 acre feet. Total development 1,600,000 hp.

393 — San Diego Consolidated Gas & Electric Co., Timken Bldg., San Diego, Calif.—Wants license transmission line from Delmar to Escondido, crossing public lands in San Diego Co.

Miscellaneous

PROPOSED WORK

Transmission Line—New York—Olean Electric Light & Power Co., Olean, plans transmission lines through Humphrey Twp., Cattaraugus Co. $25,000. Engineer not announced.

Power Development—East Creek, N. Y.—Adirondack Power & Light Corp., 511 State St., Schenectady, plans hydro electric power development to include dam, power house, penstock, etc., here, $1,500,000.

Bulkhead—Far Rockaway, N. Y.—Atlantic Beach Associates, Inc., plans 1,500 ft. bulkhead, on Far Rockaway Bay. J. R. Spelman, 405 Lexington Ave., New York City, consult. and superv. engr.

Subway—Erie, Pa.—Making plans first 3 units Cherry St. Subway. $135,000. F. G. Lynch, city engr.

Municipal Improvements—Huntington, W. Va.—See 'Sewers."

Heating Plant, etc.—Raleigh, N. C.—State Hospital for Insane, soon lets contract central heating plant, connecting mains, and heating work in buildings for Colony Group, also new underground electric distributing system. Wiley & Wilson, 907-10 Natl. Bank Bldg., Lynchburg, Va., engrs.

Elevated Railroad—Alabama—Tennessee Coal, Iron & Ry. Co., Brown-Marx Bldg., Birmingham, had plans prepared elevated railroad 5 mi. long, standard guage, running from various iron ore mines in Red Mountain to railroad tracks of Tennessee Coal, Iron & Ry. Co., at Fairfield. $4,000,000. H. C. Ryding, vice-pres.

Hydro Electric Development — Danville, Ky.—Dix River Power Co., subsidiary of Middle West Utilities Co., 72 West Adams St., Chicago, plans 250 ft. dam, and 30,000 k.w. hydro electric plant on Dix River, 2 mi. above its confluence with Kentucky River in Garrard Co. $2-$3,000,000. L. E. Harza, c/o owner, engr.

Grain Elevator—Hopkinsville, Ky.—Acme Mills plan 40x100 ft. grain elevator, 100 ft. high, rein.-con., 200,000 bu. capacity. To exceed $25,000.

Park Improvements—Youngstown, O.—Park Dept. plans miscellaneous park improvements. $30,000.

Playgrounds—Alton, Ill.—Aug. 7 to vote on $40,000 bonds for playgrounds.

Levees, etc.—Wisconsin—State Legislature appropriated $50,000 to strengthen and rebuild levees and dams on Fox and Wisconsin Rivers, Fond du Lac and Winnebago Counties. J. D. Mack, State Capitol, Madison, engr.

Tunnels—Madison, Wis.—University of Wisconsin having plans prepared for new tunnels to connect heating plant with far end of tunnel system and for additional piping, etc. $26,000. A. Peabody, Capitol Bldg., engr.

Swimming Pool, etc. — Wausau, Wis. — City plans 100 x 200 ft. rein.-con. swimming pool, 9 ft. deep, bath house and filtration system in city park, $36,000. Engineer not selected.

Levee—Kennett, Mo.—St. Francis Levee Dist. plans rebuilding 12 mi. levee, 1,000,000 cu.yd. dry earth excav. J. D. Mitchell, Puxico, engr.

White Way, Texas—Dallas and Tarrant Counties plan 25 mi. white way from Dallas to Ft. Worth, 150 concrete standards, cables, etc. $50,000. D. A. Davis, Courthouse, Ft. Worth, co. engr. Nagle, Witt & Rollins, Court House, Dallas, co. engrs.

Park Development—Dallas, Tex.—North Texas Trust Co., c/o C. S. Mitchell, 708 Mercantile Bank Bldg., takes bids about July 15, developing Kessler Park adjoining Kessler Sq. incl. paving, curbs, waterworks, sewers and electric light systems. $200,000. Koch & Fowler, 606 Central Bank Bldg., engrs.

Grain Elevator—Ft. Worth, Tex.—Smith Bros. Grain Co., 6th and Pecan Sts., had plans prepared and soon takes bids grain elevator, 8 concrete tanks and 10 interstices with necessary machinery for handling 125,000 bu., 6th and Pecan Sts. along tracks Atchison, Topeka & Sante Fe R. R. $100,000. Engineer not announced.

White Way — Ft. Worth, Tex. — City Comn. takes bids about Sept. 25 white way in Mistletoe Heights. $50,000. D. L. Lewis, city engr. R. A. Hunter, city light comr.

Athletic Field—Waco, Tex.—Bd. Educ. plans athletic field. $60,000. V. G. Koch, city engr.

Gas System—Fairfax, Okla.—Aug. 8, to vote on $40,000 bonds for high and low pressure gas mains, regulator houses and distributing system together with meters. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Town Site—Bishops Meadow, Ore.—Bowman-Hicks Lumber Co., Wallowa, plans town site 16 mi. north of Wallowa, incl. saw and planing mill, railroad yards and station, electric light and power plant, store, warehouse, hotel, theatre, over 100 dwellings, and sewerage and water systems. $500,000 will be spent during coming year. Address C. B. Miller, La Grande, archt.

Dock and Terminal—Portland, Ore.—Oregon, Washington Ry. and Navigation Co., Wells-Fargo Bldg., plans new Albina St. Dock $228,000 and terminal $197,488. S. Murray, asst. ch. engr., in charge of work.

Transmission Lines—Modesto, Calif.—Modesto Irrigation Dist. plans transmission lines. $500,000. P. Jones, Modesto, ch. engr.

Park Improvements, etc. — Monrovia, Calif.—Plan to vote on $150,000 bonds for park improvements and swimming pool.

Current Retards—Sacramento, Calif.—Recl. Dist. 2047, c/o State Recl. Bd., Forum Bldg., had plans prepared 7 current retards for levee bank protection on Sacramento River. $50,000.

Street Lighting Systems—San Bernardino, Calif.—City having plans prepared street lighting system. To exceed $75,000. C. E. Johnson, city engr.

Wharf—San Francisco, Calif.—State had plans prepared 1 story, wharf extension, creosoted piling, on Islais Creek. $55,000. F. G. White, c/o State Board of Harbor Comrs., Ferry Bldg., ch. engr.

Paving Plant—Vallejo, Calif.—City will appropriate funds for paving plant. T. D. Kilkenny, city engr.

Transmission Line — Ontario — Ontario Hydro Power Comn., 190 University Ave., Toronto, plans power line from Tillsonburg to Courtland. $40,000. A. Beck, London, chn.

Road Machinery—Goderich, Ont.—See "Streets and Roads."

BIDS DESIRED

Revetment — Sacramento, Calif. — City Comrs. receiving bids 547,000 sq.ft. 4 in. concrete revetment with head and toe walls, on water slope of east levee of Sacramento River. A. Givan, city engr.

Paving Materials—St. Paul, Minn.—July 16, by H. W. Austin, city purch. agt., 8,967 sq.yd. creosoted wood blocks, 7,558 sq.yd. 3½ in. creosoted wood blocks, 42,474 sq.yd. 3 in. vertical fibre paving brick, 16,423 bbl. portland cement, 11,869 cu.yd. crushed rock or gravel for concrete base, 7,129 cu.yd. concrete sand, 198,300 lb. asphalt filler for creosoted wood blocks, 509,700 lb. asphalt filler for brick, 120 tons asphalt, 136 tons limestone dust, 163 tons trap rock for paving Raymond Ave., Randolph St., 6th St. from Wabasha to Sibley Sts., from Rosabel St. east to bridge and from Smith to Summit Aves., also alley in Block 7. G. M. Shepard, city engr.

Electroliers—Fresno, Calif.—City Council receiving bids furnishing and installing 155 electroliers in portions of Kerchkoff Ave., Huntington Blvd., etc. $25,000. W. Stranahan, city engr. Noted June 28.

Cement—Napa, Calif.—July 23, by J. A. Daly, clk. Napa Co., 3,000 bbl. cement, f.o.b. Napa.

BIDS RECEIVED

Fan House, etc.—Pittsburgh, Pa.—Allegheny Co., 1 story, 110 x 190 ft. fan house for Liberty Tunnel, 2nd and Ruth Sts., from Williams & Haas, Empire Bldg., $193,859 alternate $181,222; electric power and lighting equipment from Booth & Flinn, 1942 Forbes St., $168,000. Noted June 21.

Shed, etc.—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., July 5, steel frame for 140 x 400 ft. shed, from Converse Bridge Co., New Orleans, $27,688; steel rolling doors, from Kinnear Mfg. Co., Hibernia Bldg., $7,796, both for Poland St. landing. Noted June 28.

Completion of Pier, etc.—Phila., Pa.—G. F. Sproule, dir. Dept. Wharves, Docks and Ferries, Municipal Pier 4, South Wharves, completion, with appurtenant work for Porter St. Pier 84, South Wharves, Moyamensing Group, Delaware River, from Frederick Snare Corp., 1524 Chestnut St., $789,350. Noted June 21.

Heating and Ventilating Apparatus—Cincinnati, O.—Bd. Educ., 511 West Court St., heating and ventilating apparatus in Hartwell Public School, from Sodemann Heat & Power Co., 2306 Morgan St., St. Louis, Mo., $43,447; Hughes High School addition, from Williamson Heater Co., 334 West 5th St., $36,190. Noted June 14.

CONTRACTS AWARDED

Underground Conduits—Hornell, N. Y.—Western Union Telegraph Co., 80 Main St., will build underground conduits by day labor. $25,000. Noted July 5.

Asphaltic Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., 600,000 gal. asphaltic cement, to Warner-Quinlan Co., 79 Wall St., $33,420; 15,000 cu.yd. asphalt wearing surface sand, to Zachary & Mahony, 557 46th St., $18,450; 300,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $14,247. Noted June 28.

Subway Changes—New York, N. Y.—Transit Comn., 49 Lafayette St., making changes in subway structure at Bway, incidental to widening of West 32nd St. and constructing ventilation flue at West 32nd St. and Bway., Routes 4 and 36, Sect. 1, Manhattan Boro, to Benedetto & Sanesez, Franklin St., Astoria, $29,550. Noted June 28.

Stone Crusher—Trenton, N. J.—Mercer Co., Court House, 24 in. jaw stone crusher, elevators, motor, etc., at Moore Sta., to F. B. Johnson, 669 Princeton Ave., $62,531. Noted June 21.

Steam Line — Scranton, Pa. — Scranton Electric Co., steam mains in various streets, excav. to Sweeney Bros., Miller Bldg., laying mains, to Amer. Dist. Steam Co., Robinson St., Tonawanda, N. Y. Engrs. est. $50,000.

Heating Plant—Greensboro, N. C.—Agricultural & Technical College, installing heating plant, to B. MacKenzie, Greensboro, $125,000.

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th St. and Bway., 150 tons structural steel for bridge, to Mt. Vernon Bridge Co., Mt. Vernon, O. Engrs. est. $9,000-$10,000. Noted Junt 28.

Dock—Cleveland, O. — Concrete dock, West 3rd St. and Cuyahoga River, to Cleveland Eng. Constr. Co., The Arcade, $31,900. Noted July 5.

Dock Front, etc. — Conneaut Harbor (Conneaut P. O.), **O.**—Bessemer & Lake Erie R.R., at office H. T. Porter, ch. engr., Greenville, Pa., rein.-con. dock front for Dock 1, to Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa.; dredging portion of channel which lies between present dock front of Dock 1 and new dock front for Dock 1, etc., to Great Lakes Dredge & Dock Co., Williamson Bldg., Cleveland. Noted June 7.

Tunnel—Orient, O.—Dept. Pub. Welfare, 9th and Oak Sts., Columbus, ¾ mi. concrete tunnel on grounds of Institution of Feeble Minded, here, to D. W. McGrath & Sons, 255 East Broad St., Columbus, $73,985; heating and piping, to Fitzpatrick & Hoepfer, 63 East Gay St., $70,521. Noted June 7.

Car Barns — Racine, Wis. — Milwaukee Electric Ry. & Light Co., Pub. Serv. Bldg., Milwaukee, 1 story, 80 x 160 ft. car barn, brick, concrete and steel, to Bondgard & Christensen, Mound Ave. and Mead St. Engrs. est. $100,000. Noted May 31.

Memorial Stadium—Conway, Ark.—Hendrix College, Young Memorial stadium, 5,000 capacity, to F. L. Scull, Conway, $54,000. Engrs. est. $55,000.

Transmission Line, Dockage Facilities, etc.—Port Arthur, Tex.—Eastern Texas Electric Co., to Stone & Webster, Inc., 147 Milk St., Boston, Mass., 22 mi., 7,500 kw., 33,000 volt, 3 phase, single circuit transmission line from here to Beaumont, $269,000; 55,000 bbl. fuel oil tank and additional dockage facilities at Houston Ave. power station; 3 story switchboard bay and new switchboard at Houston Ave. and Riverside Dr. power station, $135,000.

Lime—St. Louis, Mo.—G. Oetting, supply comr., 9,000 tons lime, to Glencoe Lime & Cement Co., Syndicate Trust Bldg., $10.90 per ton. Noted July 5.

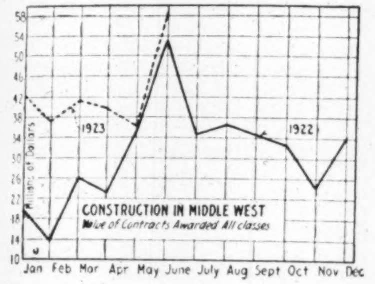
CONSTRUCTION NEWS

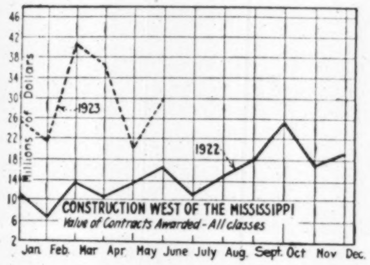
Engineering News-Record, July 19, 1923.

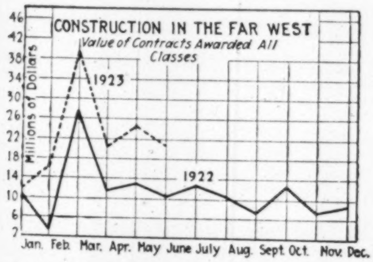
The Construction Barometer

Building Still Active—Gain in Private Work—Prices Unchanged

THAT the construction industry is still active is shown by the upward trend of contracts awarded in three of the six great geographical divisions of the United States. The falling off in New England, the South and in the Far West, however, conform very closely to the 1922 trends. Although June contracts totaled $178,587,000, against $192,032,000 for the preceding month, the May total covers awards published in five issues of *Engineering News-Record*, compared with four during June. Reducing the May total to a four-week basis, comparable with June, shows a gain in the average weekly value of contracts let. Awards during the week ended July 12 gained over the preceding week and were but slightly under the figure for the week ended June 28. Base prices remain unchanged despite the slight let-down in business.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

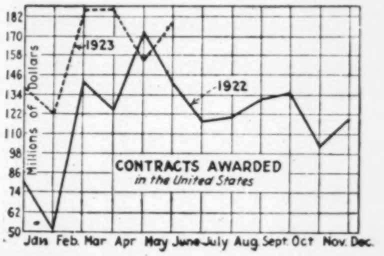
Week Ended	Public Work	Private Work	Total Contracts
June 28	$15,591,000	$39,696,000	$55,287,000
July 5	17,438,000	13,460,000	30,898,000
July 12	26,812,000	27,135,000	53,947,000
3 weeks	$59,841,000	$80,291,000	$140,132,000

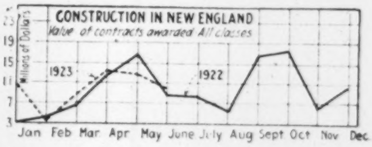
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

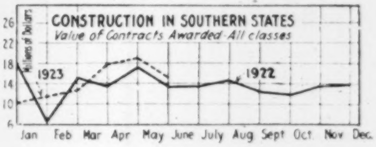
Week Ended	No.	Public Work	No.	Private Work
June 28	9	$1,375,000	26	$33,530,000
July 5	5	2,794,000	24	6,615,000
July 12	10	2,409,000	32	20,619,000

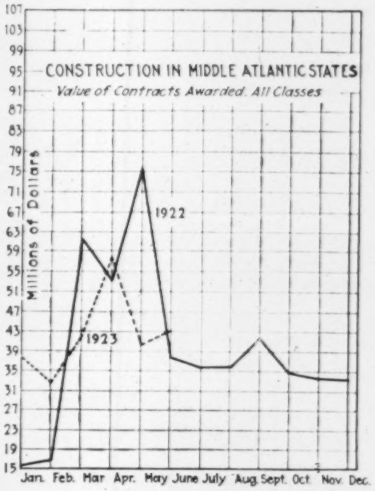
BASE PRICES UNCHANGED DURING LAST TWO WEEKS

	Quoted On July 19, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 20	Watertown, N. Y.	July 12
July 21	Cleveland, O.	July 12
July 23	Aurora, Ill.	July 12
July 23	Willmar, Minn.	July 12
July 24	Brooklyn, N. Y.	July 19
July 24	New York, N. Y.	July 19
July 24	Long Island City, N. Y.	July 19
July 25	Ft. Worth, Tex.	July 12
July 30	Tulsa, Okla.	July 12
July 30	Scranton, Pa.	July 19
Aug. 1	Raleigh, N. C.	July 19
Aug. 1	Jackson, Mich. Adv. July 19.	July 19
Aug. 6	Stone Harbor, N. J. Adv. July 19.	July 19
Aug. 16	Evanston, Ill. Adv. July 19.	July 19

SEWERS

Bids Close		See Eng. News-Record
July 20	Millville, N. J.	July 12
July 23	Leonia, N. J. Adv. July 12 and 19.	July 12
July 23	Los Angeles, Calif.	July 12
July 23	Burlington, Ia.	July 19
July 24	Toronto, Ont.	July 12
July 24	Roselle, N. J. Adv. July 12 and 19.	July 19
July 24	Park Falls, Wis.	July 19
July 25	Baltimore, Md.	July 19
July 25	Ford City, Pa.	July 19
July 26	Chicago, Ill	July 5
July 26	Salisbury, Mo.	July 19
July 27	Birmingham, Mich.	July 19
July 27	Sanborn, Minn.	July 19
July 27	Janesville, Wis.	July 19
July 30	Los Angeles, Calif.	June 28
July 30	Madison, S. D.	July 19
July 30	Huntington, Ind. Adv. July 19	July 19
July 31	Wash., D. C.	July 12
Aug. 7	Rhinelander, Wis. Adv. July 19.	July 19

Bids Close		See Eng. News-Record
Aug. 13	Pensauken (Camden P. O.), N. J. Adv. July 19.	July 19
Aug. 13	Arvada, Colo.	July 12

WASTE DISPOSAL

Bids Close		See Eng. News-Record
July 26	Lakewood (Cleveland P. O.), O.	July 12

BRIDGES

Bids Close		See Eng. News-Record
July 21	Cleveland, O.	July 12
July 21	Waynesburg, Pa.	July 12
July 23	Arlington, N. Y. Adv. July 12 and 19.	July 12
July 23	Requa, Calif.	July 12
July 23	New York Adv. July 5 to 19.	July 12
July 24	Indiana	July 12
July 25	Kentucky	July 12
July 25	Bridgeport, Conn.	June 28
July 28	Charlottesville, Va. Adv. July 19.	July 19
July 30	Scarsdale, N. Y. Adv. July 12 and 19.	July 19

Bids Close		See Eng. News-Record
July 30	Clintonville, Pa.	July 19
July 31	La Center, Wash.	July 19
July 31	Alabama	July 12
July 31	Illinois	July 19
Aug. 1	Binghamton, N. Y. Adv. June 28 to July 19.	June 28
Aug. 1	Ansonia, Conn. Adv. July 12 and 19.	July 12
Aug. 2	New Jersey Adv. July 19.	July 19
Aug. 6	California	July 19
Aug. 7	Beaumont, Tex. Adv. June 28 to July 19.	July 5
Aug. 10	Murfreesboro, Tenn.	July 19
Aug. 14	Charleston, S. C. Adv. July 12 and 19.	July 5
Aug. 14	Clearwater, Fla. Adv. July 12 and 19.	July 12
Aug. 15	Phila., Pa. Adv. July 5 and 19.	July 5
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Bids Close		See Eng. News-Record
July 31	Mexico	July 19

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
July 23	Canso, N. S.	July 19
July 24	Sanatobia, Miss.	July 19
July 26	New Orleans, La.	June 28
July 30	North Ingonish, N. S.	July 19
Aug. 1	Sioux City, Ia. Adv. July 12 and 19.	July 12
Aug. 1	Brownsville, Tex.	July 19
Aug. 8	Sioux City, Ia.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 20	New York Adv. July 12 and 19.	July 12
July 20	Michigan	July 5
July 23	New Jersey	July 5
July 23	Escondido, Calif.	July 12
July 23	Michigan	July 12
July 23	Casper, Wyo.	July 12
July 23	San Diego, Calif.	July 12
July 23	Freehold, N. J. Adv. July 12 and 19.	July 12
July 23	White Plains, N. Y. Adv. July 5 to 19.	July 12
July 23	Hillsboro, N. D.	July 12
July 23	Napa, Calif.	July 19
July 23	New York, N. Y.	July 19
July 23	Long Island City, N. Y.	July 19
July 23	St. Paul, Minn.	July 19
July 24	Roselle, N. J. Adv. July 12 and 19.	July 19
July 24	Bluefield, W. Va. Adv. July 19.	July 19
July 24	Columbus, O.	July 19
July 24	Minnesota	July 12
July 24	Huntington, W. Va.	July 12
July 24	Maryland Adv. July 12 and 19.	July 12
July 24	Napoleonville, La.	July 12
July 24	Michigan	July 12
July 24	West Virginia	June 28
July 24	South Dakota	July 19
July 24	Duluth, Minn.	July 19
July 24	Illinois	July 19
July 24	Blackwell, Okla.	July 19
July 25	Boonton, N. J.	July 5
July 25	Kentucky	July 5
July 25	Delaware	July 5
July 25	Virginia	July 12
July 25	Johnson City, Tex.	July 12
July 25	Michigan	July 19
July 25	Auburn, Calif.	July 19
July 25	Oroville, Calif.	July 19
July 25	Florida	July 19
July 25	Oklahoma	July 19
July 25	Chicago, Ill.	July 19
July 25	Brenham, Tex.	July 19
July 25	Parkersburg, W. Va.	July 19
July 25	Long Island City, N. Y.	July 19
July 26	Michigan	July 19
July 26	Michigan	July 12
July 26	Colfax, Ia.	July 19
July 27	Michigan	July 19
July 27	Lockport, N. Y.	July 19
July 27	Williamson, W. Va.	July 12
July 28	New Philadelphia, O.	July 19
July 28	Arcadia, Fla.	July 19
July 28	Pittsburgh, Pa.	July 19
July 30	Pascagoula, Miss.	July 12
July 30	New Jersey Adv. July 19.	July 19
July 30	New York Adv. July 12 and 19.	July 19
July 30	Keyport, N. J. Adv. July 19.	July 19
July 30	Michigan	July 19
July 30	Eldorado, Ark.	July 19
July 31	Alabama	July 12
July 31	Wind Gap, Pa. Adv. July 12 and 19.	July 12
July 31	Michigan	July 19
July 31	Wilton, Pa. Adv. July 19.	July 19
July 31	Maryland Adv. July 19.	July 19
July 31	New York Adv. July 12 and 19.	July 19
July 31	Illinois	July 19
July 31	Washington	July 19
July 31	Barnsdall, Okla.	July 19
Aug. 1	New Jersey Adv. July 19.	July 19
Aug. 2	Tallahassee, Fla. Adv. July 5 to 19.	July 12
Aug. 2	Vicksburg, Miss.	July 19
Aug. 2	New Jersey Adv. July 19.	July 19
Aug. 3	Georgia	July 19
Aug. 3	Canton, Miss.	July 19
Aug. 6	St. Paul, Minn.	July 19
Aug. 6	Sayre, Okla.	July 12
Aug. 7	St. Louis, Mo.	July 12
Aug. 7	Pennsylvania	July 19
Aug. 7	Beaumont, Tex.	July 19
Aug. 8	Pennsylvania	July 19
Aug. 10	Tennessee	July 19
Aug. 11	Grenada, Miss.	July 19
Aug. 14	St. Louis, Mo.	July 19
Aug. 14	Fayetteville, W. Va. Adv. July 19.	July 19
Aug. 14	Clearwater, Fla. Adv. July 12 and 19.	July 12
Jan. 17	Trenton, N. J.	July 12

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
July 31	Ossining, N. Y. Adv. July 19.	July 19

BUILDINGS

Bids Close		See Eng. News-Record
July 20	Baltimore, Md.	July 19
July 21	Pittsburgh, Pa.	June 28
July 21	Troy, N. Y.	July 19
July 23	Texarkana, Tex.	July 12
July 23	Detroit, Mich.	July 19
July 23	Baltimore, Md.	July 19
July 23	Milwaukee, Wis.	July 19
July 24	Ware, Mass.	July 12
July 24	New York, N. Y.	July 12
July 24	New York, N. Y.	July 19
July 25	Los Angeles, Calif.	July 12
July 25	Troy, N. Y.	July 19
July 25	Columbus, O.	July 19
July 26	Le Mars, Ia.	July 19
July 31	Conrad, Ia.	July 19
July 31	Mt. Vernon, N. Y.	July 5
July 31	Olympia, Wash.	July 19
Aug. 1	Jackson, Miss.	June 21
Aug. 1	Austin, Tex.	July 19
Aug. 6	Syracuse, N. Y.	July 19
Aug. 7	Corsicana, Tex.	July 12
Aug. 9	Granville, O.	July 19
Aug. 10	New Orleans, La.	July 19
Aug. 11	Centerville, Calif.	July 19
Aug. 13	Zanesville, O.	July 19
Aug. 14	Nashville, Tenn.	July 19
Aug. 15	Eagle Lake, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	July 19
Aug. 15	Dallas, Tex.	July 12
Aug. 15	Dallas, Tex.	July 19
Aug. 16	Nashville, Tenn.	July 19
Aug. 21	Hartford, Conn.	July 19
Nov. 1	Ft. Worth, Tex.	July 12

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 23	Lumber—Louisville, Ky.	July 19
July 24	Alterations—Williamsport, Pa.	July 12
July 25	Tower—Annapolis, Md.	July 12
July 25	Screening — San Diego, Calif.	July 12
July 25	Road—San Diego, Calif.	July 12
July 27	Extension—Marion, O.	July 5
July 30	Stone—Detroit, Mich.	July 5
July 30	Breakwater—Alpena, Mich.	July 12
July 31	Dredging—Baltimore, Md. Adv. June 28 and July 19.	June 28
July 31	Remodeling—Albuquerque, N. M.	July 12
Aug. 2	Excavation — Wilmington, Del.	July 5
Aug. 4	Dikes, etc.—New Orleans, La.	July 12
Aug. 4	Jetty—New Orleans, La.	July 19
Aug. 6	Extension—Spartanburg, S. C.	July 12
Aug. 6	Removal—Seattle, Wash.	July 19
Aug. 7	Water System, Neenah, Wis.	July 12
Aug. 7	Driveway—Fond du Lac, Wis.	July 12
Aug. 8	Buildings—St. Juliens Creek, Va.	July 12
Aug. 8	Remodeling—Concord, N. H.	July 12
Aug. 8	Mailing Shed—Ft. Scott, Kan.	July 19
Aug. 9	Lookout — Port Huron, Mich. Adv. July 19.	July 19
Aug. 10	Removal of Pile Protection —Chicago, Ill. Adv. July 19.	July 19
Aug. 10	Lookout—Wheeling, W. Va.	July 19
Aug. 13	Dredging—Baltimore, Md. Adv. July 19.	July 12
Aug. 13	Stamp Cages—New Orleans, La. Adv. July 19.	July 19
Aug. 14	Road—Zion National Park (Springdale P. O.), Utah Adv. July 19.	July 19
Aug. 14	Buildings—Knoxville, Ia.	July 19
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19

MISCELLANEOUS

Bids Close		See Eng. News-Record
July 20	Coal Handling System—Everett (Boston P. O.), Mass.	July 19
July 23	Cement—Napa, Calif.	July 12
July 23	Paving Materials—St. Paul, Minn.	July 19
July 23	Clay Floor Tile—St. Paul, Minn.	July 19
July 24	Culvert—St. Louis, Mo.	July 5
July 24	Subway—Phila., Pa.	July 5
July 24	Underground Fire Alarm System—New York, N. Y.	July 19
July 25	Piping—Columbus, O.	July 19
July 27	Pier—Phila., Pa. Adv. July 19.	July 19
July 27	Heating & Ventilating Apparatus—Arverne (Far Rockaway P. O.), N. Y.	July 19
July 27	Heating & Ventilating Apparatus—Brooklyn, N. Y.	July 19
July 27	Heating & Ventilating Apparatus — New Brighton, N. Y.	July 19
July 30	Pier Shed — New York, N. Y.	July 19
July 30	Heating and Ventilating, etc —Lewistown, Pa.	July 19
Aug. 1	Gas Pipe Line—Texas	July 5
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton—Plans c.i. mains in Evelyn Pl., Nash, Johnson, Esther, Westcott and Holand Sts. To exceed $15,000. W. E. Weller, city engr.

N. Y., Hammondsport—Bd. Village Trustees plans installing new water supply system. $100,000-$125,000. Address J. H. Brown, supt. Pub. Wks. & Safety.

Pa., Delta—Boro plans rebuilding waterworks pumping plant, recently destroyed by fire. $25,000. Engineer not announced.

N. C., Asheville—See "Streets and Roads."

N. C., Greensboro — City Council authorized $300,000 bond issue for extensions to waterworks system. P. C. Painter, city mgr.

La., West Monroe—C. C. Bell, mayor, and Bd. Aldermen will sell $88,000 bonds July 31 for waterworks improvements.

Mich., Detroit—Bd. Water Comrs. making plans under direction of G. H. Fenkell, genl. mgr., for main extensions as follows: 3½ mi. 24 in. pipe in 8 Mile Rd., 2 mi. 12 in. in Ridge Rd., and 2 mi. 12 in. in 10 Mile Rd. $104,000. T. H. Leisen, Water Works Park, engr.

Mich., Flint—Had plans prepared additions to buildings, filter equipment, settling basins, wash tanks and additions to filtration works, here. F. W. Baldwin, supt.

Mich., Monroe—Had plans prepared filtration plant and equipment, incl. 63 cu.yd. filter gravel, 127 cu.yd. filter sand, 4 rate controllers, 4 strainer systems, 4 operating stands, 12 washwater gutters, 1 dry chemical feed machine, etc. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Ill., Bartlett—Plans water supply system. $50,000. Suhr & Berryman, 105 North Clark St., Chicago, engrs.

Ill., Forest Park (Oak Park P. O.)—Plans mains and reservoir. $180,000. Suhr & Berryman, 105 North Clark St., Chicago, engrs.

Ill., Roselle—Plans waterworks. $50,000. Suhr & Berryman, 105 North Clark St., Chicago, engrs.

Ill., Springfield—Defeated $350,000 bonds for waterworks, incl. high and low service pumps, basins, filters, softening plant, etc. Noted June 21.

S. D., Flandreau—Making plans waterworks improvements incl. mains, wells, pumping station. $26,000 bonds voted Chenoweth, Kennedy & Rettinghouse, Boyce-Greeley Bldg., Sioux Falls, engrs.

Neb., Ft. Calhoun—Soon takes bids water works system. $16,000 bonds voted. Price & Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs. Noted June 21.

Mont., Missoula—Plans election to vote on $600,000 bonds for water system. C. H. Christensen, city treas.

Waterworks (Continued)

Mo., Braymer—July 24 to vote on $49,000 bonds for water system and sewer extensions.

Okla., Slick—Having plans prepared wells, water distributing system, elevated tank and tower, etc., $40,000. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Wash., Dash Point—Voters of Dash Point, Northeast Tacoma, Hyada Park, Tood Haven and surrounding territory, authorized $168,000 bonds for new water system. $75,000 will be spent first year.

Calif., Monrovia—Plans to vote on $60,000 bonds enlarging waterworks system.

Tex., Sweetwater—July 28, to vote on $35,000 bonds for waterwors improvements incl. filtration plant for water supply from Lake Trammell. M. Boothe, mayor.

Ont., Toronto — York Twp. soon takes bids 6 in. c.i. mains in Montcalm, Gilbert, Warren, College View, Fife and Westbrooke Aves., Russell Hill Rd. and Chaplin Crescent. $29,250. Owner will purchase pipe, valves and hydrants. F. B. Goedike, 40 Jarvis St., engr.

Ont., Walkerton—Council plans to erect standpipe, build pump house, install gasoline operated pumps, and repair reservoir. $35,000. F. B. James, Walkerton, engr.

BIDS DESIRED

N. Y., Brooklyn—July 24, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Rockaway Blvd.

N. Y., Long Island City—July 24, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Ave. D, Huntley Dr., Bradford Pl., Newtown, 58th and head of Vleigh Rds., Woolsey, 12th, Gardiner, Hammel, Mauriac, 12th, 32nd, 34th and 59th Aves., Chauncey, Crescent, Howland, Merchant, Sunswick, 15th, 118th, 164th, 165th, 189th and 206th Sts., here.

N. Y., New York—July 24, by J. Miller, pres. Manhattan Boro, Municipal Bldg., mains in Madison, Pinehurst, Woolsey and 12th Aves., Chauncey and Crescent Sts., etc.

N. J., Stone Harbor—Aug. 6, by C. A. Krouse, mayor, and Boro Council, pumping station, rein.-con. reservoir, etc. J. L. Sweigard, 1120 Lincoln Bldg., Phila.; engr.; adv. this issue.

Pa., Scranton—July 30, by W. G. Watkins, controller, Lackawanna Co., equipment and construction reservoir, pump house and complete water system for new tuberculosis hospital at West Mountain. D. Morgan, Connelly Bldg., engr.

Va., Blackstone — Taking bids pumping machinery and power equipment for waterworks. Engineer not announced.

N. C., Raleigh—Aug. 1, by City Comrs., equipment necessary to increase pumping capacity of water system from 3,500,000 gal. to 5 m.g. daily, involving concrete basin, 4 new filter tubes of 500,000 gal. capacity each, enlargement of present facilities, etc. $350,000. C. C. Page, engr. and comr. pub. wks.

O., Columbus—See "Streets and Roads."

Mich., Jackson—Aug. 1, by City Clerk, storage reservoir and wells. C. Crary, city mgr.; adv. this issue.

Ill., Evanston—Aug. 16, by Comn. of Pub. Wks., enlarging water filtration plant, Divs. A and B. H. P. Pearsons, mayor; adv. this issue.

BIDS RECEIVED

Wis., Ft. Atkinson—Brick, rein.-con. and steel pumping station, from W. H. Deason, 357 Washington Bldg., Madison, $7,790; rein.-con. reservoir, 60 ft. diameter, 15 ft. deep, from T. S. Willis, 330 Hayes Blk., Janesville, $8,214. Noted June 28.

CONTRACTS AWARDED

N. Y., Fairport—Furnishing 10 mi. 12 in. and 1 mi. 16 in. pipe and fittings, to Central Fdry. Co., Jersey City, N. J., $155,540; laying above pipe to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $47,990; rapid sand rein.-con. filtration plant, to Norwood Eng. Co., Florence, Mass., $12,737; 30 ft. standpipe to Chicago Bridge & Iron Wks. Co., 608 South Dearborn St., Chicago, Ill., $7,500; earthen dam, to Hines & McCabe, Rochester, $68,020. Noted June 7.

W. Va., Huntington—Paving Washington Ave. from 18th St. to 22nd St., brick on concrete, to Duncan, Griffith & Co., 1305 Adams Ave., $25,768.

Tenn., Madisonville—Complete water system, to F. Cantrell Co., Inc., 607 Market St., Chattanooga, $37,500; sublet tower and tank, to Chicago Bridge & Iron Co., Atlanta, $5,400; distribution system to W. A. Coates Constr. Co., Columbus, Ga. $17,132. Engrs. est. $35,000.

O., Cleveland—Cuyahoga Co. water improvements in Co. Sewer Dist. 29, to T. P. Egan, Caxton Bldg., $14,339; Co. Sewer Dist. 40, to Kassouff & Co., 3182 West 25th St., $21,546. Work involves 6,200 ft. 8 in. c.i. pipe.

O., Cleveland—For 1,045 tons c.i. mains in Random Rd. (Baldwin-Fairmount Project) Contr. 31, to Joseph Co., 877 Orange Ave., $146,245. Noted July 5.

O., Columbus—See "Streets and Roads."

O., Grandview Heights (Columbus, P. O.)—E. Gross, village clk., 16,580 ft. 6 in. c.i. mains in Parkway N, Parkway Dr., Timberman and Copeland Rds., Goodale and Northwest Blvds., Thomas Mulford, Dover, Norton, Holley and 2nd Aves., to Cleveland Trinidad Paving Co., Grand Theatre Bldg., Columbus, $35,981. Noted June 28.

Wis., Little Chute—Pumping station and reservoir, to Appleton Constr. Co., Odd Fellows Bldg., Appleton, $9,900; 100,000 gal. steel tank, 100 ft. steel tower and foundation, to Pittsburgh, Des Moines Steel Co., 10th and Tuttle Sts., Des Moines, Ia., $10,000; drilling deep well, to J. J. Faust & Son, Kaukauna. Bids rejected on excavation, laying mains and back filling. Noted June 7.

Minn., Emmons—See "Sewers."

Minn., Hutchinson — Waterworks improvements, 125,000 gal. steel tank on 100 ft. tower, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., Minneapolis, $13,100; one 300 g.p.m. centrifugal service pump and two 500 g.p.m. centrifugal booster pumps, to Worthington Pump & Mchy. Corp., 1017 Commerce Bldg., St. Paul, $4,446; 16 in well, to McCarthy Well Co., Wabash and Eustic Sts., St. Paul, $2,160. Noted June 21.

S. D., Esmond—For 3,500 lin.ft. 4 in. c.i. mains, centrifugal pump, and one 20 hp. Fairbanks-Morse oil engine, to Bruce-Bickelhaupt, Yankton, $8,384; steel tower and tank, to Pittsburgh-Des Moines Steel Co., 10th and Tuttle Sts., Des Moines, Ia., $5,450; rejected bids for pumphouse with underlying concrete reservoir, city will build by day labor. Noted June 14.

Mo., King City—New waterworks system, to Beeson Mchy. Co., 308 Mutual Bldg., Kansas City, $50,377. Noted May 3.

Tex., Crockett—See "Streets and Roads."

Utah, Midvale—To Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., 845 tons c.i. pipe $47.75 per ton, Birmingham.

Que., Montreal—For 6 m.g. electric pump, to E. Laurie Co., 243 Bleury St., $20,900. Noted June 7.

Ont., New Toronto—Pub. Utilities Comn., 1,100 ft. steel waterworks intake, flexible joints to Canadian Consolidated Rubber Co., Ltd., 1 Front St. E, Toronto; steel pipe to Horton Steel Wks., Ltd., Bridgeburg, $9,970; installing and laying to Federal Constr. Co., Ltd., 331 Bay St., Toronto, $36,800. Noted June 14.

Sewers

PROPOSED WORK

N. C., Asheville—See "Streets and Roads."

La., West Monroe—C. C. Bell, mayor, and Bd. Aldermen will sell $87,000 bonds July 31, for sewers.

O., Botzum (Ira, P. O.)—City of Akron purchased site and plans 2 story sewage disposal plant, here. $1,000,000 bonds voted. Metcalf & Eddy Eng. Co., 14 Beacon St., Boston, Mass., engrs.

O., Marietta—Making plans 10,910 ft. 4-12 in. vitr. clay sewer in 1st Sewer Dist. C. A. Stone, City Hall, engr.

Mich., Detroit—Making preliminary plans constructing Allen Drain for newly acquired city zoological gardens, about 2 mi. of 4-8 ft. brick, segment block or monolithic concrete. $300,000. J. W. Reid, city engr.

Ia., Atlantic—Making plans storm sewers in various streets. $44,000. J. Mayne, Atlantic, engr.

Minn., Austin—Plans sewers and disposal plant. $206,698. Greely & Hanson, 39 West Adams St., Chicago, engrs.

Mo., Braymer—See "Waterworks."

Tex., Grand Prairie — City Com. will probably take bids in August complete sewerage system. $35,000 bonds voted. Koch & Fowler, 606 Central Bank Bldg., Dallas, engrs. Noted May 24.

Tex., San Angelo—Making plans new sewage disposal plant and mains complete, gravity flow, to replace privately owned plant. $150,000-$200,000. W. T. Mantell, city engr.

Calif., Oakland—City to appropriate $208,000 for sewers in Yerba Buena Ave.; $103,500 outlet sewer in 7th St.; $70,000 storm sewers in Fruitvale Ave.; $40,000 outlet sewers in Piedmont St.; $15,000 sanitary sewers in Fruitvale Ave.; $85,000 storm sewers in Elmhurst Dist.

BIDS DESIRED

N. J., Pensauken (Camden P. O.)—Aug. 13, by Township Com., Cove Rd. and Center Sts., sewage disposal plant, etc. R. V. Peabody, twp. clk.; adv. this issue.

N. J., Roselle—July 24, by Boro Council constructing sewers. W. M. Van Wagner, boro engr.; adv. this issue.

Pa., Ford City—July 25, by boro, 2,000 ft. 24 in. terra cotta pipe from Ally River under Pennsylvania R.R. tracks to 1st St., along 5th Ave. to 5th St., along 4th, 3d and 1st Aves. to 5th St. $80,000. Douglas & McKnight, Columbia Bank Bldg., Pittsburgh, engrs.

Md., Baltimore—July 25, by Bd. Awards, sanitary sewers, etc., in Dist. 25, 14,795 ft. 8-15 in. vitr. pipe sewer, 5,750 ft. 5 and 6 in. vitr. pipe house connections 480 lin.ft. c.i. pipe house connections, 117 manholes. $90,000. B. L. Crozier, City Hall, highway engr.

O., Columbus—See "Streets and Roads."

Ind., Huntington—July 30, at office of Bd. Pub. Wks., constructing intercepting sewer along and adjacent to Little River, etc.; adv. this issue.

Mich., Birmingham—July 27, by Village Clerk, furnishing and installing 2,025 ft. 20 in., 1,264 ft. 18 in., 2,306 ft. 15 in. and 347 ft. 10 in., vitr. crock sewer. $25,000.

Wis., Janesville—July 27, by C. V. Kerch, city engr., 12,141 ft. 8-10 in. vitr. and 643 ft. 30 in. concrete sewer. $35,000-$40,000.

Wis., Park Falls — July 24, by J. J. Stauber, city clk., 7,000 ft. of 8 in. vitr. clay sanitary sewers. $25,000. W. F. Reichardt, Main St., Watertown, engr.

Minn., Sanborn—July 27, by city, sanitary sewerage system, 1,700 lin.ft. 8 in. and 1,930 lin.ft. 10 in. sewer, 11 manholes, 1 sewer outfall. $25,000. O. D. Fraser, clk. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs.

Wis., Rhinelander—Aug. 7, by City Clerk, constructing sewerage system. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, Ill., engrs.; adv. this issue.

Ia., Burlington—July 23, sewage disposal plant, incl. Imhoff tank, sprinkling filter, sludge bed, ejector station. H. A. Vollmer, city engr.

S. D., Madison—July 30, sewage disposal plant, 1 rein.-con. Imhoff tank, sludge bed and 8 sand filters. C. A. Trimmer, city engr.

Mo., Salisbury—July 26, by City Clerk, 8 mi. 8-10 in. sanitary sewers and 2 disposal plants. $50,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted June 21.

BIDS RECEIVED

Pa., Grove City—Sewage disposal plant, from Carson Eng. Co., Butler, $49,112. Noted June 2.

Calif., Los Angeles—For 1 mi. 7 ft. pipe for ocean outlet of outfall sewer, from Llewellyn Iron Wks., 1200 North Main St., c.i. pipe $582,264; B. B. Boyd, Los Angeles, rein.-con. pipe, $139,978. Noted June 21.

O., Cleveland—For 1,135 ft. 5 ft. 9 in. and 765 ft. 5 ft. 6 in. circular "E" brick sewer in East 141st St., from G. Darwich, 9214 Kempton Ave., $38,738; 700 ft. 5 ft. and 680 ft. 3 ft. circular "E" brick sewer in Bessemer Ave., from W. McDowell & Son Co., 10309 Miles Ave., $60,995; 2,751 ft. 12-24 in. vitr. tile sewer in Catalpa Rd., from Yahya Bros., Independence Rd., $13,921.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, timber supports Sect. 1, Fort Hamilton Parkway, to Necaro Co., Inc., 97 Court St., $153,300. Noted June 28.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewer in Church St., to Necaro Co., Inc., 97 Court St., 100.97% engrs. est. ($269,436); 64th St., to M. Tozzi, 1362 63rd St., 88.75% ($7,145); 83rd and Lake Sts., to Nazzaro & Querriero, 88% ($6,586) and 87.79% ($4,609) respectively; East 31st St., to Tomasetti & Co., Inc., 1133 60th St., 86% ($4,834); Sedgwick Pl., 54th St. and 2 sections of East 10th Sts., to Manmill Constr. Co., 2035 Douglas St., 97% ($2,443), 98% ($3,602), 87.5% ($1,600), and 87.5% ($1,600) respectively; Beverly Rd., to J. McBride, 100% ($400). Noted June 28 and July 5.

N. J., Belleville—See "Streets and Roads."

O., Akron—W. F. Peters, dir. Pub. Serv., 790 ft. 30 and 39 in. segmental block and 890 ft. 12-24 in. vitr. sewer in Aqueduct St., also 400 ft. 30 in. segmental block and 1,010 ft. 12-20 in. vitr. sewer in North Main St., to E. and W. McShaffrey Co., 574 Rhodes Ave., $13,578 and $10,088 respectively; 550 ft. 8-20 in. vitr. sewer in Bye St., to Shullo Constr. Co., 932 2nd Natl. Bank Bldg., $8,358. Noted July 12.

O., Columbus—See "Streets and Roads."

O., Garfield Heights (Cleveland P. O.)—For 7,000 ft. 30 and 36 in. segmental block

Sewers (Continued)

outfall sewer, to Manson Co., Sewer Contractors **Exch., The Arcade, Cleveland,** $78,363.

Mich., Royal Oaks—For 19,000 ft. 12-42 in. vitr. crock sewer, to Hammen & Co., 4612 Woodward Ave., Detroit. $63,000.

Mich., Detroit—Hellner Realty Co., 2348 Penobscot Bldg., for 9,826 ft. 12-42 in. vitr. crock sewers and brick manholes, Dearborn Twp. subdivision, to Cusino-Mercier Co., Springwells. $32,000.

Ia., North English—For 5,500 lin.ft. 8-12 in. sewer, to McElliott Co., Evanston, Ill., $14,115; disposal plant, to Gjellefald-Chapman Constr. Co., Forest City, $13,395. Noted June 14.

Minn., Emmons— Sewer main and water pipe laying to O. Johnson, Alden, Ia., $17,000; wells, pumps, steel tank, to Gjellefald-Chapman Constr. Co., Forest City, Ia., $13,950. Noted June 14.

Mo., St. Louis—Bd. Pub. Serv., City Hall, South Gravois Dist. Sewer 4, to United Constr. Co., Pontiac Bldg., $22,391; Harlem Sewer 18, to Hogan Contg. Co., Chemical Bldg., $56,286; Rock Creek Dist. Sewer 8, to Blackburn & Crean, Syndicate Trust Bldg., $20,679; Arloe Dist. Sewer 3, to Grant-Meinert, Arcade Bldg., $11,588; Grand Ave. Dist. Sewer 27, to Frazier-Davis Constr. Co., Arcade Bldg., $5,959; Sublette Ave. Sewer, to G. G. Prendergast, 6157 Wagner Ave., $20,406. Noted July 12.

Ont., Owen Sound—For 5,000 ft. 12-42 in. vitr. tile and rein.-con. sewer, to J. E. Russell Co., Ltd., Harbor Comn. Bldg., Toronto; laying pipe to Mitchell Constr. Co., Ltd., 43 Elmwood Ave., London.. Engrs. est. $40,000. Noted Feb. 8.

Waste Disposal

PROPOSED WORK

Calif., Marysville—City will appropriate $12,000 for incinerator. J. O. Wanzer, city mgr. Noted Apr. 26.

Bridges

PROPOSED WORK

N. Y., Mayville—Town of Chautauqua and Pennsylvania R.R., Broad St. Sta., Phila., plan new bridge, here. $50,000. Engineer not announced.

N. Y., Watertown—Power Corp. of New York, Light and Power Bldg., plans steel bridge over Skate Creek on Flat Rock-Browns Falls Rd. $50,000. Address W. P. McCreager, Northern New York Trust Co. Bldg., ch. engr.

N. C., Jefferson—See "Streets and Roads."

Louisiana—Federal Government, State, Parish of Ouachita and city of Monroe, having surveys made new bridge across Ouachita River, between Monroe and West Monroe. $1,000,000-$1,500,000. N. E. Lant, Baton Rouge, state bridge engr. J. S. Reynolds, Monroe, city engr.

Tenn., Smithville — DeKalb Co. making surveys bridge over Caney Fork River, probably steel and rein.-con.

Kentucky — State Hy. Dept., Frankfort, and Dix River Power Co., plan steel truss highway bridge over Dix River near Danville. $65,000.

Ohio— See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, plans one 80 ft. steel truss and six 20 ft. rein.-con. slab spans, etc., over Bonne Femme Creek, Howard Co.; one 40 ft. rein.-con. deck girder, and six 20 ft. rein.-con. slab spans, etc., over Moniteau Creek, Howard Co.; one 80 ft. steel truss, ten 40 ft. rein.-con. deck girder, and four 20 ft. rein.-con. slab spans, over Salt Creek and tracks of Missouri, Kansas & Texas Ry., Howard Co.; three 60 ft. steel truss and four 16 ft. rein.-con. slab spans, etc., over Perche River, Boone Co.; 10 ft. rein.-con. slab span, and 2 rein.-con. abutments, over stream, Howard Co.; two 12 ft. and six 10 ft. rein.-con. slab spans, etc., over stream, Boone Co.; one 30 ft. rein.-con. deck girder span over Hampton Branch, one 30 ft. rein.-con. deck girder span over stream, and one 30 ft. rein.-con. deck girder span over Sutton Branch, Iron Co.; one 20 ft. rein.-con. slab span, etc., over stream, one 30 ft. rein.-con. deck girder span, etc., over Midway Creek, Barton Co. B. H. Piepmeier, state highway engr.

Okla., Newkirk—Kay Co. election Aug. 10, to vote on $600,000 bonds to rebuild 29 bridges. L. A. Cann, co. comr.

Wash., Seattle—See "Streets and Roads."

Calif., Fresno—Fresno Co. plans to construct small concrete bridges. To exceed $25,000.

Calif., San Rafael—Marin Co. plans to replace various wooden bridges with concrete structures. $246,500.

Canada—Canadian Pacific R.R., Windsor St., Montreal, Que., soon takes bids 40 ft. double plate girder span on Timiskaming subdivision, Ontario, and 85 ft. pony span over coal creek, New Brunswick Div. J. M. R. Fairbairn, ch. engr.

Ont., Welland—Wainfleet Twp. soon takes bids 14 ft. concrete slab, 100 ft. through Pratt steel truss, and 72 ft. Warren steel truss bridges on concrete abutments, concrete floors, 18 and 20 ft. wide. $40,000. Ross & Scott, McCaw Blk., engrs.

BIDS DESIRED

N. Y., Scarsdale — July 30, by Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, constructing Bronx River Parkway Dr. Bridge 26 across Bronx River, about ½ mi. south of Scarsdale Station. L. G. Holleran, deputy ch. engr.; adv. this issue.

New Jersey—See "Streets and Roads."

New Jersey—Aug. 2, by State Hy. Dept., Trenton, 3 span steel encased bridge over Lehigh & Hudson River Ry., on State Highway Route 5, in municipality of Independence, Warren Co., here. A. L. Grover, ch. clk.; adv. this issue.

Pa., Clintonville—July 30, by Comrs. Venango Co., (Franklin), raising bridge, here, and replacing floor of same with creosoted yellow pine paving blocks, or with yellow pine joists, set on edge and covered with asphalt. $25,000. F. Tate, co. comr.

Va., Charlottesville—July 28, by B. A. Bennett, city mgr., rein.-con. bridge on Rugby Rd.; adv. this issue.

Georgia—See "Streets and Roads."

Miss., Grenada—See "Streets and Roads."

Tennessee—See "Streets and Roads."

Tenn., Murfreesboro—Aug. 10, by State Hy Dept., Nashville, 280 ft. rein.-con. bridge, 5 spans, over Stones River, near here, Federal Aid Project 96, Rutherford Co. $25,000. J. C. Creveling, Nashville, comr.

Illinois—July 31, by Dept. Pub. Wks. & Buildings, Div. Highways, Springfield, 14 slab bridges 10-30 ft. spans, 24 girders, 30-60 ft. spans, 9 steel, 85-200 ft. spans and 8 concrete culverts, 6-12 ft., involving 14,679 cu.yd. concrete, 1,473,670 lb. steel. C. H. Older, ch. highway engr.

California—Aug. 6, by State Hy. Comn., Sacramento, bridge over Whitewater River, near Whitewater, Riverside Co., eight 54 ft. rein.-con. girder spans with concrete piers, abutments and wing walls, 1,975 ft. earth dykes with rein.-con. slope paving, ½ mi. approach roadway paved with concrete, etc. R. M. Morton, state highway engr.

Wash., Hoquiam—July 31 to vote on $250,000 bonds constructing bridge across Hoquiam River. F. C. Black, city engr.

Wash., La Center—July 31, by State Hy. Comn., Olympia, 1,151 ft. rein.-con. bridge over south fork of Lewis River, here. J. Allen, ch. highway engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, 2 span steel and concrete bridges 42 ft. long, 34 ft. wide, on Route 4, in Cedar Creek, Ocean Co., from Gibbs-Mueller, 215 South Broad St., Phila., $36,633; 1 span rein.-con. slab bridge, 22 ft. span, 34 ft. wide, over Primrose Brook, Route 16, Morris Co., from Hoffman Constr. Co., Morristown Rd., Bernardsville, $5,672. Noted June 28.

New Jersey — Essex Co. (Newark) and Hudson Co. (Jersey City) reconstructing bridge deck, over Passaic River, Jackson St., from J. Befumo, East Orange, $45,324. Engrs. est. $60,000.

Alabama—State Hy. Dept., Montgomery, bridges on Jasper-Marion Co. line Rd., one 120 ft. steel span, remainder concrete girders, from Newell Constr. Co., 3828 Ave. A, Birmingham, $76,697; bridges on Marion-Dallas Co. line Rd., from Kenan & Kyser, Selma, concrete $35,399, from S. B. Boyd, Columbia, Miss., timber $17,732, concrete $36,797. Noted June 21.

O., Akron—W. F. Peters, dir. Pub. Serv., Delaware Bldg., 685 ft. rein.-con. girder bridge, 60 ft. wide, West State St., from T. E. McShaffrey Constr. Co., 171 South Forge St., with standard brick paving, cement filler and and waterproofing $160,751, standard brick paving, asphalt filler and waterproofing $160,751, sheet asphalt paving Plan B trinidad, brick gutter cement filler $157,354, sheet asphalt paving Plan B Texaco, brick gutter, cement filler $156,974. Noted June 21.

Missouri—State Hy. Dept., Jefferson City, July 6, four 80 ft. steel truss spans, etc., over Salt River, (on **15-21 Shelby**, which means **State Project Route** 15, Sect. 21, **Shelby Co.**), from Dildine Bridge & Constr. Co., Hannibal, $34,930; two 150 ft. steel truss, four 40 ft. rein.-con. deck, and two 20 ft rein.-con. slab spans over Grand River, **6-17, Daviess,** also eleven 20 ft. rein.-con. slab spans, etc., over overflow of Grand River, **6-17, Daviess,** from Western Bridge & Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $61,519 and $17,295 respectively; one 40 ft. rein.-con. deck girder span over Mill Race, **1-96, Jasper**, also one 75 ft. steel truss and four 20 ft. rein.-con. slab spans over Muddy Creek, five 20 ft. rein.-con. slab spans, etc., **1-91, Barton**, from Carterville Constr. Co., Carterville, $5,386 and $23,977 respectively; one 40 ft. rein.-con. deck girder span, **3-8, Mercer**, from Cameron Joyce Co., Keokuk, Ia., $7,435; one 40 ft. and four 20 ft. I-beam spans over Muddy Creek, two 40 ft. I-beam spans, etc., over Muddy Creek Drainage Ditch, one 40 ft. and four 20 ft. I-beam spans over Little Muddy Creek, two 10 ft. rein.-con slab spans over stream, two 10 ft. rein.-con slab spans, Sta. 30, plus 95, **6-17, Daviess**, from E. Euler, Perry, Kan., $31,441; one 120 ft. steel truss span, etc., over River Des Peres, **14-85, St. Louis**, from Pub. Wks. Constr. Co., St. Louis, $15,268; one 120 ft. steel truss span, etc., over Railey Creek, **43-9, Stone**, from Short & Bramer, Monett, $14,554; one 50 ft. steel truss span over Spring Creek, **19-21, Dent**, from Jones & Lenox, St. James, $7,313; three 20 ft. rein.-con. slab spans, etc., over Pine River Creek, **43-6, Stone**, from R. H. Sharp, Reads Springs, $4,870; cleaning and painting steel work on two 200 ft. and two 100 ft. steel truss spans, **9-70, St. Louis**, from C. Pearson, Jefferson City, $800. Noted June 28.

California—Yolo Co., (Woodland), and Solano Co., (Fairfield), 337 ft. rein.-con. bridge, two large and 2 small rein.-con spans, over Putah Creek, from J. L. Webster, Chico, $41,230. Noted July 5.

CONTRACTS AWARDED

Fla., Sulphur Springs—State Rd. Dept., Tallahassee, rein.-con. bridge over Hillsboro River, here, 4 spans, arch design, 30 ft. roadway, to Mugge Constr. Co., Bay View Hotel, Tampa, $61,105. Noted July 5.

Alabama—State Hy. Dept., Montgomery, treated timber bridges on road from Montgomery Co. line to Luverne, to Fountaine & Myers, Hattiesburgh, Miss., $30,063.

Ia., Clarinda—Page Co., 7 I-beams, 2 pony trusses and 7 box culverts, to G. W Condon, 510 Farnam Bldg., Omaha, Neb., $83,593. Bids on other items rejected, county will probably build by day labor. Noted June 7.

Ia., Le Mars—Plymouth Co., 37 culverts and extensions on Federal Aid Project 192, to Ward & Weighton, 516 Davidson Bldg., Sioux City, $26,797.

Ia., Oskaloosa—Mahaska Co., 4 span steel and concrete bridge east of Rose Hill, to Miller-Fifield Constr. Co., Waterloo, $44,000 exclusive of piling. Engrs. est. $45,000.

California — State Hy. Comn., Sacramento, rein.-con. bridge near San Mateo, to J. H. Shephard, Yosmite Bldg., Stockton, $49,012. Noted June 14.

Dams

PROPOSED WORK

N. Y., Altmar—See "Miscellaneous."

N. Y., Shushan—State had plans prepared 85 ft. concrete dam across Battenkill River, 34,000,000,000 cu.ft. water, here. $1,600,000. Hudson River Regulating Comn., Albany, engrs.

N. Y., Watertown—See "Miscellaneous."

CONTRACTS AWARDED

N. Y., Fairport—See "Waterworks."

Railways

PROPOSED WORK

Pennsylvania—Scranton Ry. Co., 234 Lackawanna Ave., plans extension of Washington St. car line into Keyser Valley and West Mountain Dist. $25,000. Engineer not announced.

California — Union Pacific Ry. Co., 610 South Main St., Los Angeles, having plans prepared 3 mi. cut-off freight line in vicinity of Long Beach. To exceed $450,000. R. L. Huntley, Omaha, Neb., ch. engr.

Nova Scotia—Dominion Coal Co., North Sydney, soon takes bids constructing electric railway from North Sydney to Baddeck, thence to English Harbor in one direction and to Iona on Canadian National R.R. in other. **V. MacFadden**, North Sydney, engr.

Railways (Continued)

BIDS DESIRED

Mexico—July 31 by Director Natl. Rys. of Mexico, Mexicali, 34 mi. railroad to Gulf of California, (first section of project). Correspondent reports unable to confirm.

CONTRACTS AWARDED

New Jersey—Bd. Comrs. city of Nutley, reconstructing 6,000 lin.ft. double track electric railway tracks, furnishing new rails, ties and ballast, also laying between tracks 11,750 sq.yd. reclipped granite block on concrete on Franklin Ave. between Centre St. and Kingsland Rd., to M. White, 80 Park Pl., Newark, $117,128. Noted June 28.

Idaho—Oregon Short Line R.R., Deseret News Bldg., Salt Lake City, Utah, to Morrison-Knudsen Co., Railroad and Reclamation Aves., Boise, supplying 150,000 cu.yd. ballasting gravel for new tracks on main line from Orchard to Perkins, also 15,000 cu.yd. for new grade between Reverse and Chalk, which is being built by Utah Constr. Co., McIntyre Bldg., Salt Lake City, Utah.

Excavation, Drainage Irrigation

PROPOSED WORK

La., Lake Charles — Calcasieu Parish, having plans prepared widening 25 mi. canal to 30 ft., 126 ft. deep from Calcasieu to Sabine River, $2,750,000 bonds sold for project.

Wis., Elkhorn—Farm Drainage Bd. 2, c/o H. H. Tubbs, engr., Elkhorn, making plans 5-7 mi. 10-15 in. tile drain and open ditch draining in Walworth Co. $25,000.

Calif., Manteca—South San Joaquin Irrigation Dist. to vote on $500,000 bonds for ditch lining and to purchase pumps for drainage works.

Calif., Paradise — Paradise Irrigation Dist. rejected bids extending mains, cement lining high line reservoir, etc. New bids at later date. J. E. Alley, supt. Noted June 14.

Calif., Los Angeles—Harbor Comn., Byrne Bldg., rejected bids dredging between Berths 148 and 150, 290,000 yd. excav. Noted July 12.

N. S., Lunenburg—Dominion Government, Ottawa, soon takes bids dredging, here. $40,000. Dept. of Marine, Ottawa, engrs.

BIDS DESIRED

Miss., Senatobia—July 24, by Bd. Drainage Comrs. Strayhorn Creek D.D. Tate Co. at office Holmes & Sledge, attorneys, Senatobia. 12½ mi. drainage canals, main canal 410,680 cu.yd. excav., lateral ditch 111,000 cu.yd. F. F. Pack, secy.

Wis., Milwaukee — F. D. Chase, Inc., engrs., 645 North Michigan Blvd., Chicago, taking bids on excavation work for 5 story and basement, 150 x 200 ft., printing plant, brick and concrete, plain foundation, for Milwaukee Journal Co., 182 4th St.

Ia., Sioux City—Aug. 8, Auditor, Woodbury Co., constructing New Garretson Ditch, 14 mi. excav. $50,000. C. Moriarity, 513 United Bank Bldg., engr.

Tex., Brownsville—Aug. 1, by Bd. Dirs. Cameron Co. Water Impvt. Dist. 1, constructing drainage ditches involving 300,000 cu.yd. excav., also clearing 80 acres. Engineer not announced. Noted June 14.

N. S., Canso — July 23, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., dredging, here. $75,000.

N. S., North Ingonish—July 30, by R. C. Desroches, secy., Dept. Pub. Wks., Ottawa, Ont., reconstructing breakwater and dredging. $34,700.

CONTRACTS AWARDED

Ind., Lebanon—Drainage Comn. of Boone and Hamilton Counties, Lebanon, 132,800 cu. yd. dredging, to J. E. Mieser, $24,700; 8,620 ft. 10-24 in. drain tile and 1,150 cu.yd. excav., to Sheriden Cement Co., Lebanon, $10,200.

Streets and Roads

PROPOSED WORK

N. Y., Batavia—Genesee Co. plans resurfacing 4 mi. Bethany-Pavilion Rd., 16 ft., macadam. $193,000.

N. Y., Buffalo—Plans widening about 2 mi. North St., 30.5 ft.

N. Y., Massena—Bd. Village Trustees plans concrete paving West Orvis and Cook Sts. $25,000. F. A. Hough, clk.

N. Y., Rochester—Plans paving Ellison St. brick, $41,000; Lehigh Ave., Requa, Urquhart, Marsh and Leavenworth Sts., asphalt, $75,800; sewers, walks and grading Fremont, Illinois and Durham Sts., $26,000; surface treating East Blvd., $5,700. C. A. Poole, city engr.

N. Y., Rochester—Plans asphalt paving Lake Ave., Barbara, Hampeden and Gillette Sts. $166,600. C. A. Poole, city engr.

Pa., Allentown—Plans extensive paving, various types. $50,000. H. F. Bascom, city engr.

W. Va., Parkersburg — Plans grading, paving and curbing Dickel Ave., 17th and 23rd Sts., 16 ft. $25,000. J. V. Dunbar, city engr.

W. Va., Parkersburg—Having plans prepared paving 2,200 ft. Market St., 35 ft., asphaltic concrete on 6 in. concrete, $25,000; grading paving and curbing 1 mi. Beckel Ave., 17th and 23rd Sts., 16 ft., $25,000. J. V. Dunbar, city engr.

W. Va., Williamson—Lee Dist., Mingo Co., election July 27, to vote on $436,000 bonds for road work. H. Cook, co. engr.

N. C., Asheville—City Comrs. authorized $925,000 bonds for street, sewer and waterworks improvements.

N. C., Greensboro — City Council authorized $1,000,000 bond issue for street construction. P. C. Painter, city mgr.

N. C., Jefferson—Ashe Co. sold $310,000 bonds for road and bridge construction. H. C. Tucker, West Jefferson, chn. Co. Highway Comn.

Tenn., Gallatin—Sumner Co. voted $250,000 bonds for 23 mi. highway between here and Kentucky state line, probably 16 ft. bituminous penetration macadam surface on old road base. Work will be done under supervision of State Hy. Dept., Nashville.

Tenn., Jasper—Marion Co. appropriated $100,000 for 8 mi. Federal Aid highway between Montegale and Battle Creek, 16 ft. Work will be done under supervision State Hy. Dept., Nashville.

Tenn., Linden—Perry Co. appropriated $25,000 for highway between here and Tennessee River, probably gravel. Work will probably be done under supervision State Hy. Dept., Nashville.

Tenn., Loudon—Loudon Co. voted $125,000 bonds for road from Knox Co. to Monroe Co. line, also $25,000 for various roads, probably limestone.

Tenn., Maryville—Blount Co. voted $150,000 bonds for 8 mi. highway between here and Knox Co. line, 16 ft. R. P. Reynolds, co. judge. Work will probably be done under supervision State Hy. Dept., Nashville.

Tenn., Pulaski—Making plans paving 13,000 sq.yd. various streets, rock asphalt on limestone. $25,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, consult. engr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared surfacing 14.42 mi. Owenton-Carrolton Rd., State Project 59, Owen Co., 14 ft. J. S. Boggs, state highway engr.

Kentucky — State Hy. Dept., Frankfort, having plans prepared grading and surfacing with waterbound macadam 5.405 mi. Lincoln Memorial Highway, State Project 3, Sect. B, Larue Co., 18 ft. J. S. Boggs, state highway engr.

Ky., Henderson—Plans 27,000 sq.yd. paving on various streets, $150,000-$200,000. J. A. Cunningham, comr, pub. wks. and property.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids June 28, grading, bridging and paving 6.172 mi. roads in Van Wert Co., bituminous macadam, asphalt or tar, or rein.-con.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids July 13, grading, bridging and paving 13.122 mi. roads in Summit and Wayne Counties. Noted July 5.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids June 29, grading, bridging and paving 6.147 mi. Sects. "M and N" Ohio River Rd., Lawrence Co., $160,637, also bridge on Sect. "N" Ohio River Rd., $13,327. Noted July 5.

O., Marietta—Making plans improving Front St., 975 cu.yd. excav., 3,017 ft. combination curb and gutter, 675 ft. concrete, 742 sq.yd. 1-1½-3 in. concrete, 1,695 sq.yd. 1-2½-5 concrete base, 7,375 sq.yd. 2½ in. asphalt. $35,000. C. A. Stone, City Hall, engr.

Mich., Detroit—Making plans paving with 3 in. sheet asphalt on 6 in. concrete, 5,000 sq.yd. Ralston Ave. $30,840, 1,200 sq.yd. Granville Pl. $6,690, 1,200 sq.yd. Hussar St. $7,300; 3½ in. sheet asphalt on 8 in. concrete on 3,700 sq.yd. Greendale Ave. $22,945. J. W. Reid, city engr.

Mich., River Rouge—Had plans prepared for grading,, curbing and concrete paving 13,000 sq.yd. Walnut, Elizabeth, LeBlanc, Fairmont and Anchor Sts. $65,000. M. L. Brown & Son, Capitol Theater Bldg., Detroit, engrs.

Ill., Belleville—St. Clair Co. soon takes bids grading and concrete paving 2 mi. Scott Field Rd., 20 ft. $60,000. Address County Engineer.

Ill., Chicago—Takes bids about July 27 asphalt paving various streets. $130,000. C. D. Hill, city engr.

Ia., Des Moines—Making plans paving, etc., 2¾ mi. East 30th St. from present pavement to Carlisle Rd. pavement. $75,000-$100,000. K. C. Kastberg, city engr.

Ia., Marshalltown—Marshall Co. election soon to vote on $800,000 bonds concrete paving, etc., Lincoln Highway. D. C. Elder, co. engr.

Mo., Ridgeway — Making preliminary plans paving streets, various types. To exceed $25,000. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Mo., St. Louis—Plans opening and widening ¼ mi. Morgan St. from Grand Blvd. to Spring Ave. with connections at Spring Ave. with Delmar and Enright Aves., 80 ft., cost $328,226, does not include paving. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv., City Hall, rejected bids curbing and asphaltic concrete paving 7,070 sq.yd. Smiley and Lansdowne Aves., $36,600. Will readvertise. Noted June 7.

Tex., Bastrop—Bastrop Co. plans to surface with bituminous topping State Highway 20. $25,000. State Hy. Comn., Austin, appropriated $10,500 toward cost.

Tex., Cameron—Milam Co. plans to construct Gause-Brazos River Sect. of State Highway 43. $65,000. State Hy. Comn., Austin, appropriated $20,000 toward cost. A. F. Mitchell, co. engr.

Tex., Eastland — Eastland Co. rejected bids bituminous macadam surfacing 18.67 mi. State Highway 18, 10.04 mi. State Highway 22 and 19.14 mi. State Highway 23 A. $300,000. C. S. Henning, Eastland, engr. Noted June 21.

Tex., Floresville — Wilson Co. election Aug. 4 to vote on $100,000 bonds hard surfacing State Highway 12 in Rd. Dist. 3, 18 ft. Total cost $150,000. J. E. Canfield, co. judge.

Tex., Floresville—Wilson Co. election Aug. 4, to vote on $100,000 bonds grading and hard surfacing, etc., 8 mi. State Highway 9, Rd. Dist. 3.

Tex., Laredo—Webb Co. soon takes bids bituminous topping 34 mi. San Antonio-Laredo Highway from here to Webb Co. line, 18 ft., $180,000.

Tex., McKinney—Collin Co. making plans grading, concrete surfacing, etc., 6.75 mi. State Highway 6, 18 ft. $300,370. T. W. Cawthon, co. engr.

Tex., Uvalde—Uvalde Co. plans constructign State Highway 3 west of here, through Cline to Kinney Co. line. $70,000. State Hy. Comn., Austin, appropriated $35,000 toward cost. M. B. Hodges, Co. engr.

Bids Desired.

Tex., Waxahachie—Ellis Co. défeated $750,000 bond issue to construct 30 mi. State Highways and improve 75 mi. lateral county roads. Noted June 7.

Okla., Barnsdall—Plans grading and paving 7th St., 6,000 sq.yd. vertical fibre brick, 3,400 lin.ft. curbing and guttering, etc. $34,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Clarence—Having plans prepared grading and vitr. brick paving 10 blocks, 30 ft. V. H. Cochrane, Lynch Bldg., Tulsa, engr.

Okla., Sayre—Having plans prepared grading and paving 2nd and Cedar Sts., Dist. 9, 5,600 sq.yd. concrete, 3,200 lin.ft. curbing, etc. $26,032. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Weleetka—Had plans prepared grading and paving Seminole Ave., 6,100 sq.yd. vertical fibre brick, 3,150 lin. ft. concrete curbing. $31,100. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Seattle—King Co. had plans prepared and takes bids in summer paving 3 mi. Maple Valley-Renton Highway, 20 ft. concrete roadway; 1 mi. East 65th St., 20 ft. concrete; ½ mi. pavement to Yarrow Point, 16 ft.; 270 ft. bridge across Stuck River south of Auburn. T. R. Beeman, co. engr.

California—State Hy. Comn., Sacramento, rejected bids grading and gravel surfacing 5 mi. road between Gilroy and San Felipe, Santa Clara Co. Noted June 14.

Calif., Alameda—Had plans prepared improving crossings of Bay Island Ave. and Park Ave. and Regent and Bay Island Ave., 9,200 sq.ft. grading, 1,000 sq.ft. oil macadam, etc. B. Hamilton, city engr.

Calif., Ft. Bragg—Plans paving 14 blocks, 3½ and 4 in. asphaltic concrete. To exceed $25,000.

Calif., Fresno—Fresno Co. having plans prepared paving with macadam 10 mi. lower section Tollhouse Rd., 10 mi. Trimmer Springs Rd.; paving with 4 in. asphaltic

Streets and Roads (Continued)

concrete Raisin City unit of highway system, $100,000, upper end of Blackstone Ave. unit of county highway system, $70,000, Tranquillity Rd., $100,000; paving with 5 in. asphaltic concrete Alta Ave. north of Tulare Co. line, $40,000, Reed Ave. unit south of Reedley, $15,000, Fowler-Laton Highway, $110,000, Sanger Academy Highway, $80,000. C. P. Jensen, Cory Bldg., co. surv.

Calif., Sacramento—Plans highway connecting Rio Vista Highway with new Antioch Bridge. $250,000 or more. C. W. Deterding, Courthouse, engr.

Calif., San Francisco—City to appropriate $30,000 improving Virginia Ave., $18,000 for San Jose Ave. and $25,000 for Silver Ave. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—City approciated $33,000 to improve Liberty and Sanchez Sts. M. M. O'Shaughnessy, city engr.

Calif., San Mateo — Had revised plans prepared improving portions 1st to 4th Aves. and E to I Sts., 323,000 sq.ft. 5 in. concrete, 6,000 cu.yd. excav., 14,500 lin.ft. concrete curb, etc. G. S. Whitehead, Redwood City, engr.

Calif., Willows—Glenn Co. having plans prepared constructing 6 mi. mountain road from Bedford Trail to Cottonwood Glade. B. Knock, Willows, engr.

Ont., Ottawa — Carlton Co. soon takes bids 11,000 sq.yd. bituminous macadam, Goulburn Twp. $30,000. Patterson & Byrne, 71½ Sparks St., engrs.

BIDS DESIRED

New York—July 30, by Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, paving Bronx River Parkway Dr. between Tuckahoe Rd., Tuckahoe and Harney Rd., Scarsdale. L. G. Holleran, deputy ch. engr.; adv. this issue.

New York—July 31, by Bd. Water Supply, Municipal Bldg., New York City, clearing and grubbing Schoharie Reservoir and constructing diverting dam down-stream from intake of Shandaken tunnel in towns of Gilboa and Conesville, Schoharie Co., Prattsville, Greene Co., and Roxbury, Delaware Co., Contr. 205. G. J. Gillespie, pres.; adv. this issue.

N. Y., Lockport—July 27, by F. Krull, clk. Niagara Co., paving 4.446 mi. Co. Rd. 46 in town of Niagara, 16 ft., bituminous macadam. T. Brennan, co. supt. highways.

N. Y., Long Island City—July 23, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repaving Beach 92nd St., Roosevelt, 2nd, Woodhaven, Hillside, Corona, Metropolitan, Sheridan, and Greenpoint Aves., also Metropolitan Ave. from Juniper to Pleasantview Aves., sheet asphalt; grading, etc., 101st St. (Jerome Ave.); grading, curbing, laying sidewalks, etc., on Liberty Ave.

N. Y., Long Island City—July 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, etc., Queens Blvd., Sibley St., Wooley and Eliot Aves.; laying and relaying gutters, grading and replacing surface improvements upon ramps, etc., in Tompkins Lane, Codwise and Jessie Places, Middagh and Penelope Sts., Fisk, Woodhaven and Yellows Aves., in South Side, Schroeder Pl., Laconia St., Astoria Rd., North Hempstead and Union Turnpikes, Trimble, Hyatt, Burrough and Meyers Aves., in North Side.

N. Y., New York—July 23, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving Amsterdam Ave., East 90th, 131st and East 104th Sts., sheet asphalt; repairing asphalt pavement when and where directed by Chief Engineer of Bureau of Eng.; repairing wood block and granite block pavements in railroad area.

New Jersey—July 30, by State Hy. Dept., Trenton,, grading and bridges on Route 5, Sect. 13, Budd Lake to Netcong, Morris Co. A. L. Grover, ch. clk.; adv. this issue.

New Jersey—Aug. 1, by Comrs. Boro of Deal, Boro Hall, Norwood Ave., Deal, 8 in. rein.-con. paving Richmond Ave.; by Comrs., Boro of Allenhurst at Boro Hall, Norwood Ave., Deal, 8 in. rein.-con. paving Paige Ave., etc. J. Strollo, Brent Good Bldg., Long Branch, engr.; adv. this issue.

New Jersey—Aug. 2, by State Hy. Dept., Trenton, improving Route 13, Sect. 6, Lawrenceville to Princeton, Mercer Co. A. L. Grover, ch. clk.; adv. this issue.

N. J., Keyport—July 30, by Mayor and Boro Council, concrete paving Church St. J. T. Hopkins, boro engr.; adv. this issue.

N. J., Roselle—July 24, by Boro Council, asphaltic concrete paving various streets. W. M. Van Wagner, boro engr.; adv. this issue.

Pennsylvania—Aug. 7, by State Hy. Dept., Harrisburg, surfacing various roads, (A means Application, R means Route), with one course rein.-con., 2,303 ft. A-2578, Center and Hopewell Twps., Beaver Co., 612 ft. A-2431, Burrell Twp., Indiana Co., 14,953 ft. R-95 Spur A-2273, Wetmore Twp. and Kane Boro., McKean Co.; surfacing with either bituminous on concrete or one course rein.-con. 7,881 ft. A-1242 and 1249, Trainer Boro. and L. Chichester Twp., Delaware Co., 16,310 ft. R-133, Marple and Newtown Twps., Delaware Co., 23,775 ft. R-295, A-2316, 17 and 18, Elk Creek and Conneaut Twps. and Cranesville Boro., Erie Co., 23,470 ft. R-86 and 272, A-2327 and 2328, Fairview Twp. and Fairview Boro., Erie Co., 17,527 ft. A-2227 and 2228, Upper Nazareth and Bushkill Twps., Northampton Co., 34,422 ft. A-2355, Lower Mt. Bethel Twp., Northampton Co., 11,202 ft. R-73, Center and Butler Twps., Butler Co., 10,855 ft. R-247, Dunbar Twp., Fayette Co., 13,977 ft. R-197, Richmond and Covington Twps., Tioga Co.; surfacing with bituminous surface treated macadam 7,051 ft. A-2452, Pocono and Paradise Twps., Monroe Co.; surfacing with bituminous, surface course Specification D, base course to be reconstructed by State Hy. Dept., 12,017 ft. R-111, Franklin Twp., Greene Co. P. D. Wright, secy. highways.

Pennsylvania—Aug. 8, by State Hy. Dept., Harrisburg, paving various roads, (R means Route, A means Application), with one course rein.-con. 3,199 ft. R-1, Halifax and Upper Paxton Twps., Dauphin Co., 20,005 ft. R-175, Upper Nazareth Twp., Northampton Co.; surfacing with bituminous on concrete or one course rein.-con. surfacing 18,206 ft. A-2573, 74 and 75, Springfield, Marple and Upper Providence Twps., Delaware Co., 27,876 ft. R-258, A-2331, 32 and 34, Mill Creek, Summit and McKean Twps. and Middleboro Boro., Erie Co., 7,731 ft. R-258, A-2357, Washington Twp., Erie Co., 15,659 ft. R-2, Point and Mahoning Twps. and Danville Boro., Northumberland and Montour Counties, 42,580 ft. A-2222, 23 and 24, Washington and Plainfield Twps. and Bangor Boro., Northampton Co., 3,749 ft. R-124, A-2178, Dover Boro., York Co., 14,368 ft. R-69 and 60, South Buffalo Twp., Armstrong Co., and R-70, Buffalo Twp., Butler Co.; paving with one course rein.-con. and Hillside vitr. brick 15,654 ft. R-211, A-2369, Otto and Foster Twps., McKean Co., 1,030 ft. A-2513, Montrose Boro., Susquehanna Co., 3,666 ft. R-163, Slatington Boro., Lehigh Co.; surfacing with vitr. brick on concrete or bituminous on concrete 6,397 ft. R-167, A-2195, East Stroudsburg Boro., Monroe Co.; surfacing with bituminous macadam, penetration method, 12,994 ft. R-247, Perry Twp., Fayette Co.; surfacing with bituminous macadam, penetration method, or bituminous on reconstructed base 7,272 ft. R-108, North Strabane Twp., Washington Co. P. D. Wright, secy. highways.

Pa., Milton—July 31, by W. C. Miller, town clk., paving and curbing portions Centre, Arch and 2nd Sts. J. Harpster, pres. of Council; adv. this issue.

Pa., Pittsburgh—July 28, by Comrs. Alleghany Co. paving 5,550 ft. Beaver Rd. from Glen Osborne Boro. to Sewickley Line, asphaltic concrete with bituminous surface treatment. $25,000. V. R. Covell, Court House, co. engr.

Maryland—July 31, by State Rds. Comn., Baltimore, 2.43 mi. highway in Garrett Co., Contr. G-16, concrete. J. N. Mackall, chn.; adv. this issue.

W. Va., Bluefield—July 24, at office C. R. Ridley, city mgr., surfacing treating 115,000 sq.yd. old macadam pavements; adv. this issue.

W. Va., Fayetteville—Aug. 14, by Fayette Co., grading, paving, etc., 9.5 mi. Mt. Hope-Pax Rd.; adv. this issue.

W. Va., Parkersburg—July 25, surfacing 2,580 ft. Arden Pl., Stewart and Watt Sts., 20 ft., brick on 6 in. sand and gravel, 558 ft. 8 in. storm sewers. $25,000. J. V. Dunbar, city engr.

Georgia—Aug. 3, by State Hy. Dept., East Point, chert surfacing Dallas Cedartown Highway, 14,102 lb. reinforcing, 10,468 cu.yd. chert, etc.; bridge over Seaboard Air Line R.R., 13,500 ft. creosoted and 5,200 ft. plain timber, 13 cu.yd. concrete. W. R. Neel, East Point, engr.

Florida—July 25, by State Rd. Dept., Tallahassee, grading and constructing rock base on 8.25 mi. Rd. 8, from Okeechobee City to Kissimmee River, Project 523, Okeechobee Co. W. F. Cocke, state highway engr. Noted July 12.

Fla., Arcadia—July 28, improving streets, Item 1, removing and rebuilding base with clay or stone, 10,700 sq.yd., 5 in. base; Item 2, 10,700 sq.yd. asphalt block, 10,700 sq.yd. vitr. brick pavement, asphalt filler; Item 3, 9,000 sq.yd. reconstructed 6 in. base as in Item 1; Item 4, 9,900 sq.yd. bituminous macadam pavement; Item 5, 9,800 sq. yd. bituminous surface treatment of old macadam. Cravens & Kimmel, Arcadia, engrs.

Miss., Canton—Aug. 3, by Supervs. Madison Co., resurfacing gravel road between here and Carthage, Project 111.

Miss., Grenada—Aug. 11, by Bd. Supervs. Grenada Co., Improving 7,672 mi. Federal Aid Project 147 between here and Calhoun City, 25,254 cu.yd. common and 70,644 cu. yd. borrow excav., 428.88 cu.yd. concrete in culverts, 41,692 lb. reinforcing steel bridges, incl. one 100 ft. steel span complete except floor, involve 485.83 cu.yd. concrete, 52,690 lb. reinforcing, etc. $122,172. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Vicksburg—Aug. 2, by Bd. Supervs. Warren Co., 5 mi. gravel road between here and Rolling Fork, Project 146.

Tennessee—Aug. 10, by State Hy. Dept., Nashville, grading, bituminous macadam surfacing and bridging 11 mi. highway between Shelbyville and Rutherford Co. line, 16 ft., Bedford Co., several bridges over 20 ft. span will be let separately, $200,000; grading, gravel or chert surfacing, bridging, etc., 8 mi. between Camden and Carroll Co. line, 18 ft., Benton Co. J. C. Creveling, Nashville, comr.

O., Columbus—July 24, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 1,706 ft. Piedmont Rd., 60 ft.; 1,497 ft. Midgard Rd., 40 ft.; 448 ft. alley north of 10th Ave., 25 ft.; 320 ft. alley west of 4th St., 16 ft.; 332 ft. alley north of Clark St., 21.25 ft.; 350 ft. alley west of Waldeck Ave., 26 ft.; 548 ft. alley west of Taylor Ave., 20 ft.; brick, asphalt, concrete or asphaltic concrete; 5,130 ft. 8-25 in. combined sewer in alley east of Cleveland Ave.

O., New Philadelphia — July 28, paving 4,830 ft. Boulevard, brick or asphalt on concrete, two 16 ft. strips with 27 ft. strip of rolled slag between car tracks. $76,000. G. Arnold, Court House, engr. Noted Feb. 8.

Michigan—July 25, by State Hy. Dept., Lansing, grading and surfacing 46,330 sq. yd. Federal Aid Project 74, Sect. D, Washtenaw Co., 19,857 sq.yd. State Trunk Line Rd. 17-6, Sects. A and B, Ann Arbor and Ypsilanti Counties, both asphalt concrete or bituminous concrete. F. F. Rogers, comr.

Michigan—July 26, by State Hy Dept., Lansing, grading and surfacing 21,102 sq.yd. State Trunk Line Rd. 11-22, Berrien Co., concrete or widening present macadam with concrete or macadam base and surfacing with bituminous concrete wearing course. F. F. Rogers, comr.

Michigan—July 27, by State Hy. Dept., Lansing, grading and concrete surfacing 35,874 sq.yd. State Trunk Line Rd. 11-25, Sect. B., F. F. Rogers, comr.

Michigan—July 30, by State Hy. Dept., Lansing, grading and surfacing 12,720 sq.yd. State Trunk Line Rd. 17-13, in Alboin and 28,914 sq.yd. Federal Aid Project 89, Sects. A, B and C, Calhoun Co., asphalt, concrete or bituminous macadam. F. F. Rogers, comr.

Michigan—July 31, by State Hy. Dept., Lansing, grading and gravel surfacing 53,991 sq.yd. Federal Aid Project 124 and State Trunk Line Rd. 14-44, Clinton Co. F. F. Rogers, comr.

Michigan—July 31, by State Hy. Dept., Lansing, grading and surfacing 17,447 sq. yd. State Trunk Line Rd. 65-2, Washtenaw Co., 26,316 sq.yd. State Trunk Line Rd. 47-5, Sects. A, B and C, Hillsdale Co., both asphalt, concrete or bitnminous concrete. F. F. Rogers, comr. Noted June 21.

Illinois—July 24, by Dept. Pub. Wks. and Bldgs., Div. Highways, Springfield, concrete paving 0.77 mi. highway, Bond Issue Route 26, Sta. 3, Ogle Co., cement will be furnished. Bids will also be received by village of Forreston, for widening Sect. 3. C. Older, ch. highway engr. C. S. Hepner, Freeport, engr. for village.

Illinois—July 31, by Dept. Pub. Wks. & Buildings, Div. Highways, Springfield, paving 54.94 mi. road, 18 ft., either concrete, 4 in. monolithic, 4 in. bituminous filled brick, bituminous concrete with and without binder course, (cement will be furnished), also for 81.46 mi. grading involving 1,868,248 cu.yd., and 8,839 cu.yd. concrete. C. H. Older, ch. highway engr.

Ill., Chicago — July 25, concrete sidewalks on Randolph St. $80,000. C. D. Hill, City Hall, engr.

Ia., Colfax—July 26, by H. F. Cassidy, city clk., paving, grading and curbing various streets, 41,277 sq.yd. vertical fibre brick, asphalt, bituminous, vibrolithic or rein.-con., 27,140 lin.ft. combination curb and gutter, 869 lin.ft. 36 in. double gutter,

Streets and Roads (Continued)

17,772 cu.yd. earth. $150,000. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs.

Minn., Duluth—July 24, by W. H. Fischer, city comr., paving Railroad and Commerce Sts., either 2,130 sq.yd. vitr. brick or 6,230 sq.yd. concrete. $30,780 for concrete and $37,093 for brick. J. Wilson, city engr.

Minn., St. Paul—July 23, by H. W. Austin, city purch. agt., paving with asphaltic concrete and vertical fibre brick, 21 blocks Cleveland Ave., $85,000, 12 blocks Minnehaha St., 5 blocks Phalen Parkway, 30 blocks Earl St., 8 blocks Front St. and 7 blocks Pleasant St. G. M. Shepard, city engr. Noted July 12.

Minn., St. Paul—Aug. 6, by G. J. Ries, aud. Ramsey Co., grading and gravel surfacing Frost Ave., 47,646 cu.yd. earth excav., 3,105 cu.yd. gravel surfacing, etc. $26,000. P. N. Coates, 900 Guardian Life Bldg., co. surv.

South Dakota—July 24, by State Hy. Dept., Pierre, gravel surfacing 9,169 cu.yd. 124, Codington, which means Federal Aid Project 124, Codington Co.; 29,313 cu.yd. 152 A, Codington; 16,535 cu.yd. 152 B, Grant; 12,786 cu.yd. 162 C, Roberts; 21,264 cu.yd. 96, Roberts; 10,217 cu.yd. 139, Roberts; sand clay surfacing 20,474 cu.yd. 51, Gregory. F. D. Hudgins, state highway engr.

Mo., St. Louis—Aug. 14, by Bd. Pub. Serv., 208 City Hall, paving 10,735 sq.yd. Kingsbury and Lucas Aves., asphalt on concrete, $73,760; repaving 3,660 sq.yd. Channing Ave., asphalt on concrete, $9,800; granite curbing and willite asphalt paving 4,705 sq.yd. Loughborough Ave., $25,000; concrete curbing and Kentucky rock asphalt paving 6,445 sq.yd. Quincy Ave., $32,100; grading and paving 1,495 sq.yd. Dewey Ave., asphalt or bitulithic on concrete, $9,440; repaving 3,740 sq.yd. Palm Ave., bitulithic on concrete, $10,120; 8,980 sq.yd. Garrison St., asphalt or warrenite on concrete, $21,920. W. W. Horner, 300 City Hall, engr.

Ark., Eldorado—July 30, concrete paving 43,000 sq.yd. in Dists. 16 and 12. Ford & MacCrae, Gazette Bldg., Little Rock, engrs.

Tex., Beaumont—Aug. 7, by B. B. Johnson, judge Jefferson Co., rein.-con. paving 7.35 mi. State Highway 40, 584 cu.yd. concrete and 46,884 lb. reinforcing in structures, 69,336 sq.yd. concrete and 160,816 lb. reinforcing in pavement, etc. $315,000. A. C. Love, co. engr.

Tex., Brenham—July 25, by J. H. Chappell, judge Washington Co., grading and bridging 17.3 mi. State Highway 36, 2,189 cu.yd. concrete, 611,850 cu.yd. borrow, 122,000 cu.yd. roadway, 11,100 cu.yd. unclassified excav., 196,290 lb. reinforcing, etc., $185,000; 19.2 mi. Brenham-Washington Rd., 3,000 cu.yd. concrete, 115,000 cu.yd. borrow, 129,000 cu.yd. roadway, 208,000 lb. reinforcing, $200,000. G. A. Bracher, co. engr.

Tex., Falfurrias—Brooks Co. taking bids grading, gravel and caliche surfacing 10.07 mi. State Highway 9, 18 ft. $131,250. H. S. Bedell, co. engr.

Oklahoma—July 25, by State Hy. Dept., Oklahoma City, grading and paving road between Kingston and Madill, Federal Aid Project 98, Marshall Co., 65,274 sq.yd. gravel, 17,500 cu.yd. earth and 2,050 cu. yd. rock excav. $130,000. F. L. Simmons, Capitol Bldg., Oklahoma City, engr.

Okla., Barnsdall — July 31, by J. C. Blankenship, city clk., grading and paving Cedar Ave., 7,000 sq.yd. concrete, 3,200 lin. ft. curbing, etc. $29,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted June 21.

Okla., Blackwell—July 24, by D. Randall, city clk., grading and paving 3rd St. and Lincoln Ave., 8,600 sq.yd. vertical fibre brick, 4,800 lin.ft. concrete curbing, 4,800 lin.ft. concrete gutter, etc. $46,959. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Washington — July 31, by State Hy. Comn., Olympia, grading and concrete paving 9.72 mi. Pacific Highway from Chehalis south, Lewis Co.; grading and gravel surfacing 6.08 mi. Olympic Highway from Lunch Creek, west, Grays Harbor Co., 4.43 mi. North Bank Highway and 2.26 mi. North Bank Highway between Greer Creek and Wind River, Skamania Co. J. Allen, state highway engr.

Calif., Auburn—July 25, by City Trustees, 61,600 sq.ft. grading, 61,000 sq.ft. concrete pavement, 4,600 sq.ft. curb and gutter, etc. $25,000. J. A. Barieau, city engr.

Calif., Huntington Beach—City Council receiving bids improving 17th and Delaware Sts., 1,575 tons black base patch, 204,295 sq.ft. 3 in. warrenite resurfacing. Former bids rejected. Noted July 5.

Calif., Napa—July 23, by J. A. Daly, clk. Napa Co., improving 7.34 mi. road between Monticello and Winters. E. P. Ball, co. highway engr. Noted Apr. 4.

Calif., Oroville — July 25, by Supervs. Butte Co., gravel surfacing 9 mi. Humboldt County Rd. H. H. Hume, co. road engr.

Ont., St. Thomas—Taking bids paving 7,500 sq.yd. Gladstone Ave., asphalt on concrete, concrete curb and gutter. $31,888. W. C. Miller, city engr. Noted July 12.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, July 11, asphalt paving (1) Bay 31st St. (2) Delamere Pl. (3) East 40th St. (4) Gelstone Ave. (5) 18th Ave. 66th St. (6) 70th St. (7) 72nd St. (8) 90th St., grading, curbing and flagging (9) Delamere Pl., asphalt repaving (10) Tompkins Ave., recurbing and asphalt paving (11) 6th Ave., from Cranford Co., 52 3th St., (1) $6,309 (4) $6,788 (5) $8,085 (6) $8,534 (7) $8,350 (8) $7,949 (11) $10,774; Cleveland Trinidad Paving Co., Flushing, (2) $8,872 (3) $18,866; W. J. McHale Contg. Co., 1250 Jefferson St., (9) $4,336; Sicilian Asphalt Paving Co., 41 Park Row, New York, (10) $37.585. Noted July 5.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, July 13, repaving Post Ave., granite block, from M. I. Sachs, 246 South 9th St., Brooklyn, $49,831. Noted July 5.

New Jersey—State Hy. Comn., Trenton, July 9, concrete paving 17,825 sq.yd. Route 10, Sect. 2, Broad Ave.-Glen Rd., and 16,870 sq.yd. Route 10 Sect. 1-C, Bluff Rd.-Anderson Ave., both Bergen Co., from J. J. McGarry, Edgewater, 97% of engrs. est. ($115,145) and 99% ($57,481) respectively; 24,550 sq.yd. Route 1, Sect. 12, Rahway Ave., Elizabeth, asphalt, from Newark Paving Co., 133 1st St., Newark, 99.9% ($108,192). Noted June 28.

Maryland—State Rds. Comn., Baltimore, paving 11.61 mi. from Hagerstown to Sharpsburg, Washington Co., 18,300 tons base course stone, 14,100 tons bituminous macadam, from Development & Constr. Co., American Bldg., Baltimore, $181,280; Contr. B-57, Baltimore Co., 1,900 tons waterbound macadam, from T. P. Murray, Towson, $15,003.

Alabama—State Hy. Dept., Montgomery, grading and surfacing with bituminous macadam 2.352 mi. road from Marshall Co. line to Federal Aid Project 88, Marshall and Etowah Counties, from Etowah Co. Comrs. Court, Gadsden, $62,767. Noted June 21.

O., Bellaire—Grading and paving Washington St., vitr. brick, from A. and O. Holderman, Wheeling, W. Va., $55,242.

Michigan—State Hy. Dept., Lansing, grading, and concrete surfacing, etc., 17,447 sq.yd. State Trunk Line Rd. 65-2, from L. A. and P. E. Moran, Howell, $39,202; grading 115,384 cu.yd. Federal Aid Project 73, from Koch Building & Supply Co., Ann Arbor, $133,755. Noted June 21.

Ia., Des Moines—Polk Co., concrete paving, etc., 29,506 sq.yd. Primary Rd. 15, (Norwalk Rd.), from Koss Constr. Co., 2818 5th St., $2.55 per sq.yd. Noted July 5.

Missouri—State Hy. Dept., Jefferson City, July 6, constructing roads (33-8, Clinton, means Route 33, Sect. 8, Clinton Co.) 5 mi. **33-8, Clinton,** from J. C. Lyle, Kansas City, $32,084; 4.922 mi. **19-21, Dent,** from General Constr. Co., Syndicate Trust Bldg., St. Louis, $25,483; 3.798 mi. **3-8, Mercer,** from J. L. Simmons, La Plata, $21,629; 3.57 mi. **43-6, Stone,** from M. E. Gillioz, Monett, $41,196; 5 mi. **31-2, De Kalb,** from E. Euler, Perry, Kan., $26,493; 4.332 mi. **1-91, Barton,** from Carterville Constr. Co., Carterville, $44,841; 5 mi. **6-17, Daviess,** from Western Bridge & Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $73,084; 4.449 mi. **43-10, Stone,** and 2.623 mi. **43-9, Stone,** from Springfield Constr. Co., Springfield, $23,336 and $39,199 respectively; 1.445 mi. **14-85, St. Louis,** from Webb-Kunze Constr. Co., 5927 Fyler Ave., St. Louis, $9,495; 0.39 mi. **15-21, Shelby,** from Pan Amer. Bridge Co., Moberly, $6,329. Noted June 28.

Tex., Colorado—Mitchell Co. paving 0.6 mi. 2nd and Walnut Sts., (a) warrenite bitulithic, (b) Uvalde rock asphalt on 5 in. concrete, (c) 3 in. vertical fiber brick on concrete, from Valient & Toomey, F. & W. Bank Bldg., (c) $58,070; from West Texas Constr. Co., 504 Cotton Exch. Bldg., Ft. Worth, (a) $62,660. Noted June 21.

Tex., Paris—Lamar Co. grading and concrete surfacing 2.41 mi. Bates Sect. State Highway 5, 25,535 cu.yd. concrete, etc., from Julian C. Field & Co., Denison, $67,156. Noted June 21.

Calif., Salinas—Improving Maple, Chestnut and California Sts., 175,075 sq.ft. grading, 38,204 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete, 117,621 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete, 8,589 sq.ft. concrete gutters, etc., from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, $43,757; West St., (1) 46,345 sq.ft. grading, (2) 43,461 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete (3) 2,712 sq.ft. concrete gutter (4) 2,158 lin.ft. concrete curb, from Clark & Henery Constr. Co., 38 South Sutter St., Stockton, (1) $0.02 (2) $0.189 (3) $0.23 (4) $0.64, Municipal Impvt. Co., 306 12th St., Oakland, (1) $0.027 (2) $0.185 (3) $0.225 (4) $0.65, Warren Constr. Co., Bacon Bldg., Oakland, (1) $0.03 (2) $0.185 (3) $0.21 (4) $0.62; Aves. A, B and C, from W. A. Dontanville, Salinas, 34,828 sq.ft. grading at $0.03, 31,828 sq.ft. waterbound macadam pavement $0.095, 2,836 sq.ft. concrete gutter $0.29, 2,882 lin.ft. concrete gutter $0.70. Noted June 7.

Que., Montreal — Asphalt paving from Duranceau & Duranceau, 152 Hamilton St., 1,600 sq.yd. Caramel St. $6,910, 615 ft. Resther St. 22-27 ft., $9,686, 833 ft. Boyer St., 25-30 ft., $13,163, 1,084 ft. Adam St., 37 ft., $17,408, 2,240 ft. Orleans St., 30 ft., $45,953, 2,250 ft. Mentana St., 30 ft., $9,400, 250 ft. Lalonde St., 19 ft., $2,365, 4,125 sq. yd. Adam St. $17,408; from Quinlan Robertson & Janin Ltd., 52 Duluth Bldg., 18,400 sq.yd. 1st Ave. $89,530, 5,650 sq.yd. Girouard Ave. $38,208; from D. Brault, Ltd., 2855 Rosemount Blvd., 10,445 sq.yd. St. Dominique St. $40,148, 1,930 sq.yd. Mousseau St. $11,945; from Sicily Asphaltum Paving Co., 60 St. Viateur St., 3,600 sq.yd. De Lanaudiere St. $14,498, 3,535 sq.yd. De La Roche St. $15,528; concrete sidewalks, from Leger & Lamoureux, 294 St. Catherine St., E., 2,670 sq.yd. Orleans St. $11,347, 1,290 sq.yd. St. Sotique St., $5,522; from L. Lyon, 49 Brewster St., 3,100 sq.yd. Peloquin St. $13,485; from St. George Gaubreau, Ltd., 127 Stanley St., 2,000 sq.yd. Lasalle St., $8,820.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, paving 22,130 ft. road, 20 ft., in Brimfield, bituminous macadam, to D'Onfro Bros., 712 Main St., Leominster, $235.508. Noted June 7.

Mass., Medford—Street Comn., to Coleman Bros. Inc., 245 State St., Boston, macadam paving 14,352 sq. yd. Salen St., $2.90 per sq.yd., 13,143 sq.yd. Riverside Ave. $3.02, 25,000 sq.yd. Winthrop St. $2.85 and 16,641 sq.yd. at $1.90, 16,020 sq.yd. Forrest St. $4.85 and 220 sq.yd. High St. $4.25; to Rowe Contg. Co., North Revere St., Malden, 20.809 sq.yd. High St. $2.25 and 13,507 sq.yd. Winthrop St. $2.25; to Colburn Constr. Co., c/o Dept. Pub. Wks., 50,746 sq.yd. Main St. $3.10, and 5,791 sq.yd. High St. $3. Work in charge of F. R. Charnock, city engr. Noted June 28.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Coney Island Ave., to E. J. Galway, $6,536; Kings Highway, to H. and B. Contg. Co., $85.764; 76th St., to F. Persicano, 350 Fulton St., $5,919; 77th and 81st Sts., to L. Mangeri, 190 31st St., $5,080 and $3,342 respectively; curbing and flagging Lefferts Ave., to Galco Contg. Co., $5,701; asphalt paving Rutland Rd., Newport, Osborn and Tehama Sts., asphalt repaving North Elliott Pl., 84th and North Oxford Sts., to Borough Asphalt Co., 1,301 Metropolitan Ave., $24,085, $3,392, $13,735, $10,327, $20,160, $19,535 and $21,608 respectively; asphalt paving DeKalb Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $46,855; Gelston Ave. and repaving 15th Ave., to Cranford Co., 52 9th St., $5,940 and $4,943 respectively; asphalt repaving 60th St., to Uvalde Asphalt Paving Co., 1 Bway., New York, $31,414; paving St. Edwards St., grade 1 granite, to Greico Bros., 172 Russell St., $12,479. Noted June 28 and July 5.

N. Y., Glens Falls—Paving 1.2 mi. Park, Williams and Sherman Aves., 32 ft., to W. M. Brown, Hudson Falls, $48,252.

N. Y., North Tarrytown (Tarrytown P. O.)—Westchester Co. (White Plains) rein. con. paving Bedford Rd. and Webber Ave., here, to Strong & Stiffy, Inc., 522 5th Ave., New York City, $59,430. Noted June 21.

N. Y., Rochester—Bd. Contr. & Supply, paving Elmwood Ave., willite, to Rochester Vulcanite Pavement Co., $22,204; Parsells Ave., asphalt, to Oliver Costich Co., $18,782; Averill St., asphalt, to Whitmore, Rauber & Vicinius, $18,268; Stanfield Terrace and Lorraine Pl., both asphalt, to W. E. Kinney, $8,504 and $4,295 respectively, all contractors in Rochester.

N. Y., Rochester—Resurfacing Meigs St., and paving Arbordale Ave., asphalt, to O. Costich Co., $7,640 and $6,582 respectively;

Streets and Roads (Continued)

paving Cumberland St., asphalt, to Whitmore, Rauber & Vicinius, $12,116; widening and asphalt paving 1,355 ft. Main St., to W. Bailey Co., $30,519. All contractors in Rochester. Noted Jan. 18.

N. Y., Syracuse — Bd. Contr. & Supply, paving Salt Springs Rd., to Dale Eng. Corp., Mann Bldg., Utica, $47,934; West Colvin St., to F. J. Baker, Bastable Bldg., $26,336; Durston Ave., to G. B. Dickinson, Union Bldg., $50,146. Noted July 5.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Castleton Ave., granite block, to J. Johnson Sons, 455 Bway., West New Brighton, $85,097. Noted June 21.

N. J., Belleville—Purchasing Agent Essex Co., Court House, Newark, storm drain in Rutgers St. at Washington Ave., to P. D'Amato, 224 Washington Ave., Newark, $8,213; paving Rutgers St., granite block on 6 in. concrete and bituminous concrete on concrete, to Jannarone Constr. Co., 225 Passaic Ave., $35,132. Noted June 28.

N. J., Mount Holly—Burlington Co., reconstructing Rd. 19, Bridgeboro to Chester Ave., Delran and Morristown Twps., Rd. 3, Vincentown-Cross Roads Rd., Southampton Twp., also Rd. 15, Florence Rd., Florence Twp., to Union Paving Co., 30th and Locust Sts., Phila., $247,093. Noted June 14.

N. J., Newark—Grading and paving 1 mi. Two Bridge Rd., 20 ft., 8 in., rein.-con., to J. W. Heller, South Orange Ave., South Orange, $33,100. Noted June 21.

N. J., Nutley—See "Railways under New Jersey."

Pa., Ebensburg—Cambria Co. paving 3.25 mi. road from Emeigh Run to Plattsville, 16 ft., rein.-con. and Hillside brick on concrete, to J. L. Elder, Jr., Ebensburg, $206,-333. Noted June 28.

Pa., Greensburg—Westmoreland Co., reconstructing 1 mi. Bolivar Rd., 16 ft., rein.-con., to F. Murphy, 2635 West Chestnut Ave., Altoona, $52,141. Engrs. est. $30,000. Noted June 14.

Pa., Grove City—Asphalt paving 3 streets, to W. McIntyre & Son, Sharon; 5 streets, to Allegheny Paving Co., Diamond Bldg., Pittsburgh. Engrs. total est. $40,000.

Pa., Kittanning—Resurfacing with asphalt Market St., Woodward, Union, Grant and Reynolds Aves., to Columbus Asphalt Paving Co., 288 East 16th Ave., Columbus, O. Engrs. est. $35,000.

Pa., Pittsburgh—Alleghany Co. paving Ardmore Blvd. to end of improved Electric Ave., East Pittsburgh, 3,750 sq.yd. concrete foundation, 3,355 sq.yd. asphaltic concrete paving, 420 sq.yd. brick block, etc., to M. O'Herron Co., South 1st and McKean Sts., $28,353; Brownesville Rd. through Knoxville, Carrock and Brentwood, 30,600 sq.yd. asphaltic concrete, reset 7,150 lin.ft. stone curb, 17,850 sq.yd. Legonier block, etc., to Booth & Flinn Ltd. Co., 1942 Forbes St., $129,311; Richland Ave. and 5th St., in town of Dravosburg, 3,660 sq.yd. brick, 1,280 sq.yd. Legonier block, 2,750 ft. steel protected concrete curb, to Booth & Flinn, Ltd., 1942 Forbes St.

Pa., Washington — Improving Jefferson Ave. from Hall Ave. to 3rd St., 1,620 sq.yd. vitr. brick on 6 in. concrete, etc., to W. K. Reed, Waynesburg, engrs. est. $25,000; resurfacing Maiden St., 18,800 sq.yd. brick bituminous, to Willite Resurfacing Co., Waynesburg, $42,000. Noted June 14.

Pa., Washington—Washington Co., paving 1 mi. East Pike Penn Run Twp., brick on 5 in. concrete, to Petriello Bros., Brownsville, $103,000. Engrs. est. $105,000.

Fla., Miami Beach—To J. J. Quinn Co., Miami, paving Sheridan Ave., Indian Creek Dr. and Dade Blvd., 20,000 sq.yd. penetration macadam at $1.35 per sq.yd., 9,000 sq.yd. resurfacing $0.69, total $33,210; Collins Ave., 48,000 sq.yd. penetration macadam, 7 in. compacted base, 3 in. screened rock, $64,800.

Miss., Mayersville—Hy. Comrs. 5th Supervs. Dist., Issaquenna Co., gravel surfacing 13 mi. various roads, to J. D. and R. P. Sims, Ruleville, $36,000, engrs. est. $40,000; furnishing 27,500 tons gravel f.o.b. cars at points of haul, to Harteston Gravel Co., Greenwood, $1.44 per ton, total $39,600, engrs. est. $43,500. Noted July 28.

Louisiana — State Hy. Dept., Baton Rouge, gravel surfacing 4.64 mi. Monroe-Rayville Highway, Federal Aid Project 118, Ouachita Parish, and 2.44 mi. Rayville-Monroe Highway, Federal Aid Project 119, Richland Parish, to Picard Constr. Co., New Orleans, $64,934 and $48,707 respectively; 9.237 mi. Burnside-Hope Villa Highway, State Project 130, Ascension Parish, to Banta & Mitersbaugh, Lake Charles. Noted June 28

O., Akron—Summit Co., to T. E. McShaffrey Constr. Co., 171 South Forge St., paving Barberton-Springfield Co. Highway, 1.945 mi. Sect. A, 20 ft., trinidad, $74,717, engrs. est. $86,312, 2.908 mi. Sect. A-2 and B, bitulithic slag, $107,026, $122,242, 2.053 mi. Sect. D, 20 ft., bitulithic slag, $75,705, $86,082.

O., Cincinnati—Hamilton Co. paving 60,-000 sq.yd. Cleves-Warsaw Rd., bitulithic, to A. J. Brehm, 57 Wiggins Blk., $491,496. Noted July 12.

O., Circleville—N. R. Huston, dir. Pub. Serv., sandstone curbing and vitr. brick paving 5,338 sq.yd. Ringgold Pike, to McHugh Bros., Springfield, $22,889. Noted June 28.

O., Cleveland — Bd. Educ., East 6th St. and Rockwell Ave., grading and landscaping Euclid Park School, to A. Long, 9501 Cedar Ave., $11,064, Glenville and Rawlings Schools, to V. Q. Galier, Builders Exch., $12,515; masonry work in Euclid Park School, to C. N. Griffen, 5511 Euclid Ave., $18,555, Glenville and Rawlings Schools, to A. MacDougall Co., Irene Ave., Lakewood, $4,562. Noted July 5.

O., Cleveland—Cuyahoga Co., guttering and paving 14,100 sq.yd. Lander Rd. 2, concrete, to Presgrave & Burke, 11321 Miles Ave., $64,240; 5,720 sq.yd. Cedar Rd. 3 and 5,620 cu.yd. Cedar Rd. 2, vitr. brick, to Freshwater Constr. Co., Natl. Bldg., $33,436 and $131,476.

O., Cleveland—For 833 ft. wood block flooring on East 34th St. bridge, to Forschner Co., East 10th St. and St. Clair Ave., $38,301.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to Yale Constr. Co., 146 Yale Ave., grading, laying water services and sewer connections and paving 740 ft. alley west of Summit St., 16 ft., $3,803, 1,754 ft. alley north of Lane Ave., 20 ft., $10,416, 558 ft. alley north of Tompkins St., 20 ft., $3,550, all concrete; to Franklin Asphalt Paving Co., 209 South High St., 1,345 ft. Brehl Ave., 50 ft., $17,476, 2,162 ft. Crescent Dr., 24 ft., $38,255, 2,013 ft. Binns Blvd., 24 ft., $32,733, all asphalt; to B. F. Patterson, 1214 Neil Ave., 1,010 ft. Williams St., 20 ft., asphalt, $12,068; to Knight & Wells, 483 Oak St., 1,154 ft. Taylor Ave., 26 ft., asphalt, $19,772. Noted July 5.

O., Dayton—Montgomery Co., paving 10,-000 sq.yd. North Main St., vitr. brick on concrete, to J. I. Geiger, 409 Dayton Savings & Trust Bldg., $31,459. Noted July 12.

O., Dayton—Montgomery Co. and city, paving Western Ave., brick on concrete, to Hoolihan & Wangler, Dayton, $31,179.

O., Garfield Heights (Cleveland P. O.), —Asphaltic concrete paving 30,000 cu.yd. East 107th, 108, 109 and 111th Sts., Runnymead, Langton and Wadsworth Aves., to Enterprise Paving & Constr. Co., 8436 Bway., Cleveland, $211,435. Noted July 12.

O., Grandview Heights (Columbus P. O.) —E. Gross, village clk., grading and asphaltic concrete paving 11,876 ft. Parkway N, Parkway Dr., Timberman Rd., Ridgeway Pl., Mulford, Thomas Holly, Norton, Dover, Glenn and 2nd Aves., 25 ft., also 2 driveways with park between on Northwest Blvd., 1,900 ft. single and 2,975 ft. double driveways, each 22 ft., to Cleveland Trinidad Paving Co., Grand Theatre Bldg., Columbus, $227,667. Noted June 28.

O., Steubenville—Jefferson Co. paving 1½ mi. Costonia-Shane Rd., waterbound macadam, to H. F. Daugherty, Steubenville, $30,371.

Michigan—State Hy. Dept., Lansing, grading and surfacing to H. A. Hoxie, 1426-5th St., Grand Rapids, 12,419 sq.yd. concrete surfacing, etc., Federal Aid Project 69, Sect. B, in Fowlerville, $29,483, plus cement $8,000, Federal Aid Project 69, Sect. A, Livingston Co., 10,410 cu.yd. earth excav. $0.80, 20,956 sq.yd. rein.-con. $1.60, etc., total $46,224 plus cement $15,500; to Cline & Boecleus, Spring Lake, 21,627 sq.yd. rein.-con. surfacing, Federal Aid Project 117, Sect. A, Ottawa Co., $45,449, plus cement $15,992; to Banhagel Constr. Co., Ionia, 10,-124 sq.yd. concrete surfacing State Trunk Line Rd. 39-7, Lake Odessa Co., $21,283, plus cement $7,250.

Mich., Grosse Pointe Farms (Grosse Pointe, P. O.)—Paving 4,700 sq.yd Oak St., 1,700 cu.yd. excav. 3,530 lin.ft. curb, etc., to R. R. Moran, Grosse Pointe Farms, $22,-745. Noted July 5.

Mich., Port Huron—St. Clair Co. Road Com. grading and gravel surfacing 37,341 sq.yd. Assessment Dist. Rd. 70, to Moore-Elmer Co., Snover, $34,487; grading and concrete surfacing 14,992 sq.yd. Assessment Dist. Rd. 58, to J. H. Baker & Sons, Port Huron, $41,631.

Wisconsin—State Hy. Comn., Madison, grading, surfacing, etc., to E. Knutson, La Crosse, Blair Ettrick Rd., 5,582 sq.yd. gravel $3.50, etc., total $20,692; to H. Nelson, Osseo, Blair-Ettrick Rd., Trempealeau Co., 21,129 cu.yd. earth excav. $0.35, 3,060 cu.yd. gravel $3.40, etc., total $32,968; to Tilseth & Ofstie, Menomonie, Wilson-Knapp Rd., Dunn Co., 14,814 cu.yd. earth excav. $0.42, etc., total $21,489; to W. E. Ule, Stevens Point, Sherry-Auburndale Rd., Wood Co., 17,448 cu.yd. earth excav. $0.70, 50,699 sq.yd. concrete $1.33, etc., total $93,105, Milladore-Blenker Rd., Wood Co., 1.093 cu.yd. earth excav. $1, 5,400 sq. yd. concrete, $1.60, etc., total $10,473; to Universal Eng. Co., Ingram Blk., Eau Claire, 10,600 sq.yd. concrete $1.68, etc., total $19,257. Noted June 21.

Wisconsin—State Hy. Dept., div. office, Stephenson Bldg., Milwaukee, concrete surfacing, etc., 40,000 sq.yd. Kilbourn Rd., Racine Co., to Brennan & Rounsall, 709 Exch. St., Kenosha, $84,292. Noted July 5.

Ia., Forest City—Winnebago Co. grading and graveling various roads, to G. N. Gjellefold, Forest City, 74,340 cu.yd. earth excav. $0.265, 24,874 cu.yd. gravel $0.35, etc.

Ia., Lamona—Paving, etc., 7,900 sq.yd. various streets, vitr. brick, to Cook & Stucker, Kansas City, Mo., $3.45 per sq.yd., total $27,255. Noted June 14.

Ia., Lamoni—Paving 9 blocks, vitr. brick, to Cook & Stucker, Ottawa, $37,209.

Ia., Mason City—Paving various streets to Dearborn Constr. Co., Waterloo, 14,093 sq.yd. rein.-con. $2.76, 10,479 lin.ft. curb $0.66.

Ia., Ottumwa—Paving 16,013 sq.yd. Hancock St. and Madison Ave., 11,588 lin.ft. curbing, to Matthes Constr. Co., Davenport, $68,434.

Ia., Ottumwa—Vitr. brick paving 16,014 sq.yd. City Project 23, to Mathes Coal & Constr. Co., Davenport, $68,435.

Minn., Fergus Falls—Paving 17,900 sq.yd. various streets, to W. E. Kennedy Co., Fargo, N. D., vibrolithic concrete on 7½ in. gravel $2.87 per yd., 3 in. vitr. brick $3.65, total $70.880. Noted June 28.

Minn., St. Paul—Ramsey Co., paving with one course concrete (a) 24,561 sq.yd. New Brighton Rd. from north end of present paving to Cleveland Ave. in New Brighton, 8,291 cu.yd. excav., 1,360 lin.ft. concrete curb, etc., (b) 11,496 sq.yd. Edgerton St. from north city limits of St. Paul to south end of paving at Co. Rd. B, 4,818 cu.yd. excav., 8,033 cu.yd. overhaul, etc. to Ganley Bros. Inc., 501 Endicott Bldg., (a) $65,569 (b) $33,461. Noted June 14.

Kan., Oswego—Labette Co. grading 7.901 mi. Federal Aid Project 126, Sect. A, 16 ft., to W. S. Fisher, Oswego, earth $0.38, rock $2.25, burrow $0.38, Class A and C concrete $20.50 and $18 per yd., respectively, etc., total $44,124. All bids on surfacing rejected. Noted May 17.

Mo., St. Louis—Bd. Pub. Serv., City Hall, improving 12th St., trinidad asphalt, to Central Paving Co., Fullerton Bldg., $90,-231; Hebert and Utah Sts., bitulithic, to Granite Bituminous Paving Co., Ry. Exch. Bldg., $27,402 and $17,270 respectively; Osceola St. from Ohio St. to Bway., also Tyrolean St. and Elmer Ave., rein.-con., to Eyerman Constr. Co., 1216 South Grand Blvd., $7,590 and $20,451 respectively; Osceola St. from Ohio St. east, rein.-con., to J. E. Perkinson, 3237 Carter St., $5,472; Schollmeyer St., rein.-con. to Skrainka Constr. Co., Security Bldg., $13,448. Noted July 5.

Mo., University (St. Louis P. O.)—E. B. Colby, city clk., repaving ½ mi. Delmar Blvd., bitulithic concrete, to Granite Bituminous Paving Co., Ry. Exch. Bldg., St. Louis, $34,524, engrs. est. $32,127. United Railways will pave between double car tracks with dressed granite block. Noted June 21.

Tex., Crockett — Paving 16,500 sq.yd. various streets, vitr. brick with asphalt filler on concrete, 3,000 ft. curb and gutter, 3,000 ft. 6-8 in. water mains, etc., to Smith Bros., Crockett, $75,000. Noted June 14.

Okla., Hooker — Curbing, guttering and brick paving various streets, to J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., brick at $4.30, curb and gutter $1.25, gutter $1.30, etc., total $109,399.

Ark., Little Rock—Grading and paving with asphalt 13,500 sq.yd. in Street Impvt. Dist. 348, 4,000 cu.yd. earth excav., 7,500 lin.ft. plain header curb, 3,600 lin.ft. curb and gutter, 2,000 lin.ft. storm sewer, to M. D. L. Cook, Southern Trust Bldg. Engrs. est. $60,000.

Calif., Los Angeles—Improving 1st St. between 2nd St. and Rampart Blvd., to G. H. Oswald, 366 East 58th St., total for grading $110,000, 263,249 sq.ft. asphalt at $0.30, 190,664 sq.ft. concrete $0.29, 13,616 sq.ft. finish grading, oil and rolling $0.07, 16.414 sq.ft. concrete curb $0.58, $5,458

Streets and Roads (Continued)

sq.ft. concrete walks $0.20, 11,721 sq.ft. concrete gutter $0.32, etc.

Calif., Los Angeles — Los Angeles Co. to Griffith Co., Railway Bldg., improving Los Angeles St. between Main Ave. and Azusa Canyon Rd., 12,444 sq.yd. shaping, 3,958 sq.yd. 2 in. and 8,486 sq.yd. 2¼ in. asphaltic concrete, 3,958 sq.yd. 4¼ in. asphaltic concrete base, 12,444 sq.yd. flush coat, etc., $28,550; Florence Ave. between Wright Rd. and Compton Jaboneria Rd., 7,117 cu.yd. excav., 17,730 sq.yd. shaping, 17,730 sq.yd. concrete paving, $48,775. Noted June 21.

Calif., Redding—Improving North Market St., 69,000 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 4,407 sq.ft. concrete gutter, etc., to Warren Constr. Co., Bacon Bldg., Oakland, $25,130.

Calif., Sausalito — Improving various streets in 1st Dist., 14,000 cu.yd. excav., 110,000 sq.ft. 5 in. concrete, 132,000 sq.ft. bituminous macadam, 15,000 lin.ft. granite rubble gutter, etc., to MacDonald Impvt. Co., 567 Pacific Bldg., San Francisco, $99,945. Noted July 12.

Calif., Watts—To Braun-Bryant-Austin, 1680-4th St., Santa Monica, grading, concrete curbing, paving with National paving, etc., Pine and Oak Aves., $29,585; Federal and Beaver Sts., $12,674; Aurora and Rose Aves., $30,751.

Ont., Chatham—Resurfacing 34,000 sq.yd. Park St., asphalt, labor to Cutter & Miller, Power House Bldg. Engrs. est. $30,000.

Ont., Toronto—Paving 18,000 sq.yd. Parliament St., asphalt on concrete, to Godson Contg. Co., Manning Chambers, $83,309.

Industrial Works

PROPOSED WORK

Mass., Fall River—Center Garage Co., 101 2nd St., 2 story, 100 x 200 ft. garage, concrete, brick and steel, plain foundation, 4th and 5th Sts., to Greany & Sherry, 57 North Main St. Archts. est. $100,000.

Mass., Gardner—Gardner Muslin Underwear Co., Parker St., having plans prepared by C. C. Barthel, Gardner, 1 story and basement, 50 x 145 ft. plant, brick and timber. $40,000.

Mass., Worcester—Amer. Steel & Wire Co., Grove St., takes bids in early fall, 1 story, 55 x 100 ft. and 20 x 30 ft. annealing plant, rein.-con. and steel, plain foundation. $150,000. Private plans.

N. Y., Altmar—See "Miscellaneous."

N. Y., Buffalo—S. Landt, 494 Elmwood Ave., plans 33 x 85 ft. garage, 12 ft. high, brick and steel. $40,000. Engineer and architect not announced.

N. Y., Carthage—Carthage Sulphite Pulp & Paper Co., Front St., plans repairing concrete and brick plant, damaged by fire. $100,000. G. C. Jones, mgr.

N. Y., Jamestown—Jamestown Malleable Products Co., Tiffany Ave., 1 story, 50 x 200 ft., brick, concrete and steel foundry addition, to C. Haas, 10th and Monroe Sts. Archts. est. $50,000.

N. Y., Massena—Mica Co. of Canada Ltd., Hull, Que., purchased Diamond Creamery plant, here, and plans alterations and additions. $50,000. E. G. Rykert, pres.

N. Y., Rochester—Addison Lithographing Co., Griffith St., fireproof plant, 30,000 sq.ft. floor space, Hollenbeck St., to J. B. Pike Co., Rochester, Archts. est $85,500. Noted Apr. 26.

N. Y., Rochester—Don-O-Lac Co., 770 Exchange St., plans rebuilding portion of factory, destroyed by fire. $50,000. Engineer and architect not announced.

N. Y., Rochester—Eastern Kodak Co., Kodak Park, plans 40 x 58 ft., concrete, brick and steel addition, 67 ft. high, to Bldg. 45. $40,000.

N. Y., Watertown—See "Miscellaneous."

Pa., Centralia — Lewis Bros. Shirt Co. plans rebuilding factory, recently destroyed by fire. $50,000. Engineer and architect not announced.

Pa., Oil City—Penn. Amer. Refining Co. plans to rebuild portion of its refinery, destroyed by fire. $85,000. Engineer and architect not announced.

Pa., Sharpsburg—Natl. Eng. and Mchy. Co. plans addition to factory. $50,000. Engineer and architect not announced.

Pa., Susquehanna — Susquehanna Tri Boro Throwing Co. plans to rebuild mill, Erie Ave., destroyed by fire., $50,000. Engineer and architect not announced.

Md., Baltimore — Baltimore News & American, Fayette and Calvert Sts., having plans prepared by G. R. Callis, Jr., American Bldg., 6 story, 60 x 150 ft. printing plant, rein.-con. and brick, concrete pile foundation, Pratt and Commerce Sts. $750,000.

Md., Baltimore—Flynn & Emrich, 305 North Holliday St., plans foundry, machine and casting shops, storage and boiler houses, concrete and steel. $75,000. Private plans.

W. Va., Huntington—Huntington Advertiser, 921-4th Ave., having plans prepared by R. L. and S. L. Day, 1st Natl. Bank Bldg., 3 story, basement and sub basement, 40 x 90 ft., brick and tile plant, 10th St. and 5th Ave. $100,000.

La., Shreveport — Caddo-DeSoto Cotton Oil Co. plans rebuilding 80 x 200 ft. and 60 x 325 ft. plant, destroyed by fire. $60,000. M. Stockbridge, vice-pres.

Tenn., Nashville—Southern Glass & Door Co., 218 2nd Ave., N., plans 100 x 185 ft. warehouse, 1st Ave. near Church St.

O., Akron—Northern Ohio Traction & Light Co., Terminal Bldg., plans 3 story, 47 x 65 ft. power sub-station, 461 Water St. $135,000. J. E. Eckrode, Terminal Bldg., engr.

O., Cleveland Heights (Warrensville P. O.)—Thorsell Bros., Mayfield Rd., had plans prepared by H. L. Shupe, 12429 Cedar Ave., Cleveland, 1 story, 50 x 110 ft., brick and steel garage. $40,000.

Ind., Cambridge — Cambridge Light & Power Co. plans electric light and power plant. $50,000.

Mich., Ironwood—N. A. Nelson, archt., Ironwood, preparing plans 3 story and basement, 100 x 162 ft. brick and concrete garage. $70,000. Owner's name withheld.

Ill., Chicago—W. F. Black & Co., Inc., Lamon and Bloomingdale Rds., having plans prepared by C. O. Liska, 35 South Dearborn St., 2 story, 200 x 450 ft. addition to factory, brick and timber. $200,000.

Ill., Chicago—J. S. Hoffman Co., 219 North Franklin St., having plans prepared by A. Epstein, 2001 West Pershing Rd., 3 story, 95 x 100 ft. warehouse, fireproof, Orleans and Illinois Sts. $200,000.

Wis., Green Bay—Green Bay Motor Car Co., 316 North Jefferson St., plans 2 story and basement, brick and concrete garage, plain foundation, Main St. $50,000. Engineer and architect not selected.

Wis., Manitowoc — Manitowoc Products Co., c/o O. H. Senglaub, plans 2 story, ice cream plant and dairy, brick, rein.-con. and steel, plain foundation, 9th and Marshall Sts. $50,000. Engineer and architect not selected.

Wis., Milwaukee — Retailers' Tallow & Calfskin Assn., c/o J. Herman, 2322 State St., having plans prepared by M. Fernekes, 915 Chestnut St., 1 and 4 story, 72 x 90 ft., brick and concrete plant, plain foundation. $50,000.

Wis., Neenah—H. and W. Niles, c/o Neenah Boat Wks., plans 2 story, brick, rein.-con. and steel addition, plain foundation. $50,000. Engineer and architect not selected.

Kan., Wichita—Wichita Union Stock Yards, Exch. Bldg., plans addition to horse and mule building, rein.-con. $40,000, Private plans.

Missouri—State Hy. Comn., Jefferson City, takes bids in about 60 days for plant or plants for manufacture of cement to be used on state roads during 1924-1928. Five plans under consideration, (1) furnishing cement only (2) erection of plant or plants to supply cement needed in 1924-28, state to furnish 50% of needed funds, bidder to erect and operate plant (3) commission to advance all funds for erection of plant, bidder to advance working capital and operate plant or plants, and bidder to specify price at which plant would be sold to him Dec. 31, 1928 (4) commission to advance all funds for erection of plant or plants, bidder to advance working capital and operate same, under this plan funds advanced would be refunded on barrel basis (5) commission to advance funds for erection and operation of plant, bidder to erect and operate it on percentage basis. Cost $2,000,000 if single plant is erected, $1,000,000 to $1,250,000 each if 2 plants are erected. T. Gary, chn.

Mo., St. Louis—Police Dept., 208 South 12th St., plans 2 story, rein.-con. and brick garage, repair shop, carpenter shop, armorer department, etc., Laclede Ave. $75,000. Private plans.

Tex., Eastland — Arab Gasoline Corp. making plans carbon black plant. $450,000. Private plans.

Tex., Ft. Worth—Bucy Ingram Lumber Co., W. T. Waggoner Bldg., plans 2 story, 100 x 264 ft. mill, Park Pl. $50,000. Private plans.

Tex., Ft. Worth—Cascade Laundry plans 2 story and basement, 140 x 177 ft., brick and concrete, laundry, plain foundation, 7th St. along Trinity River. $100,000. C. B. Capps, Denver-Record Bldg., engr. Architect not announced.

Wash., Port Angeles—See "Buildings."

Calif., Los Angeles—California Milling Co., c/o Hamm & Grant, engrs., Ferguson Bldg., plans 5 story, flour mill and warehouse, brick and timber, 55th and Alameda Sts.

Calif., Long Beach—Pacific Steel Corp. plans steel rolling mill, on 20 acre site. To exceed $10,000,000. D. M. Reynolds, 1st Natl. Bank Bldg., Los Angeles, interested.

Ont., Ford—Ford Motor Co. of Canada, 672 Dupont St., Toronto, having plans prepared by A. Kahn, Marquette Bldg., Detroit, Mich., 1 or 2 story heat treatment building, rein.-con. and brick, plain foundation, at plant, here. $200,000.

Ont., Merritton—Garden City Paper Co. plans paper mill, concrete, brick and steel, plain foundation. $400,000. L. H. Gardner, pres. Engineer and architect not selected.

Ont., Toronto—Hydro Electric Power Comn. of Ontario, 190 University Ave., plans addition to transformer station, concrete, brick and steel, Davenport St. $150,000. F. A. Gaby, ch. engr.

Ont., Toronto — Mahaffy Iron Wks., 4 Trafalgar Ave., plans factory, brick and timber, Kendall Ave. $50,000.

Ont., Woodstock—Woodstock Paper Box Co. plans rein.-con. and brick addition to mill, plain foundation. $150,000. J. Evans, Galt, archt.

BIDS DESIRED

N. Y., Ossining—July 31, by C. F. Rattigan, supt. State Prisons, Albany, refrigeration plant, Clinic Building 8, Building 4, Mess Hall and Kitchen Building 4, etc., at Sing Sing Prison, here. S. W. Jones, Albany, state archt.; adv. this issue.

Pa., Coraopolis—Vulcan Oil Refining Co. will rebuild 1 story, 130 x 190 ft., brick refinery, 3rd Ave. and Kendall St., by separate contracts. Private plans. Address J. N. McAllister, c/o owner.

Pa., Uniontown — M. Friedman taking bids 2 story and basement, 124 x 150 ft., brick and stone, Fayette and Wilson Sts. $40,000. Private plans.

Ill., Chicago—P. C. Winn, c/o J. Burns, archt., 64 West Randolph St., receiving bids 2 story fireproof addition to garage, Sheriden and Morse St. $150,000.

Ill., Harvey—S. Ward Hamilton Co., 152nd St., taking bids 1 story, 90 x 170 ft. factory addition, fireproof, 152nd St. $60,000. H. Raeder, 20 West Jackson Blvd., archt.

O., Cleveland—Balbin Bros., 2741 East 34th St., taking bids and open same about July 27, 5 story and basement, 115 x 145 ft., brick, steel and concrete warehouse, East 35th St. $150,000. A. Soffen, Ulmer Bldg., archt.

O., Cleveland — Aetna Rubber Co., 811 East 79th St., 2 story, 50 x 60 ft. and 2 story, 33 x 133 ft. brick and steel factory, 811 East 79th St., to Hunkin-Conkey Constr. Co., Century Bldg. Archts. est. $50,000. Noted July 12.

O., Cleveland — Brodhead-Garrett Co., 2835 East 51st St., 300 x 360 ft. timber warehouse, 40 x 40 ft. dry kiln, 40 x 50 ft. planing mill, also boiler house, office and garage, brick and steel, East 71st St. along tracks of Belt Line R.R., to C. Peterson Co., 45 Euclid Ave. Archts. est. $150,000. Former contract rescinded. Noted June 21.

Ill., Chicago—Owner, c/o Rienzi Garage 554 Diversey Parkway, 2 story, 150 x 250 ft. garage, fireproof, Lehman St. near Dale St., to P. M. Schroter, 6447 North Rockwell St. Archts. est. $250,000.

Wis., Madison—W. Brueski, 2805 East Washington Ave., will build 2 story, 50 x 90 ft. garage and repair shop, brick and rein.-con., plain foundation, by day labor. $40,000. Private plans. Noted July 28.

Wis., Milwaukee—L. Hunt, archt., 445 Milwaukee St., taking bids and opens same about July 23, 2 story, 40 x 57 x 85 ft., battery service building, brick and concrete, plain foundation, Fond du Lac Ave., for A. R. Lemm, 1242 40th St. $40,000.

Wis., Milwaukee—Pittsburg Plate Glass Co., 213 Lake St., rejected bids 5 story, 90 x 140 ft., brick and concrete plant, plain foundation. Will readvertise. Kirchoff & Rose, 221 Grand Ave., archts.

Wis., Random Lake—Krier Preserving Co., Belgium, 2 story, brick and timber cannery, plain foundation, here, to West Bend Constr. Co., West Bend. $40,000.

Industrial Works (Continued)

Wis., Shawano—J. Popp taking bids 2 story, 40 x 48 ft. garage and repair shop, brick and rein.-con., plain foundation. $40,000. Private plans. Noted Apr. 26.

Wis., Waterloo—Lazers & Sons Motor Co., Marshall, will build 2 story, 45 x 80 ft., brick and concrete garage, plain foundation, by day labor. $40,000. Private plans.

CONTRACTS AWARDED

Me., Portland — Portland-Nash Co., 3 story, 120 x 140 ft. garage and machine shop, concrete, plain foundation, to F. A. Rumery Co., Portland, $150,000. Archts. est. $175,000. Noted Apr. 19.

Mass., Boston—City, 2 story, 125 x 200 ft. garage, concrete and steel, Albany St., to J. B. Dolan, 43 Tremont St., $152,490. Noted June 14.

Conn., Hartford—S. S. Nelson, 20 Magnolia St., had plans prepared by F. C. Walz, Trumbull St., 1 story, irregular shaped garage, etc., brick and steel, plain foundation, Church St. $65,000.

Conn., Hartford—New England Laundry Co., Hawthorne St., 2 story, 40 x 40 ft. factory addition, brick, plain foundation, Hawthorne St., to C. P. Waterman, Inc., 43 Farmington St. Archts. est. $40,000. Noted July 12.

Conn., Manchester — Orford Soap Co. Hilliard St., had plans prepared by L. Geer, 62 Prospect St., 1 story, 140 x 160 ft. storehouse, brick, plain foundation. $50,000.

Conn., Middletown—Frissel Fabric Co., 26 Frissel St., 1½ story, 60 x 100 ft. factory, brick, plain foundation, Silver St., to D. O'Brien & Sons Co., 118 Asylum St., Hartford. Archts. est. $60,000. Noted May 17.

Conn., New Haven — Semon Ice Cream Co., 110-112 Bristol St., 2 story and basement, 40 x 103 ft. factory addition, brick and rein.-con., plain foundation, Bristol St., to Larkin-Carey Co., 166 Brewery St. Archts. est. $40,000.

Conn., West Hartford (Hartford P. O.) —B. A. Sellew, archt., 721 Main St., taking bids 1 story, 100 x 100 ft. garage, rein.-con. and brick, plain foundation, Prospect Ave., for Cohn & Feinsilber. $40,000. Noted June 28.

N. Y., Brooklyn—Aaron Constr. Co., c/o A. Goldberg, archt. and engr., 164 Montague St., will build 1 story, brick, steel and concrete garage, plain foundation, Empire Blvd., by day labor. $85,000.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., general contract additions and alterations at asphalt plant, 90th St. and East River, from W. W. Constr. Co., 51 East 42nd St., $49,600. Noted July 5.

Pa., McKeesport—H. W. Waldbaum, 6th and Walnut Sts., will build 4 story, 60 x 140 ft. garage, rein.-con., brick and tile, Walnut St., by day labor. $50,000.

Pa., Millvale (Pittsburgh P. O.)—A. Gerzowski, Searcy Rd., 2 story and basement, 41 x 100 ft., garage, Grant Ave., to J. H. Schran, 1618 Marys St., Sharpsburg. Archts. est. $40,000.

Pa., Phila.—General Electric Co., Witherspoon Bldg., first unit of power plant, on twenty acre site, 56th St. and Elmwood Ave., to White Constr. Co., 95 Madison Ave., New York City.

Pa., Scottdale—United States Cast Iron Pipe & Fdy. Co., Burlington, N. J., general contract 1 story, 106 x 263 ft., steel and corrugated iron factory to Austin Co., 16112 Euclid Ave., Cleveland, O., Est. cost $55,000.

Pa., Scranton—A. Anderson, 409 Adams Ave., 1 story, 40 x 160 ft., limestone, concrete, brick, steel and tile garage, salesroom and service station, Adams Ave., to R. D. Richardson Constr. Co., Cornell Bldg., Scranton. Est. cost $40,000.

Pa., Warren—J. T. Newell, Penna. Ave., 3 story, brick and concrete printing shop, 3rd and Liberty Sts., to H. Shenk Co., Erie. Archts. est. $50,000.

Md., Baltimore—Atlas Safe Deposit & Storage Co., 820 George St., 4 story and basement, 50 x 100 ft. warehouse, concrete and brick, plain foundation, Edmondson Ave., along tracks Philadelphia, Baltimore & Washington R.R., to Consolidated Eng. Co., Calvert Bldg. Archts. est. $160,000.

W. Va., Logan—Miller Logan Supply Co., Huntington, 6 story and basement, 100 x 103 ft. warehouse, brick and tile, here, to C. W. McNulty Co., 208-4th St., Huntington. Archts. est. $150,000. Noted Jan. 4.

N. C., Kinston—See "Buildings."

S. C., Paris—Southern Worsted Mill Co., 1 story, 180 x 578 ft. mill, to Gaston Constr. Co., Gastonia, N. C.; 86 houses, to Minter Homes Co., Greensboro, N. C., $135,000.

Ga., Macon—Clinchfield Portland Cement Co., Kingsport, Tenn., will build plant, near here, by day labor. $1,000,000. Private plans.

La., New Orleans—Longsfield Bros., Baronne and Lafayette Sts., 2 story (ultimately 3 story), 127 x 160 ft., brick factory, Tchoupitoulas and Calliope Sts., to G. E. and E. E. Reimann, Ltd., Weis Bldg., $74,114. Noted May 31.

Mich., Detroit—Detroit Lubricator Co., 5938 Trumbull Ave., 4 story, 120 x 140 ft. rein.-con. and brick addition to factory, to A. A. Albrecht Co., 1130 Penobscot Bldg. Noted June 14.

Mich., Detroit—Peoples Outfitting Co., 150 Michigan Ave., 6 story, 70 x 134 ft. rein.-con. and brick addition to warehouse, Vinewood Ave., to Bryant & Detwiler Co., 2336 Dime Bank Bldg.

Ill., Peoria—Commercial Solvents Corp., remodeling 4 buildings and constructing 100 x 300 ft. fermerter building, 40 ft. high, steel and corrugated iron, to Stone & Webster, Inc., 147 Milk St., Boston.

Wis., Appleton—Northern Boiler & Structural Iron Co., Mill St., will build 1 story, 60 x 100 ft., boiler shop, brick and steel, plain foundation, by day labor. $40,000. Private plans.

Wis., Green Bay—Beaumont Hotel Co., West Main and Washington Sts., 1 and 2 story, 60 x 160 ft., brick and concrete garage, plain foundation, to Regal Constr. Co., 134 South Adams St. Archts. est. $40,000.

Wis., Racine—Lockwood Oil Co., 1421 Racine St., 2 story and basement, 40 x 100 ft., brick and concrete filling station, plain foundation, to W. Fergus, 119 Irving St. Archts. est. $40,000. Noted Feb. 8.

Wis., Milwaukee—Sinclair Refining Co., 425 East Water St., will build 40 x 60 ft. service station and 20 x 20 ft. filling station, brick and concrete, plain foundation, by day labor. $40,000. Private plans.

Mo., St. Louis — Primm-Tesson Realty Co., 1942 North 2nd St., 1 and 2 story, 125 x 295 ft., rein.-con. and brick factory and office building, Tesson St., to Fruin Colnon Constr. Co., Merchants Laclede Bldg. Archts. est. $100,000. Scharff-Koken Mfg. Co., 403-29 Tesson St. and 7905-15 Michigan Ave., lessee.

Tex., Eastland — Arab Gasoline Corp. gasoline plant, to F. Dalton and A. F. Mueller, Eastland, $250,000. Noted Mar. 29.

Tex., Sweetwater—United States Gypsum Co. will build factory by day labor. $1,000,000. G. W. Rathjens, Sweetwater, archt. and engr.

Okla., Oklahoma City—University Hospital, 800 East 13th St., 2 story, power house, rein.-con., brick and steel, to Kreipke Schafer Constr. Co., 615 Hersk St., $50,000.

Calif., Los Angeles—I. Elsner, 438 South Kingsley Dr., 6 story and basement, warehouse and loft, rein.-con., 6th St. near Hope St., to R. E. Millsap, Marsh-Strong Bldg., $103,000.

Ont., Iroquois—H. H. Coldwell, 1 story, 37 x 144 ft. mill, concrete, brick and steel, to R. Briggs, Hallville. Est. cost $40,000.

Ont., Weston—Toront Free Hospital for Consumptives, Buttonwood Ave., Toronto, central heating plant, here, piping, radiation and installation to Purdy Mansell Ltd., 63 Albert St., Toronto; boilers, furnaces and steel stack to J. Inglis Co., Ltd., 14 Strachan Ave., Toronto. Total est. $50,000. Noted June 14.

Buildings

PROPOSED WORK

Mass., Northampton—School—City plans 2 story, 80 x 100 ft., brick and timber, New South St. $150,000. K. S. Putnam, 78 Main St., archt. and engr.

Conn., Bridgeport—Business—Estate of S. Wheeler, 1188 Main St., having plans prepared by W. Schmidt, 1188 Main St., 8 story, 68 x 70 ft., brick, steel and concrete, Main and Golden Hill Sts. $175,000. Monks & Johnson, 99 Chauncy St., Boston, associated archts.

N. Y., Medina—Hospital—Medina Hospital Assn. plans modern fireproof hospital. To exceed $150,000. D. White, secy. Engineer and architect not selected.

N. Y., New York—Home—Beth Abraham Home for Incurables, c/o Wiseman & Taussig, archts. and engrs., 25 West 43rd St., soon takes bids 3 story, brick, steel and stone, plain foundation, Allerton Ave. $200,000.

N. Y., Oswego—Welfare and Administration—See "Miscellaneous."

N. Y., Schenectady—Y.M.C.A. Building Com., 13 State St., plans new concrete, brick and steel association building and dormitory. $600,000. F. Hoppmann, chn.

N. J., Asbury Park—High School—Bd. Educ. rejected bids June 26, brick, steel and stone, plain foundation. $600,000. Will readvertise. E. A. Arend, 105 West 40th St., New York City, archt and engr. Noted June 21.

Pa., Farrell—Store and Apartment—J. B. Roux had plans prepared by W. A. Ullom, Horton Bldg., 2 story and basement, 33 x 160 ft., brick, tile and steel, Bway. $175,000.

Pa., Greensburg — Church — Most Holy Sacrament Congregation having preliminary plans prepared by Cones, Perry & McMullen, Renshaw Bldg., Pittsburgh, 1 story and basement, steel and stone. $175,000.

W. Va., Huntington—Court House—Cabell Co. having plans prepared by R. L. and S. L. Day, 1st Natl. Bank Bldg., 2 story and basement, 65 x 106 ft., rein.-con. and stone. $150,000.

W. Va., Welch—High School—Bd. Educ. having plans prepared by A. B. Mahood, L. & C. Bldg., Bluefield, 3 story and basement, 60 x 136 ft., brick and stone. $150,000.

Ga., Savannah—Hotel—R. F. Hicks plans 6 story, 33 x 184 ft., Congress and Abercorn Sts., to be known as John Wesley Hotel. $150,000.

La., Baton Rouge—Chemistry, etc.—Greater Agricultural College having plans prepared by T. Link, c/o owner, chemistry building $500,000, and cafeteria building $150,000.

Tenn., Nashville—Memorial—Vanderbilt University having preliminary plans prepared by H. C. Hibbs, 4th and 1st Natl. Bank Bldg., memorial building on campus. $250,000.

O., Cleveland—Apartment—I. Shur, 203 Ulmer Bldg., had plans prepared by Branerman & Havermaet, Ulmer Bldg., 2 story and basement, 64 x 103 ft., brick, East 140th St. near Lake Shore Blvd. $150,000.

O., Cleveland—Commercial and Office—Phoenix Mortgage Co., Natl. City Bldg., having plans prepared by C. B. Rowley, Union Bldg., 2 or 4 story, 102 x 135 ft., brick, steel and concrete, East 17th St. and Superior Ave. $150,000. Noted May 10.

O., Steubenville — Church—Peterson & Clarke, archts., Steubenville, soon take bids 100 x 153 ft. church with 70 ft. tower, Indiana limestone, 5th St., for First United Presbyterian Church. $150,000.

Mich., Ecorse—Hotel—P. Petljanski, 7721 Jos. Campau Ave., Detroit, plans 2 story and basement, 110 x 180 ft., rein.-con., brick, terra cotta and steel, here. $200,000. P. R. Rossello, 406 Congress Bldg., Detroit, archt.

Ill., Chicago—Apartment—F. A. Siebold, Jr., c/o B. L. Steif & Co., archts., 64 West Randolph St., plans 16 story, 100 x 150 ft., fireproof, Sheridan and Brompton Sts. $2,000,000.

Ill., Chicago—Hospital—Washington Blvd. Hospital, Washington and Campbell Sts., plans 5 story addition, fireproof, Washington and Campbell Sts. $700,000. Berlin, Swern & Randall, 17 South LaSalle St., archts.

Ill., Chicago—Store and Apartment—S. K. Gaff, c/o Folty & Brand, archts., 111 West Washington St., plans 3 story, 140 x 180 ft., fireproof, Crawford and Roosevelt Sts. $300,000.

Ill., Upper Alton (Alton P. O.)—Administration-Shurtleff College having revised plans prepared by W. E. Trueblood, archt., and H. Graf, associated archt., Chemical Bldg., St. Louis, Mo., 3 story and basement, 45 x 120 ft., rein.-con. and brick, plain foundation, $150,000. Former bids rejected. Noted May 3.

Wis., Beloit—Hospital—Beloit Municipal Hospital Com., plans 4 or 6 story, brick, rein.-con. and steel, plain foundation. $250,000. T. B. Woolsey, Hook Bros. Bldg., chn. Engineer and architect not selected.

Wis., Green Bay—Y. M. C. A., c/o A. F. Grim, secy., Minahan Bldg., having plans prepared by Foeller, Schober & Stephenson, Nicollet Bldg., 3 or 4 story and basement, brick and concrete, plain foundation. $400,000. Noted Oct. 19.

Wis., Milwaukee—Business—H. H. Brun archt., 845 26th St., making plans 2 story and basement, 82 x 120 ft., brick, concrete and terra cotta, plain foundation, West Side. $150,000. Owner's name withheld

Ia., Manning — Hospital — A. Dohmen, archt., 68 Wisconsin St., Milwaukee, Wis., preparing preliminary plans 2 story and basement, 84 x 186 ft. hospital and 40 x 150 ft. power house and laundry, brick and concrete, here. $300,000. Owner's name withheld.

Ia., Marion—School—July 24, to vote on $150,000 bonds for school. W. J. Brown, 201-203 Amer. Trust Bldg., Cedar Rapids, archt.

Buildings (Continued)

Mo., St. Louis—School—Bd. Educ., 911 Locust St., takes bids about Sept. 1, 3 story and basement, brick and rein.-con., 10,000 sq. ft. floor space, Walnut St. $250,000. R. M. Milligan, Bd. Educ. Bldg., archt. and engr.

Mo., University (St. Louis, P. O.)—Temple—University Temple Assn., c/o University Lodge 649 having plans prepared by J. W. Leight, Ry. Exch. Bldg., St. Louis, 2 story and basement, 50 x 100 ft., rein.-con., marble and Bedford stone, Delmar Ave. $150,000.

Kan., Wichita—Business—L. E. Heckard, c/o G. W. Metz Lumber Co., plans 4 story and basement, rein.-con. and brick, 32nd and Main Sts. $150,000. Private plans.

Kan., Wichita—Temple—York Rite Masonic Temple having plans prepared by Eberson & Weaver, 504 Orpheum Bldg., 7 story and basement, 75 x 134 ft., rein.-con., brick and terra cotta. $400,000.

Ark., Hot Springs—Hotel—C. G. Owens, c/o Sorey & Vahlberg, archts., 233 Terminal Arcade Bldg., Oklahoma City, Okla., preparing plans 6 story and basement, 75 x 93 ft., rein.-con., brick and stone. $250,000.

Tex., Denton—Schools—Bd. Educ. takes bids about July 25, 2 story and basement 85 x 125 ft. High School, brick and concrete, and 1 story, 125 x 150 ft. Ward School, brick and stone. $150,000 and $50,000 respectively. W. G. Clarkson, 1st Natl. Bank, Ft. Worth, engr. and archt. Noted July 12.

Tex., Galveston—High School—Bd. Educ. having plans prepared by W. B. Ittner, archt., Bd. Educ. Bldg., St. Louis, Mo., and De Witt & Lemmon, associated archts., 507 Southwestern Life Bldg., Dallas, 3 story addition to Ball High School, remodeling present building and constructing new heating plant, rein.-con., brick and stone. $320,000.

Tex., Galveston—School—Bd. Educ. takes bids about latter part of August 2 story, rein.-con. and brick, plain foundation, 31st and L Sts. $175,000. Dewitt & Lemmon, Southwestern Life Bldg., Dallas, engrs. W. B. Ittner, Bd. Educ. Bldg., St. Louis, Mo., archt.

Wash., Port Angeles—Hotel, etc.—Lilliwaup Land & Resort Co. having tentative plans prepared for development of tourist resort on Hoods Canal. Plans under way for 600 room hotel, cottages costing $7,000-$10,000 each, 4,000 hp. plant. Total $1,000,000.

Calif., Anaheim—Bank and Office—S. Kraemer, Kraemer Bldg., having plans prepared by M. E. Durfee, Kraemer Bldg., 8 story and basement, fireproof, East Center St. To exceed $150,000.

Calif., Hanford—Auditorium—City voted $190,000 bonds for auditorium. J. A. Crawshaw, pres. Civic Center Com. Noted June 6.

Calif., Los Angeles—Loft—Stern Co., c/o T. B. Keim, archt., Haas Bldg., had plans prepared 3 story and basement, 45 x 125 ft., brick, South Maple St.

Calif., Los Angeles—Office—J. Toplitzky, H. W. Hellman Bldg., having preliminary plans prepared by Schultz & Weaver, 17 East 49th St., New York City, 11 story and basement, 105 x 120 ft., Spring and 7th Sts. $1,000,000 or more.

Calif., Mt. Tamalpais (Ross P. O.)—Hotel and Tavern—Mt. Tamalpais & Muir Woods Ry., Pacific Bldg., San Francisco, plans hotel and tavern, fireproof, here. To exceed $150,000. R. H. Ingram, mgr. Bliss & Faville, Balboa Bldg., San Francisco, archts.

Calif., San Francisco—Store and Loft—Marian Realty Co., 1171 Market St., having plans prepared by D. C. Coleman, 1171 Market St., two 3 or 4 story and basement, rein.-con., Market St. near 8th St. $150,000 each.

Calif., Watsonville—Schools—Watsonville Union High School Dist., and Watsonville Grammar School Dist., having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, rein.-con. gymnasium for high school, $100,000, and 2 grammar schools, $100,000. Noted June 14.

Que., Quebec—Hospital—Sisters of Quebec Hospital, 11 Palace Hill, having sketches made by Stevens & Lee, 62 Charles St., Toronto, steel, stone and brick, probably 3 story, plain foundation. $600,000.

Ont., Bradford—School—D. R. Franklin, archt., 587½ Yonge St., Toronto, soon takes bids 2 story and basement, steel and concrete, plain foundation, for Bd. Educ., here. $150,000.

Ont., Windsor—School—Pub. School Bd., plans 6 story addition to Victoria Ave. School and 8 room school on Assumption St., rein.-con., brick and steel, plain foundation. $200,000-$250,000. G. A. Courtenay, 1467 Dougal Ave., secy. Engineer and architect not selected.

BIDS DESIRED

Conn., Hartford—High School—Aug. 21, by Bd. Contr. & Supply, 3 story and basement, brick, stone, concrete and steel, plain foundation, Maple Ave. $1,500,000. E. T. Wiley, 75 Pratt St., archt. F. I. Cooper Corp., 983 Main St., associated archts. Noted May 4.

N. Y., Amsterdam—High School—Aug. 15, by Bd. Educ. for Junior High School, Guy Park Ave. $450,000. G. L. Lockhart, Inc., L. H. Niles and H. F. Daly, 15 East Main St., archts.

N. Y., New York—Loft—I. Goldberg, c/o G. & E. Blum, archts. and engrs., 505 5th Ave., will build brick, steel and stone, plain foundation, 107 West 38th St. $200,000. Work will be done by separate contracts under supervision of architects. Noted May 31.

N. Y., New York—School—July 24, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, addition to P. S. 30, East 141st St. and Brook Ave., here. Noted July 12.

N. Y., Syracuse—School—Aug. 6, by Bd. Contr. & Supply, constructing Danforth Normal School, 2 story and basement, 166 x 257 ft., brick, stone, steel and concrete and rein.-con., West Kennedy St. $400,000. Randall & Vedder, S. A. K. Bldg., archts. Noted July 12.

N. Y., Troy—Health Center—July 21, by Bd. Contr. & Supply, 2 story and basement, 38 x 60 ft., brick and steel, plain foundation, State St. $155,000. F. J. Morgan, 30 2nd St., archt.

N. Y., Troy—Police, etc.—July 25, by Bd. Contr. & Supply, 3 story and basement, 130 x 155 ft., headquarters for Police, Fire and Water Depts., brick and steel, plain foundation, State St. $300,000. M. F. Cummings & Son, State Bank Bldg., archt. M. F. Roche, City Hall, engr.

Md., Baltimore—Business—July 20, by Southern Supply Co., Calvert and Saratoga Sts., 4 story, 78 x 100 ft., concrete, plain foundation. $150,000. J. W. Lee, 201 Water St., Norfolk, Va., archt.

Md., Baltimore—School—July 23, by Calvert Primary School, Inc., 10 West Chase St., 2 story, 110 x 160 ft., concrete and brick, University Circle and 40th St. $200,000. L. H. Fowler, 347 North Charles St., archt.

La., New Orleans—Clubhouse—Aug. 10, by Building Com. B.P.O.E. 30, Elks Pl., reconstructing clubhouse, destroyed by fire. $175,000-$200,000. R. DeBuys, Hibernia Bank Bldg., archt. E. A. Christy, City Hall annex, associated archt.

Tenn., Knoxville—School, etc.—Aug. 16, by L. S. Pope, dir. institutions, Nashville, school building, dormitory and power plant at State Deaf and Dumb School, here. $250,000. Marr & Holman, Stahlman Bldg., Nashville, and Barber & McMurray, Burwell Bldg., Knoxville, archts.

Tenn., Nashville — Hospital, etc. — Aug. 14, (change of date) by J. H. Kirkland, chancellor of Vanderbilt University, 337 x 458 ft. hospital and laboratory, also nurses' home, power plant and laundry, brick and rein.-con., on Campus, $2,000,000. Coolidge & Shattuck, 122 Ames Bldg., Boston, archts. Noted June 28.

Tenn., Nashville—Office—Aug. 16, by Nashville, Chattanooga & St. Louis Ry., 1000 Bway., 8 story, brick, steel and rein.-con., 10th and Broad Sts., by day labor. $250,000. H. McDonald, ch. engr.

O., Cleveland—Commercial and Theatre—E. C. T. Miller, c/o G. M. Hopkinson, archt., Vickers Bldg., taking bids 2 story and basement, 100 x 140 ft., brick, steel and concrete, East 107th St. and Fairmount Ave. $150,000.

O., Cleveland—Store and Office—W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids and opens same about July 25, 6 story, 43 x 132 ft., brick, steel and concrete, East 9th St. and Vincent Ave., for Seidman Mortgage Co., Discount Bldg. $300,000.

O., Columbus—Journalism, etc.—July 25, by Bd. Trustees Ohio State University, constructing Journalism Building, 2 story and basement, 80 x 117 ft., brick, stone and concrete, $165,000, 1 story, 105 x 290 ft., brick and concrete addition to chemistry building, $65,000, both on campus. J. N. Bradford, c/o owner, archt.

O., Granville—High School—Aug. 9, by C. F. Owens, clk. Bd. Educ., 3 story, 123 x 132 ft., brick, concrete and cut stone. $20,000. F. L. Packard, 16 East Broad St., Columbus, archt.

O., Zanesville—High School—Aug. 13, by C. J. Weaver, clk. Bd. Educ., 3 story, 158 x 190 ft., brick, concrete and cut stone. $225,000. F. L. Packard, 16 East Broad St., Columbus, archt. Noted July 12.

Mich., Detroit—School—July 23, by Bd. Educ., 1354 Broadway Ave., 2 story and basement, 84 x 278 ft., brick, rein.-con. and steel addition to Priest School, Wagner Ave. Will include 90 ft. brick stack. Malcolmson, Higginbottom & Palmer, Industrial Bank Bldg., archts.

Ill., Chicago—Apartment—Leichenko & Esser, archts., 38 South Dearborn St., taking bids 3 story and basement, 103 x 176 ft., fireproof, Madison and Mayfield Sts. $400,000. Owner's name withheld.

Ill., Chicago—Apartment—A. H. Quitsow, archt., 11 South La Salle St., taking bids 3 story and basement, 100 x 150 ft., fireproof, Winthrop and Glenlake Sts. $225,000. Owner's name withheld.

Ill., Chicago—School—Z. T. Davis, archt., 400 North Michigan Ave., taking bids 3 story fireproof addition, Belden and Sheffield Sts., for De Paul University. $300,000.

Wis., Green Bay—Church—Oppenhamer & Obel, archts., Nicollet Bldg., taking bids 2 story and basement, 75 x 167 ft., brick, tile and concrete, plain foundation, for Christ Episcopal Congregation, c/o M. McMurray, pastor, Bellin Bldg. $150,000.

Wis., Milwaukee—Apartment—July 23, by Voelz & Siebert, archts., 86 Michigan St., 4 story, 80 x 100 ft., brick, tile and concrete, plain foundation, Juneau Ave., for Wisconsin Bond & Mortgage Co., 440 Bway. $200,000.

Ia., Conrad—School—July 31, (change of date) by Bd. Educ., 3 story and basement, rein.-con., brick, tile and stone. $150,000. E. F. Grier, Conrad, archt. Noted June 21.

Ia., Le Mars—School—July 26, by Beutler & Arnold, archts., Grain Exch. Bldg., Sioux City, 2 and 3 story and basement, 70 x 216 ft., rein.-con. and brick, for Bd. Educ. $150,000.

Tex., Austin—Biology—Aug. 1, by Bd. Regents, 3 story and basement, 66 x 192 ft., brick, stone and terra cotta, on Campus, for University of Texas. $400,000. H. M. Greene Co., 620 North Texas Bldg., Dallas, archts. Noted July 5.

Tex., Dallas—High School—Aug. 15, by Bd. Educ., 3 story and basement, 200 x 230 ft., brick and concrete, plain foundation, Jefferson and Boundary Sts. $500,000. Dewitt & Lemmon, Southwestern Life Bldg., engrs. and archts.

Tex., Eagle Lake—School—Aug. 15, by School Bd., 2 story, 80 x 140 ft. brick, stone and rein.-con., concrete pile foundation. $150,000. Giesecke & Harris, 406 Littlefield Bldg., Austin, archts. and engrs. Noted July 5.

Wash., Olympia—Capitol—July 31, by State Capitol Comn., constructing main portion Legislative Building of Capitol, (exclusive of dome), Wilder & White, 16 East 41st St., New York City, archts. Noted June 28.

Calif., Centerville—High School—Aug. 11, by Trustees Washington Union High School Dist., 2 story, concrete. $175,000. H. H. Meyers, Kohl Bldg., San Francisco, archt. Noted May 17.

Calif., San Francisco—Apartment—E. E. Young, archt., 2002 California St., receiving bids 5 story and basement, rein.-con., Bway. near Steiner St., for M. Gnecco, c/o architect. $150,000 or more. Noted July 12.

Calif., San Francisco—Store and Office—Marian Realty Co., 1171 Market St., will build 3 story and basement, rein.-con., Market St. near 7th St. $150,000. Work will be done by separate contracts. D. C. Coleman, 1171 Market St., archt.

BIDS RECEIVED

Mass., Lynn—School—Dir. Pub. Wks., 3 story, 100 x 125 ft., rein.-con. and brick, plain foundation, Hood St., from C. H. Cunningham & Son, Main St., $146,850. Archts. est. $170,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, rein.-con., brick, stone and tile, Boggs Ave., from Pittsburgh Eng. & Constr. Corp., 511 Homewood Ave., $168,941. Noted June 28.

Ia., Des Moines—Clinic—Medical Clinic, 505 Commonwealth Bldg., general contract 4 story and basement, 40 x 125 ft., rein.-con. and brick, 10th and Grand Sts., from Sugarman Constr. Co., 8th and Tuttle Sts., $160,180.

CONTRACTS AWARDED

Mass., Boston — Apartment — Fensgate Realty Trust, 85 Devonshire St., 8 story, brick, stone and steel, plain foundation, 536 Beacon St., to F. J. Van Etten Co., 80 Boylston St.

Mass., Boston — Bank and Office — Old Colony Trust Co., 17 Court St., 9 story, brick and stone, plain foundation, 28-36 Cornhill, to A. C. Whitney, 126 State St. Archts. est. $1,000,000. Noted Apr. 4.

Buildings (Continued)

Mass., Boston—Theatre—W. R. Ross, 42nd St. and 6th Ave., New York City, having plans prepared by A. Rosenstein, 7 State St., 1 story, 70 x 150 ft., brick and steel, Washington and Prospect Sts., here. $200,000.

Conn., Hartford—Apartment— T. J. Morrissey, 737 Farmington Ave., West Hartford, had plans prepared by G. H. Mathews, 48 Campbell St., 4 story, brick, plain foundation, Owen St. $200,000.

Conn., Hartford—Office—Judd & Co., 750 Main St., 9 story, 70 x 82 ft., brick and steel, plain foundation, Lewis and Pearl Sts., to M. Eidlitz & Sons, 750 Main St. Archts. est. $300,000.

Conn., Stamford—Temple—Masonic Hall Corp., 125 Atlantic St., 3 story, 62 x 140 ft., granite and steel, plain foundation, to T. J. Pardy Constr. Co., 1481 Seaview Ave., Bridgeport. Archts. est. $200,000. Noted May 31.

N. Y., Arverne (Far Rockaway, P. O.) —School—Bd. Educ., 500 Park Ave., New York, P. S. 42, East 66th St., here, to Hayson Constr. Co., 44 Court St., Brooklyn, $719,000. Noted July 12.

N. Y., Hudson — School — Bd. Educ., masonry contract 2 story, 78 x 134 ft., brick, 3rd and Robinson Sts., to C. Crowley, 114 3rd St., Troy, $40,000; carpentry work to Nial Bros. Constr. Co., Douw St., Troy, $40,000.

N. Y., Jamestown—Hotel—Hotel Jamestown, Inc., 3rd and Cherry Sts., 10 story, brick, steel and stone, plain foundation, to Hunkin-Conkey Co., New Century Bldg., Cleveland, $862,898. Noted June 7.

N. Y., New York — Apartment — Fifty Nine-Sixty Five West 71st St. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 9 story, 80 x 85 ft., brick, steel and stone, plain foundation, West 71st St., by day labor.

N. Y., New York—Apartment—Kar Realty Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 4 story, brick, steel and stone, plain foundation, 348 West 84th St., by day labor. $200,000.

N. Y., New York—Apartment—Otto Realty Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build 12 story, 100 x 125 ft., brick, steel and stone, plain foundation, 251 West 80th St., by day labor.

N. Y., New York—Apartment—R. & H. Realty Co., Inc., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, Fort Washington Ave., by day labor. $250,000.

N. Y., New York—Bank—Manhattan Savings Bank, 644 Bway., 5 story, 50 x 90 ft., brick, steel and stone, plain foundation. East 86th St., to Clough-Bourne Co., 101 Park Ave. Archts. est. $300,000.

N. C., Greenville—College—State, constructing college buildings at East Carolina Teachers' College, here, to J. E. Beaman Constr. Co., Commercial Bank Bldg., Raleigh, $1,025,000. Noted Mar. 29.

N. C., Kinston—Hospital, etc.—Caswell Training School, erection and completion of hospital, boys' industrial building, girls' industrial building, laundry, cold storage building, mule barn and implement shed, to W. P. Rose, Goldsboro, $358,000. Noted May 31.

N. J., North Caldwell (Caldwell P. O.)—Prison—Essex Co. (Newark) general contract 4 story, 44 x 115 ft., here, to G. C. Marsted, 532 Bloomfield Ave., Verona, $31,915; cell work, to Pauly Jail Building Co., 1270 Bway., New York City, $156,398. Noted May 24, under "Newark."

Pa., Clairton—School—Bd. Educ., remodeling and building 2 story and basement, 48 x 75 ft. brick and stone, 3rd St., to E. H. Cannon, Ruben Bldg., McKeesport. Archts. est. $150,000. Noted Mar. 15.

Pa., Clearfield — Church — West Side Methodist Episcopal Church, 1 story and basement, 60 x 84 ft. and 50 x 100 ft., to C. V. Hobaugh, Butler. Archts. est. $150,000. Noted May 17.

Pa., Swissvale—Office and Apartment—F. S. Wallace, 4 story and basement, 32 x 45 x 85 ft., brick and steel, Washington and Noble Sts., to J. Wallace, 7634 Westmoreland St. $150,000.

Md., Baltimore — Apartment — B. L. Brown, 10 story, 70 x 132 ft., concrete and brick, plain foundation, Charles and 34th Sts., to Weller Constr. Co., 816 14th St., Wash., D. C. Archts. est. $850,000. Noted July 12.

Fla., Miami—Hotel—E. R. Smith, Banyan Pl., 6 story, 90 x 90 ft., rein.-con., plain foundation, Northeast 1st Ave. and 10th St., to Wolf Constr. Co., Miami, cost plus percentage basis. Archts. est. $175,000.

Ala., Birmingham—Apartment—Highland Apartment Co., 8 story and basement, 100 x 195 ft., brick, steel and stone, Highland Ave. and Elm St., to Smallman & Brice, 1115 Ave. E., $800,000.

La., Baton Rouge—Library—State University constructing Hill Memorial Library, new University site, to J. V. and R. T. Burkes, Carondelet Bldg., New Orleans, $247,913.

La., Baton Rouge—Office and Store—Elks Theatre Co., Ltd., 4 story, fireproof, 3rd St. and Florida Ave., to Stewart & McGehee Constr. Co., Kahn Bldg., Little Rock, Ark. Archts. est. $200,000.

Tenn., Nashville—Temple—Scottish Rite Masonic Temple, general contract stone, brick, rein.-con. and steel, 7th and Broad Sts., to Hugger Bros., Constr. Co., Bell Bldg., Montgomery, Ala., $600,000. Noted June 21.

O., Athens—High School, etc.—Bd. Educ., 2 story and basement, to B. Davidson, Athens, $243,000; general contract for grade school, to Murch Bros. Contg. Co., Ry. Exch. Bldg., St. Louis, Mo., $19,500. Noted May 24.

O., Cleveland — Apartment — Larkspur Apartment Co., c/o G. A. Grieble, archt., Sloan Bldg., 8 story, 50 x 142 ft., brick, steel and concrete, 2338 Euclid Ave., to Crofts Constr. Co., Sloan Bldg. Archts. est. $500,000.

O., Cleveland—Hotel—S. E. Dettlebach, Williamson Bldg., 16 story, 132 x 200 ft., brick, steel and concrete, East 12th St. and Walnut Ave., to Crafts Constr. Co., Sloan Bldg. Archts. est. $3,000,000.

O., Cleveland—Schools—Bd. Educ., East 6th St. and Rockwell Ave., general contract, 1 and 2 story, 172 x 306 ft. and 33 x 78 ft., brick, steel and concrete school and boiler house, 4091 East 146th St., to C. Peterson Co., 4500 Euclid Ave., $483,000, steam heating system, to Feldman Bros., 10309 Barrett Ave., $73,243; general contract 1 and 2 story, 172 x 306 ft. and 33 x 78 ft., brick, steel and concrete school and boiler house, 10800 Sandusky Ave., to Drummond-Miller Co., 7500 Euclid Ave., $493,585, steam heating system, to Feldman Bros., 10309 Barrett Ave., $73,243. Noted July 5.

O., Cleveland—Sunday School and Recreation—Pearl Rd. Methodist Episcopal Church, 3528 Muriel Ave., 4 story, 50 x 150 ft., brick and steel, to F. H. Vogel, Ridge Rd. Archts. est. $150,000.

O., Lorain—Hospital—St. Joseph Hospital, 4 story, 91 x 111 ft., brick, steel and concrete addition, to A. J. Leighton, Lorain. Archts. est. $200,000.

Ill., Maywood—Apartment—J. Dornbach, c/o R. F. France, archt., 155 North Clark St., Chicago, 3 story and basement, 120 x 160 ft., fireproof, Lexington and 5th Aves., to J. M. Ward, 309 South LaSalle St., Chicago. Archts est. $200,000.

Wis., Milwaukee — Apartment — S. N. Loftus, 3018 Wells St., 3 story and basement, 46 x 100 ft., brick and concrete, plain foundation, Grand Ave. and 32nd St., to Kohl & Keating, 428 Grand Ave. Archts. est. $150,000.

Wis., Milwaukee — Store — Kunzelmann-Esser Co., 460 Mitchell St., 4 story, 60 x 82 ft., brick and timber addition, plain foundation, to S. Czaplewski, 878 2nd Ave. Archts. est. $150,000. Noted July 28.

Wis., Wausau—Apartment — McEachron Apartment Co., 812 Franklin St., 3 story and basement, 48 x 100 ft., brick, tile and concrete, plain foundation, Franklin St., to Wisconsin Eng. & Constr. Co., 315 Jefferson St. Archts. est. $150,000.

Ia., Oelwein—High School—School Bd., general contract 2 story and basement, rein.-con., brick and stone, plain foundation, to Spencer Constr. Co., Spencer, $125,800; heating and plumbing, to C. F. Rock Plumbing and Heating Co., 115 North 8th St., St. Joseph, Mo., $35,985. Archts. est. $200,000. Noted June 14.

Minn., St. Paul—School—Bd. Educ., 3 story and basement, rein.-con., brick and tile, Wacouta, Sibley, 10th and Spruce Sts., general contract to Lindstrom & Anderson, 206 Bremer Arcade, $184,704. Noted June 28.

Colo., Denver,—Store, etc.—Bishop Cass Bldg. Co., Amer. Theatre Bldg., 3 story, 100 x 125 ft., store and loft, concrete, brick and terra cotta, 16th and Curtis Sts., to C. S. Lambie, Tramway Bldg., $275,000.

Calif., Compton—Bank and Office—First Natl. Bank, 2 story and basement, rein.-con. and brick, to Alexander Constr. Co., 260 South Pacific Blvd., Huntington Park, $150,000.

Calif., Huntington Beach—School—Huntington Beach School Dist., 1 and 2 story, brick, general contract to Ridenour Bros., Huntington Beach, $176,726. Noted July 12.

Calif., Long Beach—Store and Office—Kent, Marshall & Belt, 109 Locust St., 5 story, brick, concrete and steel, East 1st St., to J. D. Sherer, 1865 East Anaheim Ave., $165,000.

Calif., Los Angeles — Store and Office — Professional Building Corp., c/o W. S. Hebbard, archt., I. W. Hellman Bldg., 8 story and basement, rein.-con., St. Paul and 6th Sts., to Winter Constr. Co., Railway Bldg., $750,000.

Calif., San Diego—Theatre and Office—Balboa Theatre Building Co., rein.-con. theatre and office, to Wurster Constr. Co. 2136 Arctic St., $645,000. Noted May 3.

Calif., San Francisco—Apartment—R. J. O'Brien, 608 Alexander Bldg., 6 story and basement, rein.-con., Eddy St. near Jones St., to Kiernan & O'Brien, 1756 Mission St., $150,000. Noted May 3.

Que., Montreal—Office—Keefer Realty Co., 696 St. Catherine St., W., 10 story, 103 x 122 ft., rein.-con., brick, steel and stone, St. Catherine St., to Thompson & Starrett Co., Drummond Bldg., $500,000. Noted July 5.

Federal Government Work

PROPOSED WORK

N. Y., Dunkirk—Superstructure—U. S. Engineer, Federal Bldg., Buffalo, rejected bids stone superstructure on breakwater, here. This correct reports in June 14 issue.

California—Road—U. S. Bureau Pub. Rds., 9 Main St., San Francisco, had plans prepared improving 15 mi. road in Calaveras Co., 175,000 cu.yd. excav. and approximately 16,000 yd. rock surfacing. C. H. Sweetser, dist. engr.

Calif., San Diego—Light System, etc.—Spec. 4821—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans light, power and telephone systems, at Destroyer Base, here.

Calif., San Diego—Storehouse—Spec. 4809—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans storehouse for paint and oil, here.

T. H., Pearl Harbor—Bins and Trestle—Spec. 4772—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans storage bins and trestle, here.

BIDS DESIRED

W. Va., Wheeling—Lookout—Aug. 10, by J. A. Wetmore, acting superv. archt., Wash., D. C., lookout at Post Office, here.

La., New Orleans—Jetty—Aug. 4. U. S. Engineer, Custom House Bldg., approximately 1,300 ft. extension to headland jetty, at mouth of Mississippi River from South and Southwest Pass, approximately 94 mi. south of here, involving 20,000 ft. creosoted piling. Part 1, 10,000 ft. creosoted piling, 10,000 creosoted timber, 5,000 cords brush, 450 tons rip rap. Part 2, 55,000 sq.yd. facine mattresses, 8,700 tons rip rap stone, 16,000 ft. creosoted piles. $1,300,000 appropriated.

La., New Orleans—Stamp Cages, etc.—Aug. 13, by J. A. Wetmore, acting superv. archt., Treas. Dept., Wash., D. C., parcel post stamp cages, etc., in new Post Office, here; adv. this issue.

Ky., Louisville—Lumber—July 23, by Dist. Engineer, P. O. Box 72, furnishing yellow pine sound No. 1 common about 400,000 ft., main items 1,300 pieces 6 in. x 8 in. x 20 ft., 250 pieces 4 in. x 6 in. x 20 ft., 120 pieces 2 in. x 4 in. x 10 ft., 62 pieces 1 in. x 12 in. x 8 ft., f.o.b. Owensboro.

Mich., Port Huron—Lookout—Aug. 9, by J. A. Wetmore, acting superv. archt. Treas. Dept., Wash., D. C., lookout, here; adv. this issue.

Ill., Chicago—Removal of Pile Protection —Aug. 10, by U. S. Engineer, 537 South Dearborn St., removal of pile protection in Chicago Harbor; adv. this issue.

Utah, Zion National Park (Springdale P. O.)—Road—Aug. 14, by G. E. Goodwin, ch. civil engr., National Park Serv., constructing and reconstructing about 7.5 mi. road. A. B. Cammerer, acting dir. National Park Serv.; adv. this issue.

Ia., Knoxville—Buildings—Aug. 14, by Director U. S. Veterans Bureau in office of Quartermaster General, 2306 Munitions Bldg., Wash., D. C., additional buildings at U. S. Veterans' Hospital 57, here.

Kan., Fort Scott Mailing Shed—Aug. 8, by J. A. Wetmore, acting superv. archt. Treas. Dept., Wash., D. C. mailing shed for Post Office, here.

Wash., Seattle—Removal—Aug. 6, by U. S. Dist. Engineers, Burke Bldg., removal of 399,000 cu.yd. earth along north side of Lake Washington Canal from locks to Puget Sound, also removing 978,000 cu.yd. from

Federal Government Work (Continued)

canal from locks out to Puget Sound. W. J. Barden, col. of engrs.

T. H., Pearl Harbor—Storage Bins, etc.—Spec. 4772—Sept. 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., storage bins and trestle, here.

BIDS RECEIVED

Mich., Keeneenaw—Repairs—U. S. Engineer, Duluth, Minn., repairs to west breakwater, upper entrance, Keeneenaw Waterway, here, from T. I. Durocher Co., Detour, $40,001.

CONTRACTS AWARDED

N. Y., New York—Extension—J. A. Wetmore, acting superv. archt., Wash., D. C., extension to delivery platform at Appraisers Warehouse, here, to C. L. Dooley Co., 257 Adelphi St., Brooklyn, $5,122 (60 days).

Va. Yorktown—Power Plant Equipment—Spec. 4,826—Bureau Yards & Docks, Navy Dept., Wash., D. C., power plant equipment, at Navy Mine Depot, here, to Noland-Clifford Co., 322 28th St., Newport News, Va., $16,265 (150 days). Noted July 5.

Ala., Florence—Sluice Valves, etc.—U. S. Engineer, sluice valves, etc., for Wilson Dam, here, Lot 1 to Wheeling Mold & Fdry. Co., Peninsula St., Wheeling, W. Va., $253,893; Lot 2 to Riter-Conley Mfg. Co., Leetsdale St., Pittsburgh, Pa., $44,380; Lot 3 to J. and J. B. Milholand Co., 714 5th Ave., Pittsburgh, Pa., $2,040. Noted May 3.

Ky., Frankfort—Remodeling-etc.—Treas. Dept., Wash., D. C., remodeling and extension to Post Office and Court House, here, to C. E. Wright, Inc., Monadnock Blk., Chicago, $3,190 (60 days). Noted June 14.

Minn., St. Cloud—Stack—Spec. 4833—Bureau Yards & Docks, Navy Dept., Wash., D. C., radial brick stack, here, to W. Summerhays & Sons, 1 Exchange St., Rochester, N. Y., $9,145 (200 days). Noted May 18.

Tex., Galveston—Jetty—U. S. Engineer, jetty repairs, Sabine Pass, to D. M. Pictor & Co., Inc., Port Arthur, $291,070. Noted July 12.

Miscellaneous

PROPOSED WORK

Loading Platform — Hartford, Conn.—New York, New Haven & Hartford R.R., Union Station, plans loading platform, rein.-con. and steel. $50,000. E. Gagel, ch. engr.

Power Development—Altmar, N. Y.—Niagara, Lockport & Ontario Power Co., Niagara Falls, and Marine Bank Bldg., Buffalo, having plans prepared for additional hydro-electric developments, on Salmon River, here, to include brick, concrete and steel power houses, concrete dams, penstocks, etc. To exceed $1,000,000. H. C. Church, Buffalo, ch. engr.

Oil Well Drilling—Jamestown, N. Y.—T. Neil, Jr. plans oil and gas well drilling near here. $25,000.

Grain Elevator—Oswego, N. Y.—State had plans prepared grain elevator, rein.-con., on 69 x 213 ft. site, to provide storage for 1,000,000 bu. to consist of 27 circular concrete bins each 20 ft in diameter and 90 ft. high, with 16 interstice bins and 20 outside bins; 2 movable marine towers, 158 ft. high, 24 ft. wide and 30 ft. long, each tower to unload 16,000 bu. per hr.; train shed to cover 2 standard gauge tracks with 3 cars on each track, also constructing welfare and administration building, etc., here. $1,000,000. F. La Du, 158 State St., Albany, state engr.

Hydro-Electric Development—Watertown, N. Y.—Power Corp., of New York, Light and Power Bldg., arranged to purchase Soft Maple Dam Site, on Beaver River, and plans hydro-electric development of 6,000 hp., to include power house, concrete dam, penstock, high tension transmission line, etc. To exceed $500,000. Address W. P. McCreager, Northern New York Trust Co. Bldg., ch. engr.

Gas Main—Erie, Pa.—Pennsylvania Gas Co. plans new 10 in. low pressure gas main through city. $25,000. F. Krum, Mgr.

Stadium—Baton Rouge, La.—Greater Agricultural College having plans prepared by T. Link, c/o owner, rein.-con. stadium, on campus. $250,000.

Cement — Missouri — See "Industrial Works."

Tourist Resort—Port Angeles, Wash.—See "Buildings."

Dock—Los Angeles, Calif.—Southern Pacific Co., Southern Pacific Bldg., San Francisco, having plans prepared 26 x 440 ft. automobile dock, rein.-con. and steel, here. $85,000. Private plans.

Grain Elevators—Los Angeles, Calif.—California Milling Co., c/o Hamm & Grant, engrs., Ferguson Bldg., having plans prepared grain elevators, probably 6, rein.-con., 15 ft. diameter, approximately 90 ft. high, 55th and Alameda Sts.

Street Equipment—Oakland, Calif.—City will appropriate $18,000 to purchase equipment for Street Dept. E. K. Sturgis, clk.

Asphalt Plant—Santa Barbara, Calif.—Santa Barbara Co. plans asphalt plant. O. O'Neill, co. surv.

Oil Storage Tank—Ford, Ont.—Imperial Oil Co., Ltd., Imperial Oil Bldg., Toronto, plans 429,000 gal. oil storage tank, steel, St. Lukes Rd., here. $35,000.

Pier—Hamilton, Ont.—Hamilton Harbor Comn., 47½ Main St. E., preparing plans new piers at Burlington Beach. $55,000.

Oil Tanks, etc.—Sarnia, Ont.—Imperial Oil Co., plans to rebuild tanks and replace equipment destroyed by fire. Loss $60,000. C. Stillman, mgr.

Arena—Niagara Falls, Ont.—Niagara Falls Arena, Ltd., soon takes bids 258 x 270 ft. arena, Victoria Ave. $55,000. Architect not announced. Noted June 22, 1922.

Pier and Dredging—Darthmouth, N. S.—Dominion Government, Ottawa, soon takes bids pier and dredging, here. $75,000. Dept. of Marine, Ottawa, engrs.

BIDS DESIRED

Coal Handling System—Everett (Boston **P. O.), Mass.**—July 20, by E. Dana, genl. mgr. Boston Elevated Ry. Co., 108 Massachusetts Ave., Boston, furnishing, delivering and erecting coal handling system complete in power house of Everett shops, Bway. $50,000.

Heating and Ventilating Apparatus—New Brighton, N. Y.—July 27, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulation apparatus, for addition to Curtis High School, Hamilton Ave. and St. Marks Pl., here.

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y.—July 27, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulating apparatus, in P. S. 100, West 3rd St., 317 ft. south of Sheepshead Bay Rd., also in P. S. 190, Sheffield Ave., 100 ft. south of Riverdale Ave.

Heating and Ventilating Apparatus, etc. —Arverne (Far Rockaway, P. O.), **N. Y.**—July 27, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulating apparatus in P. S. 42, Beach 66th and Thursby Sts., here.

Pier Shed—New York, N. Y.—July 30, by J. H. Delaney, comr. Docks, Pier "A" North River, constructing West 44th St. Pier Shed, North River, Contr. 1810.

Underground Fire Alarm System — New York, N. Y.—July 24, by T. J. Drennan, fire comr., Municipal Bldg., portion of underground fire alarm system in Bronx Boro.

Heating and Ventilating System, etc.—Lewistown, Pa.—July 30, by Bd. Educ., new heating and ventilating system in Waye St. building and annex, also new 1 story, and part basement, 40 x 50 ft. boiler house. $40,000. G. T. Cooper, pres. Kast & Kelker, Harrisburg, archts.

Pier—Phila., Pa.—July 27, in Room 211, Municipal Pier 4, South Wharves, foot of Chestnut St., completing Porter St. Pier 84, South Wharves. G. F. Sproule, dir.; adv. this issue.

Piping—Columbus, O.—July 25, by Bd. Trustees Ohio State University, piping between Olentangy River and condenser in boiler house at University, either concrete or segmental sewer pipe. $30,000. J. N. Bradford, c/o owner, engr.

Clay Floor Tile—St. Paul, Minn.—July 23, by H. W. Austin, city purch. agt., 28,500 6 in. x 6 in. clay floor tile not less than ⅝ in. thick. G. M. Shepard, city engr.

Paving Materials—St. Paul, Minn.—July 23, by H. W. Austin, city purch. agt., 18,790 sq.yd. 3 in. vertical fibre brick, 25,290 bbl. cement, 15,415 cu.yd. crushed rock or gravel for concrete base, 9,249 cu.yd. concrete sand, 225,780 lb. asphalt filler, 705 tons limestone dust, 2,890 cu.yd. crushed rock, 2,223 cu.yd. screened sand, 260 tons asphalt, for 6th St. between Smith and Summit Aves. (postponed from July 16), Minnehaha and Front Sts., Pleasant and Cleveland Aves. G. M. Shepard, City engr. Noted July 12.

Pipe—Dallas, Tex.—Wear & Thomas, 106 Gaston Bldg., taking bids 10,000 ft. of 1,800 lb. pressure 2 in. pipe, also grading outfit and two 10 ton gas road rollers.

Pipe — Ennis, Tex. — C. M. Thomas, mayor, taking bids 16,000 ft. 10 in. iron pipe.

BIDS RECEIVED

Bituminous Road Material, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., July 12, bituminous road surfacing material, from Barrett Co., 40 Rector St., $3,300; asphaltic cement, from Warner-Quinlan Co., 79 Wall St., $6,288; asphalt wearing surface sand, from C. and C. Contg. Co 324 Jay St., Brooklyn, $6,030. Noted July 5.

Cement—Baltimore, Md.—Bd. Awards, supplying cement, from R. S. Green, Inc., 3232 Frederick Ave., $27,900. Noted July 5.

Deck — New Orleans, La. — Bd. Port Comrs., 200 New Court Bldg., July 12, concrete deck for Poland St. Dock, 1,590 cu.yd. concrete, 4,300 lb. curb angle, etc., from J. M. De Fraites, 620 State St., $38,811. Noted July 5.

Foundation — Racine, Wis. — Memorial Hall Comn. plain foundation for 1 and 2 story, 180 x 200 ft., brick and concrete auditorium, from Bondgard & Christensen, Mound Ave. and Mead St., $49,994. Total $300,000.

Ornamental Lighting System—Los Angeles, Calif.—Ornamental lighting system in Hollywood Blvd. between Vermont and Vine Sts., from Paulson Constr. Co., Detwiler Bldg., $83,983.

Fuel Oil—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., July 12, 25,000 bbl. fuel oil, from Natl. Petroleum Co., Carondelet Bldg., $1,29 per bbl.

CONTRACTS AWARDED

Elimination of Grade Crossing—Jamestown, N. Y.—Erie R.R., 50 Church St., New York City, elimination of grade crossing on Main St., (portion of work), to A. McMullen & Co., 50 Church St., New York City, $134,946, balance to be done by separate contracts. Engrs. est. about $900,000.

Foundation — Baltimore, Md. — Consolidated Gas, Electric Light and Power Co., Constitution St., concrete foundation for gas plant, to Whiting-Turner Constr. Co., Stewart Bldg., $35,000.

Mechanical Equipment—Goldsboro, N. C.—State Hospital Comn., Raleigh, to B. MacKenzie, Greensboro, heating mains with trunk line and steam main connections in Women's Receiving Building and extension to McKinne Bldg., at State Hospital, here, $27,900; steam main piping and trunk lines, heating and ventilating equipment, distributing mains and connections, power plant piping and apparatus with boiler fittings and connections for one battery of three boilers, at State Hospital, here, $81,998.

Shed — New Orleans, La. — Bd. Port Comrs., 200 New Court Bldg., furnishing and erecting 227 tons structural steel in superstructure of Poland St. shed, and 19 tons steel in bridge extension, to Converse Bridge Co., Chattanooga, Tenn., $27,687; 4,500 sq.ft. still rolling doors, to Kinnear Mfg. Co., Hibernia Bank Bldg., $7,798. Noted July 12.

Heating and Ventilating Apparatus—Cincinnati, Ohio—Bd. Educ., 511 West Court St., heating and ventilating apparatus in Hughes High School, to Williamson Heater Co., 335 West 5th St., $36,190; Hartwell Public School, to Sodemann Heat & Power Co., 2306 Morgan St., St. Louis, Mo., $43,447. Noted July 12.

Extending Coal Dock—Duluth, Minn.—Inland Coal & Dock Co., 50th Ave. W., extending coal dock, rein.-con. on pile and concrete foundation, to R. C. Buck, Inc., 15 United States First Natl. Bank Bldg., Superior, Wis. $80,000.

Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., 40 tons pig lead in 100 lb. pigs, to Nassau Smelting & Refining Co., 603 West 29th St., New York City, $5,820; 253 bbl. portland cement, to Corning-Donohue Brick Co., 614 Ryan Bldg., $2.70 per bbl. without sacks (subject to 2 per cent discount if paid within 10 days); 800 sq.yd. sandstone blocks, to Sandstone Quarries Co., 510 Plymouth Bldg., Minneapolis, $2.74 per sq.yd. f.o.b. cars St. Paul. Noted June 28.

Cable—St. Louis, Mo.—Southwestern Bell Telephone Co., Boatmen's Bank Bldg., will construct 19,365 ft. aerial and 22,400 ft. underground cables in Riverside Dist., by day labor. $85,000.

Conduit, etc.—Dallas, Tex.—Dallas Light & Power Co., Interurban Bldg., making plans underground conduit system in central portion of city. $300,000. H. Oram, ch. engr.

Culverts — Walkerton, Ont. — Bruce Co., 20 concrete and rein.-con. highway culverts, about 2,000 cu.yd. concrete, to W. Mackenzie, Wiarton. Cement and steel will be purchased by owner through G. E. Stephenson, co. engr. Engrs. est. $35,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ADVERTISEMENTS ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE.

OFFICIAL PROPOSALS

Bids: Aug. 16.

Enlargement of Water Filtration Plant

Evanston, Ill.

Sealed proposals endorsed "Proposal for Enlargement of Water Filtration Plant," will be received by the Commissioner of Public Works for the Mayor and City Council of Evanston, Illinois, until 10:30 o'clock (daylight saving time) a.m., on the 16th day of August, 1923, and will then be publicly opened and tabulated for presentation to the City Council.

The work for which proposals are invited includes the following divisions.

DIVISION A.—Filter Equipment and Piping:—All inside and outside piping, filter equipment, valves, operating tables, filter sand and gravel, chemical feed pipes and all appurtenances to furnish and erect complete, six (6) filter units each with a capacity of two million gallons per 24 hours.

DIVISION B.—Construction Work:—Coagulating basins, mixing basins, filters, filtered water basin, concrete conduits, sewers, filter house and excavation and appurtenances.

The work is located adjacent to the present water filtration plant on land owned by the City of Evanston, near Sheridan Road and Lincoln Street.

Each proposal must contain the full name of every person interested in the same and must be accompanied by cash or a certified check on a State or National Bank in good standing, made payable to the City of Evanston, Illinois, in the following amounts:

Division A	$5,000
Division B	7,500
Divisions A and B	12,000

This sum is a guarantee that if a proposal is accepted, a contract will be entered and its performance properly secured.

Upon the complete execution of said contract by the bidder when said contract is awarded, in accordance with all the terms and conditions thereof, and upon the approval of the bond on said contract by the Commissioner of Public Works of said City of Evanston all of said sums deposited with proposals on the work so awarded will be returned to the prospective bidders.

Proposals may be made upon one division or both divisions, complete, but not on any part of either division.

All proposals must be made upon blank forms furnished by the City of Evanston and in accordance with the "Requirements for Bidding and Instructions to Bidders" attached thereto.

The City of Evanston reserves the right to reject any or all bids, waive or not waive any informality in the bids received and to accept or reject such items and divisions of the work as it deems most favorable to the City of Evanston.

Requirements for bidding, instructions to bidders, form of proposal contract, specifications, form of bond and plans may be obtained from the Commissioner of Public Works at the City Hall in Evanston, or at the offices of Pearse, Greeley and Hansen, 39 West Adams Street, Chicago, Illinois, upon deposit of fifteen dollars ($15.00), which sum so deposited will be refunded if said plans, specifications, etc., are returned in good condition within thirty (30) days after the opening of bids.

Dated the 19th day of July, A.D., 1923.

CITY OF EVANSTON,
By HARRY P. PEARSONS,
Mayor.

Attest: JOHN F. HAHN,
City Clerk.

OFFICIAL PROPOSALS

Bids: July 30.

Paving

CONTRACT NO. 60

Bronxville, N. Y.

Sealed bids for paving Bronx River Parkway Drive between Tuckahoe Road, Tuckahoe, and Harney Road, Scarsdale, N. Y., will be received by the Bronx Parkway Commission at its office, 72 West Pondfield Road, Bronxville, N. Y., until 11:45 A. M. July 30, 1923.

The average width of the driveway will be 40 feet; a portion of which is divided into two 20-ft. driveways, and the total area to be paved is about 60.000 square yards.

Bids will be received on the basis of furnishing any of the following types of pavement:—

(a) Asphalt block on a concrete base.
(b) Bituminious concrete, Type "A" on a concrete base.
(c) Bituminous concrete, Type "B" on a concrete base.
(d) Bituminous concrete, Amiesite process, on a concrete base.

Bidders may submit alternative bids on any or all types as they may elect. They may also submit bid for the fine grading and concrete base alone or for the asphalt surfacing alone. The Commission expects to select the type of surface pavement which will, in its judgment, give the greatest return for the money expended.

The right is reserved to reject any or all bids.

Pamphlets containing Information for Bidders, Form of Proposal, Specifications and Contract Drawings may be obtained by intending bidders at the above address by depositing $5.00 for each copy of the pamphlet, including drawings.

BRONX PARKWAY COMMISSION,
By L. G. HOLLERAN,
Deputy Chief Engineer.

Dated: Bronxville, N. Y.
July 9th, 1923.

Bids: July 20.

Highway Work

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. advanced standard time which is twelve o'clock noon eastern standard time, on Friday, July 20, 1923, for the improvement, reconstruction and completon of highways in the following counties:

Albany	(2 reconstruction: 3.78 & 0.60)
Allegany	(1 completion: 2.29)
Erie	(1 reconstruction: 2.45)
Herkimer	(1 improvement: 0.53)
Jefferson	(1 improvement: 3.38)
Monroe	(1 reconstruction: 2.65)
M'tgomery	(1 reconstruction: 1.65)
Oneida	(1 reconstruction 6.16 and 1 completion 2.75)
Steuben	(1 reconstruction 2.24)
Sullivan	(1 improvement 5.25)
Suffolk	(1 reconstruction 1.72)
Wyoming	(1 completion 0.89)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Bureau in Albany, N. Y., and also at the offices of the division engineers in whose division the roads are to be improved, reconstructed or completed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner of Highways.
W. A. PATTON, Secretary.

OFFICIAL PROPOSALS

Bids: Aug. 2.

Steel Bridge

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of a three-span steel encased bridge over Lehigh & Hudson River Railway and fill approaches with gravel surface between Station 24 and 44 plus 76 on State Highway Route No. 5, in the Municipality of Independence, County of Warren and State of New Jersey.

Bids for the above will be received at the Assembly Chamber, Trenton, New Jersey, on Thursday, August 2nd, 1923, at 11:00 a.m., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of ten dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, N. J. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the State Treasurer, for not less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, N. J. Bids not enclosed in special envelopes will be considered informal and will not be accepted.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: Aug. 13.

Sewage Disposal Plant, Etc.

CONTRACTS NOS. 2 AND 3

Pensauken, N. J.

Sealed proposals will be received by the Township Committee of the Township of Pensauken, N. J., at the Township Hall, Cove Road and Center Street, on the 13th day of August, 1923, until 8:00 o'clock p.m. (daylight saving time), for the construction of a sewage disposal plant, two sewage pumping stations and approximately 6,700 lineal feet of 20" T. C. sewer.

Each proposal must be accompanied by a certified check, made payable to the Township of Pensauken, for a sum equal to 5% of the amount bid. A bond for 100% of the contract price will be required.

Plans and specifications are on file and may be seen at the office of the Township Clerk, or at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, N. J. Complete sets of plans and specifications may be obtained from the Engineers upon deposit of $15.00, of which $10.00 will be refunded upon their return in good condition by August 20, 1923.

The Township reserves the right to reject any or all bids.

ROBERT V. PEABODY,
Township Clerk

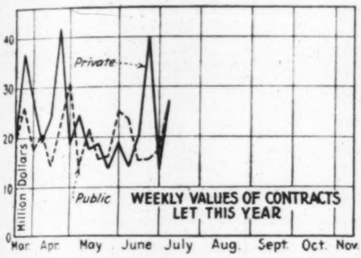
CONSTRUCTION NEWS

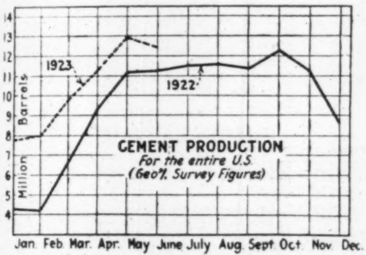
Engineering News-Record, July 26, 1923.

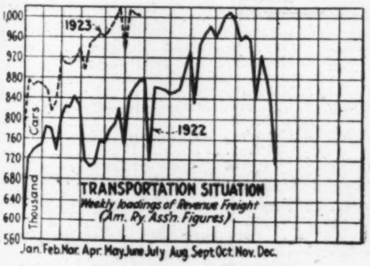
The Construction Barometer

No Falling Off in Business—Seasonal Decline in Production

ALTHOUGH general business as indicated by bank debits and car loadings is holding up, production is being decreased, all as shown by the charts. New construction is being placed at a normal rate — $33,000,000 in large contracts last week (*E. N.-R.* figures). At the same time it must be considered that for the last three months the U. S. Steel Corporation has been catching up on its orders. The price situation is outlined, as usual, on the page to the left of this. Next week — construction cost.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
July 5	$17,438,000	$13,460,000	$30,898,000
July 12	26,812,000	27,135,000	53,947,000
July 19	14,514,000	18,552,000	33,066,000
3 weeks	$58,764,000	$59,147,000	$117,911,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

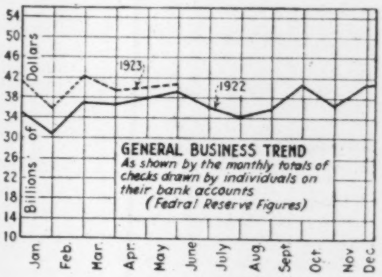
Week Ended	No.	Public Work	No.	Private Work
July 5	5	$2,794,000	24	$6,615,000
July 12	10	2,409,000	32	20,619,000
July 19	12	4,681,000	34	13,523,000
3 weeks	27	$9,884,000	90	$40,757,000

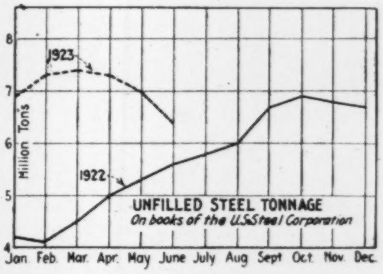
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

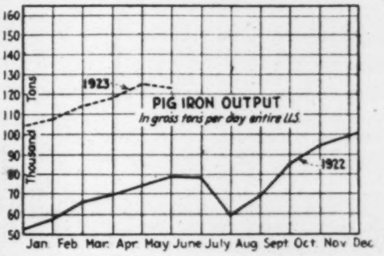
Week Ended	Private	Public			
		All	Streets and Roads	Water-works and Sewers	All Buildings
July 5	27	158	71	24	30
July 12	32	161	73	38	42
July 19	30	223	86	37	42

BASE PRICES UNCHANGED DURING LAST THREE WEEKS

	Quoted On July 26, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

Bids Close — See Eng. News-Record

WATERWORKS

July 30 Scranton, Pa. ....July 19
July 30 Bartlett, Ill. ....July 26
July 30 West Chicago, Ill. ....July 26
July 30 Monroe, Mich. ....July 26
Aug. 1 Raleigh, N. C. ....July 19
Aug. 1 Jackson, Mich. ....July 19
Aug. 1 Ft. Smith, Ark. ....July 26
Aug. 1 Detroit, Mich. ....July 26
Aug. 1 Baltimore, Md. ....July 26
Aug. 3 Le Sueur Center, Minn. ....July 26
Aug. 3 Westerville, O. ....July 26
Aug. 6 Stone Harbor, N. J. ....July 19
Adv. July 19 and 26.
Aug. 6 Flandreau, S. D. ....July 26
Aug. 7 Bedford, O. ....July 26
Aug. 10 Cleveland, O. ....July 26
Adv. July 26.
Aug. 14 Douglas, Wyo. ....July 26
Aug. 15 Jennings Lodge, Ore ....July 26

Bids Close — See Eng. News-Record

Aug. 15 Memphis, Tenn. ....July 26
Adv. July 26.
Aug. 15 Wellsburg, W. Va. ....July 26
Adv. July 26.
Aug. 16 Evanston, Ill. ....July 19
Aug. 21 Detroit, Mich. ....July 26
Adv. July 26.
Aug. 22 Andrews, S. C. ....July 26
Aug. 26 Pennington, N. J. ....July 26
Aug. 27 San Diego, Calif. ....July 26
Aug. 29 Watertown, S. D. ....July 26
Adv. July 26.

SEWERS

July 31 Wash., D. C. ....July 12
July 31 Chicago, Ill. ....July 26
July 31 Ridgefield Park, N. J. ....July 26
July 31 Burlington, Ia. ....July 26
July 31 Columbus, O. ....July 26
July 31 Long Island City, N. Y. ...July 26
Aug. 1 Maplewood St. Louis P. O.), Mo. ....July 26
Aug. 1 Baltimore, Md. ....July 26
Aug. 1 Brooklyn, N. Y. ....July 26
Aug. 2 Des Moines, Ia. ....July 26
Adv. July 26.

Bids Close — See Eng. News-Record

Aug. 2 Lewistown, Pa. ....July 26
Aug. 3 Delaware, O. ....July 26
Aug. 6 Euclid, O. ....July 26
Aug. 7 Rhinelander, Wis. ....July 19
Aug. 7 Bedford, O. ....July 26
Aug. 8 Baltimore, Md. ....July 26
Adv. July 26.
Aug. 10 Millville, N. J. ....July 26
Adv. July 26.
Aug. 13 Arvada, Colo. ....July 12
Aug. 13 Pensauken (Camden P. O.), N. J. ....July 19
Aug. 16 Haddonfield, N. J. ....July 26
Adv. July 26.
Aug. 22 Andrews, S. C. ....July 26
Aug. 24 Spencer, W. Va. ....July 26
Adv. July 19 and 26.

WASTE DISPOSAL

July 31 Johnstown, Pa. ....July 26

BRIDGES

July 28 Charlottesville, Va. .....July 19
Adv. July 19 and 26.
July 30 Scarsdale, N. Y. ....July 19
Adv. July 12 to 26.

Bids Close		See Eng. News-Record
July 30	Clintonville, Pa.	July 19
July 30	New York	July 26
July 31	Alabama	July 12
July 31	La Center, Wash.	July 19
July 31	Illinois	July 19
July 31	Maryland Adv. July 19 and 26.	July 26
July 31	Ohio	July 26
Aug. 1	Binghamton, N. Y.	June 28
Aug. 1	Ansonia, Conn.	July 12
Aug. 2	New Jersey Adv. July 19 and 26.	July 19
Aug. 3	New York Adv. July 26.	July 26
Aug. 3	Waycross, Ga.	July 26
Aug. 4	Rawlins, Wyo.	July 26
Aug. 6	California	July 19
Aug. 6	North Adams, Mass Adv. July 26.	July 26
Aug. 6	Daytona, Fla.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 7	Beaumont, Tex.	July 5
Aug. 7	Forrestville, Conn.	July 26
Aug. 8	Ventura, Calif.	July 26
Aug. 10	Murfreesboro, Tenn.	July 19
Aug. 13	New Jersey	July 26
Aug. 14	Charleston, S. C.	July 5
Aug. 14	Baton Rouge, La.	July 26
Aug. 15	Phila., Pa.	July 5
Aug. 17	Allenhurst, Fla.	July 26
Aug. 17	Clendenin, W. Va. Adv. July 26.	July 26
Aug. 23	Clearwater, Fla. Adv. July 19 and 26.	July 26
Sept. 11	New Jersey Adv. July 26.	July 26
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Bids Close		See Eng. News-Record
July 31	Mexico	July 19

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
July 27	St. Emelie, Que.	July 26
Aug. 1	Sioux City, Ia.	July 12
Aug. 1	Brownsville, Tex.	July 19
Aug. 1	Harlinger, Tex.	July 26
Aug. 3	Worthington, Minn.	July 26
Aug. 8	Sioux City, Ia.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 25	Rhode Island	July 26
July 30	New York Adv. July 12 to 26.	July 19
July 30	Keyport, N. J. Adv. July 19 and 26.	July 19
July 30	New Jersey Adv. July 19 and 26.	July 19
July 30	St. George, N. Y.	July 26
July 30	Tavares, Fla.	July 26
July 31	Alabama	July 12
July 31	Wind Gap, Pa. Adv. July 12 to 26.	July 12
July 31	Michigan	July 19
July 31	Milton, Pa. Adv. July 19 and 26.	July 19
July 31	Maryland Adv. July 19 and 26.	July 19
July 31	New York Adv. July 12 to 26.	July 19
July 31	Illinois	July 19
July 31	Washington	July 19
July 31	Barnsdall, Okla.	July 19
July 31	New Hampshire	July 26
July 31	Ohio	July 26
July 31	Inverness, Fla.	July 26
July 31	Columbus, O.	July 26
July 31	Massachusetts	July 26
July 31	Wisconsin	July 26
July 31	Eastland, Tex.	July 26
July 31	Long Island City, N. Y.	July 26
Aug. 1	New Jersey	July 19
Aug. 1	Bellaire, O.	July 26
Aug. 1	Michigan	July 26
Aug. 1	Baltimore, Md.	July 26
Aug. 1	Brooklyn, N. Y.	July 26
Aug. 2	Tallahassee, Fla. July 5 to 26.	July 12
Aug. 2	Vicksburg, Miss.	July 19
Aug. 2	New Jersey Adv. July 19 and 26.	July 19
Aug. 2	Vermont Adv. July 19 and 26.	July 26
Aug. 2	Baton Route, La.	July 26
Aug. 3	Georgia	July 19
Aug. 3	Canton, Miss.	July 19
Aug. 3	Cincinnati, O.	July 26
Aug. 3	Arizona	July 26
Aug. 3	Independence, Kan.	July 26
Aug. 3	Georgia	July 26
Aug. 6	Sayre, Okla.	July 12
Aug. 6	St. Paul, Minn.	July 19
Aug. 6	Park Ridge, N. J. Adv. July 26.	July 26
Aug. 6	Cleveland, O.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 6	Belzoni, Miss.	July 26
Aug. 6	Lewistown, Pa.	July 26
Aug. 6	New Jersey Adv. July 26.	July 26
Aug. 6	California	July 26
Aug. 6	St. Paul, Minn.	July 26
Aug. 6	De Land, Fla.	July 26
Aug. 6	Michigan	July 26
Aug. 7	St. Louis, Mo.	July 12
Aug. 7	Pennsylvania	July 19
Aug. 7	Beaumont, Tex.	July 19
Aug. 7	Wapallo, Ia.	July 26
Aug. 7	Quebec	July 26
Aug. 7	Rayville, La.	July 26
Aug. 7	Louisiana	July 26
Aug. 7	Gulfport, Miss.	July 26
Aug. 7	Baton Rouge, La. Adv. July 26.	July 26
Aug. 7	Michigan	July 26
Aug. 7	North Milwaukee, Wis.	July 26
Aug. 7	Washington	July 26
Aug. 8	Pennsylvania	July 19
Aug. 8	Freehold, N. J. Adv. July 26.	July 26
Aug. 8	Mays Landing, N. J. Adv. July 19 and 26.	July 26
Aug. 8	Florida	July 26
Aug. 8	Dover, Del. Adv. July 26.	July 26
Aug. 8	Knoxville, Ia.	July 26
Aug. 8	Michigan	July 26
Aug. 9	Michigan	July 26
Aug. 9	Gulfport, Miss.	July 26
Aug. 9	Walterboro, S. C.	July 26
Aug. 10	Utah	July 26
Aug. 10	New York Adv. July 26.	July 26
Aug. 10	Tennessee Adv. July 26.	July 26
Aug. 10	Bennington, Kan.	July 26
Aug. 10	Greensburg, Pa.	July 26
Aug. 11	Grenada, Miss.	July 19
Aug. 13	Akron, O.	July 26
Aug. 13	California	July 26
Aug. 13	White Bear (White Bear Lake P. O.), Minn.	July 26
Aug. 13	Kansas City, Kan.	July 26
Aug. 14	St. Louis, Mo.	July 19
Aug. 14	Fayetteville, W. Va. Adv. July 19 and 26.	July 19
Aug. 14	Louisiana	July 26
Aug. 14	Bluefield, W. Va. Adv. July 26.	July 26
Aug. 14	Clarksburg, W. Va.	July 26
Aug. 23	Clearwater, Fla. Adv. July 19 and 26.	July 26
Aug. 23	Yakima, Wash.	July 26
Aug. 27	Bessemer, Ala.	July 26

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
July 28	Collingwood, Ont.	July 26
July 30	Cincinnati, O.	July 26
July 31	Ossining, N. Y.	July 19
Aug. 6	East View, N. Y. Adv. July 26.	July 26

BUILDINGS

Bids Close		See Eng. News-Record
July 30	Springfield, Mass.	July 26
July 30	Cambridge (Boston P. O.), Mass.	July 26
July 31	Mt. Vernon, N. Y.	July 5
July 31	Conrad, Ia.	July 19
July 31	Olympia, Wash.	July 19
July 31	Milwaukee, Wis.	July 26
Aug. 1	Jackson, Miss.	June 21
Aug. 1	Austin, Tex.	July 19
Aug. 1	Verona, Wis.	July 26
Aug. 4	Kamloop, B. C.	July 26
Aug. 6	Syracuse, N. Y.	July 19
Aug. 6	Scotia, N. Y.	July 26
Aug. 6	Scranton, Pa.	July 26
Aug. 7	Corsicana, Tex.	July 12
Aug. 7	Alpena, Mich.	July 26
Aug. 9	Granville, O.	July 19
Aug. 10	New Orleans, La.	July 19
Aug. 11	Centerville, Calif.	July 19
Aug. 13	Zanesville, O.	July 19
Aug. 14	Nashville, Tenn.	July 19
Aug. 14	Brooklyn, N. Y.	July 26
Aug. 15	Eagle Lake, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	July 19
Aug. 15	Dallas, Tex.	July 12
Aug. 15	Dallas, Tex.	July 19
Aug. 16	Nashville, Tenn.	July 19
Aug. 20	Williamstown, Mass.	July 26
Aug. 20	Ft. Worth, Tex.	July 26
Aug. 21	Hartford, Conn.	July 19
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 15	Dallas, Tex.	July 26
Sept. 28	Institute, W. Va.	July 26
Nov. 1	Ft. Worth, Tex.	July 12

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 30	Stone—Detroit, Mich. July 5 to 26.	July 5
July 30	Breakwater—Alpena, Mich.	July 12
July 30	Pump—Louisville, Ky.	July 26
July 31	Dredging—Baltimore, Md. Adv. June 28 to July 26.	June 28
July 31	Remodeling—Albuquerque, N. M.	July 12
July 31	Road—Wyoming	July 26
Aug. 2	Excavation — Wilmington, Del. Adv. July 5 to 26.	July 5
Aug. 3	Dredging, etc.—Buffalo, N. Y. Adv. July 19 and 26.	July 26
Aug. 4	Dikes, etc.—New Orleans, La. Adv. July 12 and 26.	July 12
Aug. 4	Jetty—New Orleans, La.	July 19
Aug. 6	Extension—Spartanburg, S. C.	July 12
Aug. 6	Removal—Seattle, Wash.	July 19
Aug. 6	Road—New Mexico	July 26
Aug. 7	Water System, Neenah, Wis.	July 12
Aug. 7	Driveway—Fond du Lac, Wis.	July 12
Aug. 8	Buildings—St. Juliens Creek, Va.	July 12
Aug. 8	Remodeling—Concord, N. H.	July 12
Aug. 8	Mailing Shed—Ft. Scott, Kan.	July 19
Aug. 8	Water Softening Plant — Annapolis, Md.	July 26
Aug. 8	Reroofing—Chelsea, Mass.	July 26
Aug. 9	Lookout — Port Huron, Mich.	July 19
Aug. 10	Removal of Pile Protection —Chicago, Ill. Adv. July 19 and 26.	July 19
Aug. 10	Lookout—Wheeling, W. Va.	July 19
Aug. 13	Dredging—Baltimore, Md. Adv. July 19 and 26.	July 12
Aug. 13	Stamp Cages—New Orleans, La.	July 19
Aug. 14	Road—Zion National Park (Springdale P. O.), Utah	July 19
Aug. 14	Buildings—Knoxville, Ia.	July 19
Aug. 15	Water Supply — Chealsea, N. Y.	July 26
Aug. 15	Barracks, etc.—San Diego, Calif.	July 26
Aug. 16	Extension—Evanston, Ill. Adv. July 26.	July 26
Aug. 17	Dredging—Massachusetts Adv. July 19 and 26.	July 26
Aug. 22	Dredging—Norwalk, Conn. Adv. July 26.	July 26
Aug. 22	Sub Post Office—Memphis, Tenn.	July 26
Aug. 28	Superstructure—Ludington, Mich. Adv. July 19 and 26.	July 26
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19

MISCELLANEOUS

Bids Close		See Eng. News-Record
July 27	Pier—Phila., Pa.	July 19
July 27	Heating & Ventilating Apparatus—Arverne (Far Rockaway P. O.), N. Y.	July 19
July 27	Heating & Ventilating Apparatus—Brooklyn, N. Y.	July 19
July 27	Heating & Ventilating Apparatus — New Brighton, N. Y.	July 19
July 30	Pier Shed — New York, N. Y.	July 19
July 30	Heating and Ventilating, etc. —Lewistown, Pa.	July 19
Aug. 1	Gas Pipe Line—Texas	July 5
Aug. 1	Mechanical & Electrical Equipment—Greensboro, N. C.	July 26
Aug. 1	New Castle, Pa.	July 26
Aug. 3	Concrete Mixer, etc.—Trenton, N. J.	July 26
Aug. 6	Cement, etc.—San Diego, Calif.	July 26
Aug. 7	Heating Work—Syracuse, N. Y. Adv. July 26.	July 26
Aug. 10	Heating Work, etc.—Hudson, N. Y. Adv. July 26.	July 26
Aug. 11	Operating Quarries — Missouri Adv. July 26.	July 26
Aug. 11	Ice Arena—London, Ont.	July 26
Aug. 25	Tunnel—Colorado	July 26
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. H., Newmarket—Water Comrs. having plans prepared filtration plant for present water system. $50,000-$75,000. Weston & Sampson, 14 Beacon St., Boston, engrs.

N. Y., Fredonia—Plans reservoir at Shumla and laying new main into village. $15,000. A. R. Moore, village clk. Engineer not announced.

N. Y., Gowanda—State plans 6 mi. mains at state hospital, here, also large dam on north branch of Clear Creek in hamlet of

Waterworks (Continued)

Marshfield. $118,000. T. J. Morrison, c/o State Hospital, Gowanda, engr. in charge.

N. Y., Jamestown—Plans election to vote on $150,000 bonds for renewal of mains throughout city. L. O. Bergman, city engr.

N. Y., Jamestown—Bd. Water & Light Comrs. plan 16 in. c.i. main in Harrison St. $50,000. L. O. Bergman, city engr.

N. Y., Niagara Falls—Plans extension to water filter plant, 16 new filters. $200,000. W. Bennett, city engr.

N. Y., Palmyra—Soon takes bids new water system to include concrete reservoir and filtration plant. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.

Pa., Leighton—Leighton Water Co. plans extension and improvements to its plant and will be open for quotations on electric pumping machinery. $40,000. Engineer not announced.

Fla., Indian River City—Indian River City Town Site Corp. plans complete water system. $25,000. H. F. Williams, c/o Hotel Pines, Titusville, mgr.

Fla., West Palm Beach—Election Aug. 14, to vote on $25,000 bonds for high pressure water and fire systems. K. Riddle, city mgr.

Tenn., Watertown—Plans to erect water plant. $50,000.

O., Ashtabula—Ashtabula Water Co. plans expanding capacity of water system. $150,000. Engineer not announced.

O., Cleveland—See "Streets and Roads."

O., Columbus — See "Streets and Roads."

O., Ironton—Plans extensions to mains. $39,012. L. G. Howell, Ironton, engr.

Ia., Sergeant Bluff—Having plans prepared waterworks system incl. well, 200 ft. deep, 6 in. diameter. $15,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., St. Paul—Voted $2,500,000 bonds for waterworks improvements. G. M. Shepard, city engr. Noted June 28.

Kan., Emporia—Plans 12,000 ft. 20 in. c.i. pipe from filter house to city. R. J. Paulette, city engr.

Kan., Pittsburg—Plans to purchase new water softener. A. Liftmer, supt.

N. D., Ellendale—Plans sinking 1 hard water well $15,000, and drilling 1 artesian well, $10,000. J. King, city clk.

Wyo., Douglas — Aug. 14 to vote on $250,000 bonds for complete new gravity water system from Mountain Springs. F. T. Cummings, city engr. Noted May 18.

Mo., Canton—See "Sewers."

Mo., Greenfield—Plans election to vote on $50,000 bonds extending water mains and installing sewerage system.

Mo., St. James—July 31, to vote on $33,000 bonds for waterworks and distribution system, also $12,000 bonds for sewerage system.

Tex., Dallas—Plans dam. $2,000,000-$5,000,000. E. A. Kingsley, city engr. J. C. Nagle, of Nagle, Witt & Rollins, Courthouse, Dallas, and T. A. Thompson, Wichita Falls, consult. engrs.

Tex., Hubbard—Defeated $50,000 bonds for waterworks improvements. J. C. Mecklin, mayor. Noted June 28.

Tex., Sanger — Voted $55,000 bonds for waterworks, $22,500 sewers, and $17,500 electric light plant. E. L. Dalton, engr., 1915½ Main St., Dallas, preparing plans. Noted June 21.

Tex., Strawn—Making plans waterworks improvements, mains, etc. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Okla., Stillwater — Election about Aug. 14, to vote on $250,000 bonds for new earth dam, spillway, pipe lines, pumping station and machinery. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted May 17.

Wash., Walla Walla—Plans twin reservoirs at city water plant. $210,000.

Calif., Beverly Hills—Voted $400,000 bonds for water system.

Calif., Gilroy—Plans to vote on $90,000 bonds for improvements to water system.

Calif., Ravenswood (Redwood City P. O.) —City and County of San Francisco had plans prepared pumping plant, here, (portion of Hetch Hetchy Project). $17,000. M. M. O'Shaughnessy, City Hall, San Francisco, ch. engr.

Calif., Watts — Conservative Water Co. plans 10 mi. c.i. and screw pipe, new pumps and meters. $150,000.

Que., Metis Beach — Corp. of Beach in market for complete waterworks equipment. Address Mayor, c/o McDougall & Pease, 85 Osborne St., Montreal.

Ont., Carleton Place — Voted $30,000 bonds improving and extending waterworks system, mostly 6 in. c.i. mains. H. Nicholson, Town Hall, clk.

Ont., Halleybury—Town Council plans installing pumping equipment for fire protection, incl. 3 stage centrifugal motor driven pumps. $20,000. H. A. Day, clk.

BIDS DESIRED

N. J., Pennington—Aug. 26, by Boro Council, electrically operated pumping station. Separate contracts may be awarded for building and erection of mechanical equipment. Remington & Vosbury, 601 Market St., Camden, engrs. Noted July 12.

Md., Baltimore—Aug. 1, by Bd. Awards, furnishing and delivering w.i. pipe, couplings and malleable iron fittings for Water Dept. W. A. Megraw, water engr.

W. Va., Wellsburg—Aug. 15, by Water Bd., 2 centrifugal pumps, etc. Hudson & Myron, 808 Wabash Bldg., Pittsburgh, Pa., engrs. adv. this issue.

S. C., Andrews — Aug. 22, c.i. mains, reservoir, filter and transmission lines, etc. $70,000. Ryan Eng. Co., Columbia, engrs.

Tenn., Memphis—Aug. 15, by Bd. Water Comrs. at office Memphis Water Dept., 105-107 North 2nd St., well houses, piping and equipment, etc., Contrs. 22 to 27 inclusive. Fuller & McClintock, 879 North Parkway, engrs.; adv. this issue.

O., Bedford — Aug. 7, about 5 mi. c.i. mains. B. T. Wright, Bedford, engr.

O., Cleveland—Aug. 10, at office of Commissioner Purchases & Supplies, City Hall, main in Lorain Ave. A. V. Ruggles, comr. water.; adv. this issue.

O., Columbus—See "Streets and Roads."

O., Westerville—Aug. 3, by R. Biehl, city mgr., constructing filter plant, 2 contact beds and 2 units to sledge beds, 17,000 lb. reinforcing, 18 tons c.i. pipe and specials, 4,600 lin.ft. 4-30 in. pipe, etc. $31,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

Mich., Detroit—Aug. 21, by Bd. Water Comrs., 176 East Jefferson Ave. 37 mg. pumping engine. H. S. Starkey, secy.; adv. this issue.

Mich., Detroit—Aug. 1, by Dept. Purchases & Supplies, 700 Marquette Bldg., c.i. manhole frames and covers, c.i. specials, fire hydrants, etc., for Bd. Fire Comrs.

Mich., Monroe—July 30, by F. M. Kressback, city clk., filtration plant equipment at waterworks incl. 4 operating stands, 4 strainer systems, 12 wash water gutters, 63 cu.yd. filter sand, 127 cu.yd. filter gravel, 8 depth gauges, etc. Hoad, Decker Shoecraft & Drury, Ann Arbor, Mich., engrs.

Ill., Bartlett—July 30, drilling artesian well. $50,000. Suhr & Berryman, 105 North Clark St., Chicago, engrs. Noted July 19.

Ill., West Chicago—July 30, by city or E. Hancock, engr., 2007 Ogden Ave., Chicago, mains. $45,000.

Minn., LeSueur Center—Aug. 3, by city new motor-driven deep well pumping unit, pipe and fittings for connection with street main. A. A. Tambornino, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

S. D., Flandreau — Aug. 6, waterworks improvements incl. concrete well and brick pumphouse, 400,000 gal. daily capacity. $20,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greeley Bldg., Sioux Falls, engrs. Noted July 19.

S. D., Watertown—Aug. 29, by A. M. Myhre, secy. Municipal Utilities Comn., filter, pumping and piping equipment within waterworks filter house and pumping station. W. F. Cochrane, city engr.; adv. this issue.

Ark., Ft. Smith—Aug. 1, by D. L. Ford, chn. Ft. Smith Water Works Dist. furnishing and laying 64,000 ft. c.i. pipe. Kiersted & Stringfellow, Interstate Bldg., Kansas City, Mo., engrs.

Tex., Abilene—Taking bids several million gallon daily capacity electric motor driven Booster pump between here and Lake Abilene, to take place of standpipe. H. H. Batjer, city engr.

Tex., Cross Plains—Taking bids complete waterworks system. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Ore., Jennings Lodge—Aug. 15, by H. L. Gilbert, engr., Couch Bldg., Portland, 27,000 ft. lap weld 8 in. pipe, 11,000 ft. 8 in. and 20,000 ft. 6 in. c.i. pipe, 20,000 ft. 4 in. and 90,000 ft. 2 in. steel pipe, 600,000 gal. concrete reservoir, 40,000 gal. tank on concrete base, 150 g.p.m. electric driven pump, for Oak Lodge Water Dist. $200,000.

Calif., San Diego—Aug. 27, by W. H. Cameron, purch. agt., furnishing and erecting 1,200,000 gal. steel stand pipe, incl. towers and foundations, for municipal water distributing system.

BIDS RECEIVED

O., Cleveland—For 973 tons c.i. mains in Superior Ave., 8,000 cu.yd. excav., Contr. 28, from J. T. Martin, B. F. Keith Bldg., $123,000.

O., Cleveland—Piping for main pumping units of Fairmount Pumping Station, from Natl. Valve & Mfg. Co., 3101 Liberty Ave., Pittsburgh, Pa., $66,976.

Que., Montreal—For 6,500 ft. of 48 in. force main in Atwater Ave. and St. Patricks St. east, from Laurin & Leitch Co., 590 Union Ave., $157,725.

CONTRACTS AWARDED

Pa., Dubois—Rein.-con. reservoir, 165 ft. inside diam., 16 ft. high, 500 ft. of 12 in. terra cotta pipe, etc., to C. Hatten & Co., Dubois, $78,500. Noted June 14.

O., Bedford—For 5 to 6 mi. of 6 and 8 in. c.i. mains, to Gantose Constr. Co., Columbia Bldg., Cleveland, $140,000.

O., Bellaire—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Youngstown—See "Sewers."

Wis., Milwaukee—Two 100 kw. Uniflo engines and generators for Riverside Pumping Station, to Ames Iron Wks., 25 East 2nd St., Oswego, N. Y., $16,250. Noted July 12.

Wis., Oshkosh—For three thousand five hundred ⅝ in. water meters, to Gamon Meter Co., 282 South St., Newark, N. J., $9 each.

Wis., Park Falls—Water supply, incl. 3 test wells and pumping equipment, to Layne & Bowler Co., 37 West Van Buren St., Chicago, $18,000.

Ia., Dubuque — To Dayton-Dowd Co., Quincy, Ill., 2 centrifugal pumps $5,270 and $3,810 respectively; to F. H. Dormer, 548 Milwaukee St., Milwaukee, venturi meters $2,550; to Swords Bros., Rockford, Ill., switchboards $2,625; to Sullivan Mchy. Co., 124 South Michigan Ave., Chicago, air lift equipment $5,580, 2 motor driven compressors $30,741.

Minn., Stewart—For 60.000 gal. elevated steel tank, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., Minneapolis, $5,000. Noted May 24.

N. D., Casselton — For standpipe, pump and portion of distribution system, also portion sewerage system, to Haggart Constr. Co., Fargo, $55,669. Noted April 26.

Mo., Kirksville—Valves and hydrants, to Ludlow Valve Mfg. Co., 1416 R. A. Long Bldg., Kansas City, $8,334; filter equipment, to E. W. Bacharach & Co., 616 Rialto Bldg., Kansas City, $7,667.

Mo., Kirkwood—Treating plant for waterworks, to St. Louis Foundation Co., Fullerton Bldg., St. Louis, $18,700.

Mo., Lathrop—See "Sewers."

Ark., Van Buren—Filtration plant, new pump house and laying mains, to Ajax Constr. Co., Oklahoma City, and J. S. Terry, Poteau, Okla., $67,911.

Ark., De Queen—Waterworks extension, to Ladd Constr. Co., Kansas City, $45,014.

Tex., Ft. Worth—Waterworks system for Polytechnic Heights, booster plant and machinery to A. M. Lockett Co., Magnolia Bldg., Dallas, $14,897; mains to H. W. Greenway, 214 Hemphill St., $71,036. Noted June 21.

Okla., Woodward—Waterworks system, general contract to Tibbets & Pleasant, 229 North Nogales St., Tulsa, $40,000; foundations to W. C. Ward, Woodward, $7,000; wells to Well Wks. Mfg. Co., Garden City, $7,000; pipe to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., Kansas City, Mo., $84,000; valves to Ludlow Valve Co., 1416 R. A. Long Bldg., Kansas City, Mo., $2,000; 1 m. g. steel storage tank to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, $18,250. Noted June 72.

Calif., Los Angeles—Pub. Serv. Comn., to Amer. Cast Iron Pipe & Fdry. Co., Los Angeles, and Balboa Bldg., San Francisco, under Specification 676 C, Class B pipe, bell and spigot ends, as follows: 7,501 pieces 4 in., 16 ft. lengths at $67.74 per ton, 1,500 pieces 6 in., 16 ft. lengths $63.74, 450 pieces 8 in. and 650 pieces 12 in., 12 ft. lengths $62.74; Specification 677 C, Class B c.i. pipe, bell and spigot ends, delivered Aqua Siding, 750 pieces 12 in., 12 ft. lengths $62.24, 1,014 pieces 6 in., 5 meter lengths $63,24, 4,000 pieces 4 in., 12 ft. lengths $66.24; delivered Van Nuys 440 pieces 12

Waterworks (Continued)

in. and 250 pieces 8 in., 12 ft. lengths $62.14, 863 pieces 6 in., 5 meter lengths $63.14, 3,450 pieces 4 in., 12 ft. lengths $66.14, 375 pieces 6 in., 5 meter lengths $65.74, 1,000 pieces 4 in., 12 ft. lengths $68.74. Noted May 31.

Sewers

PROPOSED WORK

N. Y., Binghamton—Plans Trout Brook trunk line sewer. To exceed $25,000. W. E. Weller, city engr.

N. Y., Snyder—C. Burkhardt Co. plans 4 mi. sewers in Audubon Terrace. To exceed $25,000. Engineer not announced.

N. J., Bloomfield — See "Streets and Roads."

N. J., Westville—Boro Council plans new sewers. $170,000. C. W. Letzgus, 509 Market St., Camden, boro solicitor.

Pa., Lewistown—Election in November to vote on $100,000 for sewers in 4th, Dorcas, Hale and Walnut Sts., and paving Pine and Spruce Sts. H. C. Burkett, pres. Boro. Council.

La., Minden—Making plans sanitary sewerage system. $105,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Ohio—Summit Co. (Akron) authorized E. L. Barstow, engr., County Bldg., Akron, to make surveys and estimates for 8 mi. sewers in Sawyerwood, Lakemore and North Springfield. $300,000. County will advance money, and collect from benefited property owners.

O., Cleveland—See "Streets and Roads."

O., Columbus—Franklin Co. soon takes bids 6-18 in. vitr. sewers in Sewer Dist. Marion 2, North Whittier Gardens Area. $51,029. E. G. Bradbury, 262 South High St., co. engr.

Ill., Granite City—Preparing plans 6-12 in. lateral sewers in Dist. 2. $65,000. W. W. Kerch, 1st Natl. Bank, engr.

Minn., St. Paul—Voted $3,000,000 bonds for sewer extensions and repairs. G. M. Shepard, city engr. Noted June 28.

Mo., Canton—Plans sewerage system and waterworks improvements. To exceed $25,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Mo., Greenfield—See "Waterwork."

Mo., St. James—See "Waterworks."

Ark., McGehee—Making preliminary survey sanitary and storm sewerage system. $85,000-$100,000.

Tex., Sanger—See "Waterworks."

Wash., Seattle — Plans 3 septic tanks. $50,000. W. D. Barkhuff, supt. of streets and sewers.

Calif., Beverly Hills—Voted $140,000 bonds for sewers and treatment plant.

Calif., Eureka—Plans election to vote on $25,000 bonds for extensions to sewerage system.

Calif., Orange — Will vote on $200,000 bonds to finance city's portion of cost for sewage disposal system to be undertaken by cities of Anaheim, Fullerton, Santa Ana and Orange.

Calif., Pasadena—City cancelled contract for sewers in Dist. 7, due to errors in proceedings. New proceedings will be started immediately. Noted July 5.

Calif., San Bernardino—Plans deep sewerage system. To exceed $50,000. C. E. Johnson, city engr.

Calif., Santa Paula—Aug. 7 to vote on $150,000 bonds which includes $90,000 for sewerage system, etc. City Hall is also planned.

Ont., Hamilton—Takes bids about middle of August, sewers in Sterling St. $58,000. W. L. McFaul, City Hall, engr.

Ont., London—Having plans prepared extensions to sewers. $300,000. W. P. Near, City Hall, engr.

BIDS DESIRED

N. Y., Brooklyn—Aug. 1, by E. Riegelmann, boro pres., Boro Hall, sewers in Mansfield Pl., Lenox Rd., Aves. T and L, East 3rd, East 35th, 73rd, East 52nd, 81st, 51st, 82nd, 79th, 81st, East 26th and 58th Sts., 7th, 20th, 23rd, and Lott Aves., Fort Hamilton Parkway between 67th and 68th Sts., and Fort Hamilton Parkway between 45th St. and New Utrecht Ave.

N. Y., Long Island City—July 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in 25th St.

N. Y., St. George — See "Streets and Roads."

New Jersey — Sept. 11, by State Hy. Comn., Trenton, highway bridge with its approaches, over Raritan River, between Perth Amboy and South Amboy. W. G. Sloan, state highway engr C. W. Hudson, superv. engr.; adv. this issue. Noted May 25, 1922 under "Perth Amboy."

N. J., Haddonfield — Aug. 16, by Boro Comrs., Boro Hall, sanitary sewerage system and sewage pumping station, etc. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

N. J., Millville—Aug. 10, by Bd. City Comrs., City Hall, West Millville sewage pumping station, South Millville pumphouse and 10 in. c.i. force main under Maurice River. N. B. Wade, city engr.; adv. this issue.

N. J., Ridgefield Park—July 31, sludge drying beds at East Side and West Side sewage treatment plants. A. J. Provost, Jr., 39 West 38th St., New York City, consult. engr.

Md., Baltimore—Aug. 1, by Bd. Awards, drains and sewers in Dist. 38-C, Sanitary Contr. 204, 6,000 lin.ft. 6-24 in. drains and sewers, $40,000; Gwynn Falls intercepting sewer, Sect. 3, $50,000. B. L. Crozier, highway engr.

Md., Baltimore—Aug. 8, by Bd. Awards, City Hall, constructing sludge digestion tanks 24, 25 and 26, and sludge drying beds 9 and 10 at Baltimore Sewage Treatment Wks. S. Purcell, ch. engr.; adv. this issue.

Pa., Lewistown—Aug. 2. 6,300 ft. vitr. pipe sewer in Wayne and Grand Sts. $25,000. Former bids rejected. Banks & Craig, Telegraph Bldg., Harrisburg, engrs. Noted June 21.

W. Va., Spencer—Aug. 24, by State Bd. Control, Charleston, intercepting sewer and branches. C. E. Collins, Drexel Bldg., Phila., consult. engr.; adv. this issue.

S. C., Andrews—Aug. 22, 22,000 ft. 8 and 12 in. terra cotta sewers, disposal plant, etc. $30,000. Ryan Eng. Co., Columbia, engrs.

O., Bedford—Aug. 7, about 1 mi. 10 and 12 in. vitr. tile sewers. B. T. Wright, Bedford, engr.

O., Columbus—July 31, by W. H. Duffy, dir. Pub. Serv., 28,593 ft. 6-24 in. vitr. sewer in Wilson Ave. to Ohio Ave. extending over several streets and alleys. $50,478.

O., Columbus—See "Streets and Roads."

O., Delaware—Aug. 3, by W. H. Duffy, dir. Pub. Serv., Columbus, sewage disposal plant, at Girls Industrial Home, here, $150,000. Former bids rejected. C. B. Hoover, 252 17th Ave., Columbus, engr. Noted July 5.

O., Euclid—Aug. 6, storm and sanitary sewers in Lake Shore Blvd., East Miller and Euclid Aves., Upson, Johnson, Cut and Chardon Rds. To exceed $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Chicago — July 31, by Bd. Local Impvts., 207 City Hall, sewerage system in South Park Ave., 114th Pl. and 115th St., etc., $174,000, 89th St. Sewer and replacement of sewer in Western Ave. $38,000. C. H. Hill, ch. engr.

Ia., Burlington—July 31, sewage disposal plant, one Imhoff tank, sprinkling filter, sludge bed and ejector station. $30,000. M. G. Hall, Centerville, engr. H. A. Vollmer, city engr.

Ia., Des Moines—Aug. 2, by City Council at office A. E. McGlothen, clk., Southwest Sewerage System. Adv. this issue. Former bids rejected. Noted July 12.

Mo., Maplewood (St. Louis P. O.)—Aug. 1, by G. D. Komar, city clk., City Hall, 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block sewer in Manchester Sewer Dist. 2. $97,996. A. H. Beard, Title Guaranty Bldg., St. Louis, engr. Noted July 5.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 19, sewers in 25th and 27th Sts., from F. J. Kelly Co., Inc., 186 Joralemon St., Brooklyn, A $368,581; Awixa Corp., Mt. Vernon, B $313,047. Noted July 12.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in (1) Olmstead Pl. (2) Matthews Ave. (3) Randall Ave. (4) Pelham Parkway, excavating and removing existing sewer in (5) Exterior St., from C. E. Farrell Contg. Co., 1981 Pilgrim Ave., (1) $7,805; McDonald & Wilson, (2) $12,431 (3) $6,848 (4) $14,560; F. Henretti, (5) $7,200. Noted July 12.

N. J., Bloomfield—J. C. Johnson, town clk., July 2, 5,000 lin.ft. 8 and 10 in. sanitary sewer in Myrtle Ave., 850 lin.ft. 8 in. sewer in Franklin Ave. and 250 lin.ft. 8 in. sewer in Parkway west, from Paterson Contg. Co., Paterson, $13,140, $598 and $815 respectively; 1,500 lin.ft. 12 in. sewer in Mill St., paving 900 sq.yd. Farrandale Ave., also curbing and paving 1,700 sq.yd. Fulton St., asphalt penetration telford, from A. Lamparillo, 67 Glen Ridge Ave., Montclair, $4,795, $2,043 and $5,015 respectively; 575 lin.ft. 8 in. sewer in Weaver Ave., from P. D'Amato, 224 Washington Ave., Newark, $1,675; paving 600 sq.yd. Vesper Pl. and 700 sq.yd. Fontaine Ave., asphalt penetration telford, from J. R. Fresco, Montclair, $1,421 and $1,624 respectively; curbing and paving 2,500 sq.yd. Race St., asphalt penetration telford, from R. Doriety, 168 Ridge St., Newark, $10,694.

Ky., Louisville—Napoleon Blvd. sewer and drain and Speed Ave. Laterals "South," 10,920 ft. 8-36 in. pipe, from H. Bickel Co., 433 Garden St., $110,953. Noted June 28.

Wis., Milwaukee — Sewerage Com., 508 Market St., regulating and by-pass chamber, Muskego Ave., 140 ft. double section concrete sewer, etc., in Florida, South Water and Grove Sts., etc., from Prange-Ferebee Constr. Co., 37th Ave. and Burnham St., $123,315; 3,271 lin.ft. 96 in. storm sewer tunnel, Schiller and Jordan Sts., Howell and Oklahoma Aves., from H. Hohensee, Ludington Ave., Wauwatosa, $227,492.

CONTRACTS AWARDED

N. Y., Syracuse—Bd. Contr. & Supply 1,525 ft. 10 x 11 ft. concrete and rein.-con. storm sewer in Erie Canal from Clinton to Salina Sts., to J. Young, 620 South Salina St., $100,000. Noted July 5.

N. J., Plainfield — See "Streets and Roads."

Md., Linthicum Heights—Anne Arundel Sanitary Comn., (1) 3,200 ft. 6 in., 2,506 ft. 8 in. and 3,359 ft. 10 in. vitr. clay sewers, Contr. 1-S, (2) 1,191 ft. 6 in., 15,889 ft. 8 in. and 1,682 ft. 10 in. vitr. pipe sewers, Sanitary Dist. 2-S, to P. Agrios, 3641 13th St., Wash., D. C., (1) $20,083 (2) $30,952. Noted July 5.

N. C., Rutherfordton—Sewerage disposal plant, to Elliotte Building Co., Hickory, $62,635; paving to Geer & Wilson, Rutherfordton, $23,000. Noted July 5.

O., Cleveland—For 2,661 ft. 12-24 in. vitr. tile sewer in Catalpa Rd., to Yahya Bros., 591 Bway. Rd., $13,613; 1,135 ft. 5 ft. 9 in. and 765 ft. 5 ft. 6 in. circular "E" sewer in East 141st St., to G. Darwich, 9214 Kempton Ave., $38,738. Noted July 19.

O., Cleveland—Cuyahoga Co., 4,000 ft. of 27 x 33 egg shape outfall sewer in Ridge Rd. Impvt. 20, Sect. C of Co. Sewer Dist. 1, to Manson Co., c/o Sewer Contractors Exch., The Arcade, $56,530. Noted July 12.

O., Cleveland Heights (Warrensville P. O.)—for 8,640 ft. 12-20 in. vitr. tile sewer in Washington Blvd., to Consolo & Palermo, Berwood Ave., Cleveland, $28,952; 2,745 ft. 36, 42 and 48 in. segmental block and 6,070 ft. 8-18 in. vitr. tile sewer in Taylor Rd., to Salem George Bros., Erie Bldg., Cleveland, $50,000.

O., Columbus—See "Streets and Roads."

O., Youngstown—Mahoning Co., 5½ mi. sewers and 2½ mi. water mains in Brookfield Twp. Sanitary Sewer Dist. 2, to Turner Contg. Co., Park Theatre Bldg., $100,118. Engrs. est. $108,500.

N. D., Casselton—See "Waterworks."

Mo., Lathrop—Sewerage and water system, to Burt & Tripp, Hutchinson, Kan., $101,309. Noted June 28.

Ark., De Queen—Sewerage system, to Campbell & Heinght, Dallas, Tex., $42,314.

Calif., Pasadena—For 8-20 in. vitr. sewers in portions of West Ave., Ontario St., etc., to Downer & Mero, 2234 Macdonald Ave., Richmond, $58,000.

Ont., Ford—Sanitary sewers in Drouillard and Pilette Rds., to Merlo, Merlo & Ray, Sandwich St., $97,200. Prices wanted on materials. Noted June 21.

B. C., Point Grey—Vitr. sewers in various streets, to D. W. Johnson, 3615 10th Ave. W., Vancouver, $42,805.

Waste Disposal

PROPOSED WORK

Calif., Beverly Hills — Voted $25,000 bonds for incinerator.

BIDS DESIRED

Pa., Johnstown—July 31, by City Council, improving garbage disposal plant, 900 cu.yd. excav., 401 sq.yd. brick paving, 250 lin.ft. grouted cobble gutter, 1 rein.-con. re-

Waste Disposal (Continued)

taining wall and 1 grate inlet. H. L. Opperman, Supt. H. L. Wilson, 184 Worth St., engr.

CONTRACTS AWARDED

Wis., West Allis—Garbage incinerator to Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $22.500. Noted Apr. 26.

Bridges

PROPOSED WORK

Mass., Boston—City plans bridge and draw for vehicles and pedestrians, Congress St. $800,000. J. E. Carth, city engr.

Pa., Johnstown — City plans 168 ft. through plate girder span and 175 ft. through truss span, 24 ft. roadway, two 8 ft. sidewalks, Conemaugh St. $100,000. M. L. Greiner & Co., 985 B, Union Arcade, Pittsburgh, engrs.

La., New Orleans—See "Miscellaneous."

Mich., Alpena—Making preliminary plans 175 ft. steel truss bridge 32 ft. wide, on 9th St. over Thunder Bay River. L. Gram, Eng. Bldg., Detroit, engr.

Wis. Milwaukee—Making plans 1,400 ft. plate girder viaduct incl. trunnion double leaf bascule, on Holton St. $950,000. M. C. Cutler, City Hall, engr.

Okla., Guthrie—Logan Co. election Aug. 10, to vote on $100,000 bonds for 480 ft. steel bridge, 3 truss spans, pile foundation, concrete piers, 1 mi. north of here. H. J. Wilkins, co. engr.

Wash., Tacoma—City and Pierce Co. plan bridge over Hylebos Waterway to replace present inadequate structure. J. C. Manley, city engr. C. H. Votaw, co. engr.

California—State Hy. Dept., Sacramento, plans 6 structures on highway between Red Bluff and Los Molinas, Tehama Co. State will defray cost of constructing above, if Tehama Co. will pay ½ cost of building Cottonwood Bridge which will cost $85,000. R. M. Morton, state highway engr.

Calif., Santa Barbara—Santa Barbara Co. plans bridge over Santa Ynez River on highway between Lompoc and Harris Station. To exceed $50,000.

Ont., Goderich — Huron Co. plans concrete culverts and bridges, 1,600 cu.yd. concrete. $35,000. T. R. Patterson, Goderich, engr.

Ont., Kitchener—See "Streets and Roads."

BIDS DESIRED

Vermont—See "Streets and Roads."

Conn., Forrestville—Aug 7, by City Clerk of Bristol, 75 ft. 3 span concrete girder bridge over Pequabuck River, here. $45,000. C. W. Buell, 175 Main St., Bristol, engr. Noted June 14.

Mass., North Adams—Aug. 6, by J. L. Temple, comr. pub. wks., City Hall, bridge over Hoosac River; adv. this issue.

New York—July 30, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York City, piers for bridge over North Channel, Jamaica Bay Blvd., Queens Boro.

New York—Aug. 3, by Committee on Bridges at office of C. MacDonald, engr. Westchester Co., Court House, (White Plains), completing Van Cortlandt Bridge over Croton River, on Albany Post Rd. between towns of Cortlandt and Ossining; adv. this issue.

New Jersey—Aug. 13, by State Hy. Dept., Trenton, steel and concrete bridge having two 73 ft. spans, 30 ft. roadway and 8 ft. extension, incl. temporary pile trestle and rein.-con. slab over Crosswicks Creek, M. P. 26.5, Route 2, Sect. 5, Mercer and Burlington Counties. $118,330. J. L. Vogel, 772 Broad St., Newark, engr.

Maryland—July 31, by State Rds. Com., Baltimore, bridges in Frederick and Garrett Co., Contrs. F-65 and G-26. J. N. Mackall, chn.; adv. this issue.

W. Va., Clarksburg—See "Streets and Roads."

W. Va., Clendenin—Aug. 17, by Comrs. Kanawha Co., (Charleston), bridge over Elk River, here. R. N. Moulton, co. clk.; adv. this issue.

S. C., Walterboro—See "Streets and Roads."

Ga., Waycross—Aug. 3, by State Hy. Dept., at East Point, 2 concrete bridges, 575 lin.ft. long, on Waycross-Pearson Highway, for Ware Co. C. L. Rhodes, Waycross, engr.

Ga., Waycross—Aug. 3, by C. L. Rhodes, engr., Waycross, 2 concrete bridges, 312 ft. long, on Waycross-Valdosta Highway, Ware Co.

Fla., Allenhurst — Aug. 17, by Comrs. Brevard Co., (Titusville), concrete and steel bridge across Hanlover Canal, here, one 55 ft. clear opening. $26,000.

Fla., Clearwater — Aug. 23, (change of date), by Bd. Comrs. Pinellas Co., 7 concrete deck girder bridges, 10 concrete flat slab and 1 creosoted timber, built in connection with 25 ft. single leaf steel lift span, etc. C. E. Burleson, co. engr.; adv. this issue. Noted July 12.

Fla., Daytona—Aug. 6, by Comrs. Volusia Co., (De Land), creosoted wood bridge across Halifax River, here, one 55 ft. draw span, 150 ft. stone wall and embankment fill. $60,000. C. M. Rogers, Daytona, engr.

Louisiana—Aug. 14, by State Hy. Dept., Baton Rouge, 810 lin.ft. concrete pile trestle divided into 7 structures varying from 76 to 174 ft., substructure consists of 4 pile concrete bents either precast or cast in place concrete piles, superstructure consists of rein.-con. deck girders approximately 22 ft. spans, on Federal Aid Project 116, Sect. D, Minden-Shreveport Highway, Webster Parish. J. M. Fourmy, state highway engr.

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, concrete arch bridge on Sect. B-2 Mt. Vernon-Newark Rd., Knox Co. $31,000. A. V. Donaheys, dir. highways.

O., Cincinnati—See "Streets and Roads."

Wyo., Rawlins—Aug. 4, by Clerk Carbon Co., 102 ft. steel span bridge, 18 mi. north of Hanna. $25,000. D. West, chn. co. comn.

Calif., Ventura—Aug. 8, by Supervs. Ventura Co., rein.-con. pipe trestle bridge, seven 30 ft. spans rein.-con. girders and deck, on rein.-con. pile bents, over Calleguas Creek, on Coast State Highway. C. Petit, co. surv.

Calif., Yreka—Aug. 6, by Supervs. Siskiyou Co., two curve chord riveted Warren 60 ft. steel span bridges, concrete foundations, one over Scott River on Patton Lane, other over east fork of Scott River. A. F. Parrott, co. surv.

BIDS RECEIVED

Rhode Island—State Bd. Pub. Rds., July 18, bridge at River Point, from T. J. McCusker, Phenix, $31,250. Noted July 12.

New Jersey—See "Streets and Roads."

Wis., Milwaukee—Dept. Pub. Wks. steel structure, double leaf trunnion bascule bridge on State St., superstructure from Milwaukee Bridge Co., 1400 34th St., $224,768; substructure from E. E. Gillen Co., 288 East Water St., $227,900. Noted July 19.

CONTRACTS AWARDED

N. J., Englishtown — Monmouth Co. (Freehold) Bridge Mn-30, Water St., here, to O. J. Melee, 72 Branchport Ave., Long Branch, $22,318. Noted June 21.

Pa., Phila. — Delaware River Bridge Joint Comn., to American Bridge Co., 71 Bway., New York City, 2 anchorage cable bents of bridge over Delaware River connecting Phila. and Camden, N. J., Contr. 7, 2,030,000 lb. silicon steel $0.093, 650,000 lb. carbon steel $0.093, 950,000 lb. cast steel $0.117, 200,000 lb. steel supports for bents $.081, total $376,590. Noted June 28.

North Carolina — State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 141, Edgecombe and Halifax Counties, to J. A. Peterson, Wadesboro, $72,474; State Project 213, Craven Co., to Eagle Eng. Co., New Bern, $55,418; State Projects 189, 230 and 293, Green, Pitt and Wilson Counties, to Pub. Serv. Production Co., Terminal Bldg., Newark, N. J., $58,295; State Project 836, Henderson Co., to W. M. Brown & Co., Sylva, $92,092; State Project 702 B, Alleghany Co., to Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $28,265; State Project 672, Rowan Co., to J. A. Kreis, 307 Burwell Bldg., Knoxville, Tenn., $29,918. Noted July 12.

Miss., Houston—See "Streets and Roads."

Ky., Owensboro—See "Excavation, Drainage, Irrigation."

Ia., Orange City—Sioux Co., 1 pony truss to E. Landsman, Everly, $15,893; 1 pony truss to Jensen Constr. Co., Kimballton $9,500; 13 culverts and extensions, to J. Brandsma, Sibley, $4,510.

Missouri—State Hy. Dept., Jefferson City, eleven 20 ft. rein.-con. slab spans over overflow Grand River, also two 150 ft. steel truss, four 40 ft. rein.-con. deck girder, and two 20 ft. rein.-con. slab spans, etc., over Grand River, Daviess Co., to Western Bridge Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $17,295 and $61,519, respectively; three 20 ft. rein.-con. slab spans over Pine Run Creek, and one 120 ft. steel truss span over Railey Creek, to M. E. Gillioz, Monett, $5,395 and $14,652 respectively; one 50 ft. steel truss span over Spring Creek, Dent Co., to General Constr. Co., Syndicate Trust Bldg., St. Louis, $7,841; one 75 ft. steel truss and four 20 ft. rein.-con. slab spans over Muddy Creek, five 20 ft. rein.-con. slab spans, etc., Barton Co., to Carterville Constr. Co., Carterville, $23,977; four 80 ft. steel truss spans, etc., over Salt River, to Pan Amer. Bridge Co., Moberly, $36,170; cleaning and repainting steel work on two 200 ft. and two 120 ft. steel truss spans, St. Louis Co., to St. Louis Foundation Co., St. Louis, $1,300. Noted July 19.

Washington—State Hy. Comn., Olympia, 2 bridges, each with 150 ft. half through concrete arch, over Hamma Hamma River, to Colonial Bldg. Co., Hutton Bldg., Spokane, 215,000 steel reinforcing bars $0.07, 22,400 steel castings $0.15, 560 cu.yd. Class A concrete $32, 550 cu.yd. Class B $30, 392 cu.yd. Class E $29, etc., total $77,838; bridge over Yakima River near Fallon, Benton Co., two 180 ft. through riveted steel spans with concrete deck and two 30 ft. concrete approaches, to C. H. Graves, Spokane, 450,000 lb. steel $0.084, 44,500 steel bars $0.55, 875 cu.yd. earth approach and fill $3.60, total $55,945. Noted June 28.

Ont., Toronto—Provincial Dept. Pub. Highways, 110 University Ave., 700 ft. bridge, 60 ft. wide, concrete abutments, over Humber River on Dundas St., concrete to Johnston Bros., Brantford, $292,000; steel to Dominion Bridge Co., Imperial Life Bldg. Engrs. est. $500,000. Noted May 24.

Dams

PROPOSED WORK

N. Y., Gowanda—See "Waterworks."

Tenn., Lawrenceburg — Aug. 3, to vote on $80,000 bonds for another dam and power plant on Shoal Creek, between present dam and power plant.

Tex., Ballinger — Coke Runnels Water Impvt. Dist. 1 plans election in August to vote on $4,500,000 bonds for 2,000 ft. dam, 100 ft. high, 200,000 acres to be irrigated. C. C. Holder, Bronte, engr.

Ont., London—Utilities Comn., Hydro Bldg., plans rebuilding cement dam wrecked by flood. $150,000. E. V. Buchanan, Hydro Bldg., engr.

BIDS DESIRED

Calif., Merced—Merced Irrigation Dist., receiving bids Exchequer Dam, 310 ft. high, 900 ft. long on top, over 12 ft. thick at top and over 127 thick at base, Jorgenson type, slightly modified. $3,000,000-$4,000,000. Starr-Thebo & Anderton, Sharon Bldg., San Francisco, engrs. R. C. Starrett, resident engr.

CONTRACTS AWARDED

N. Y., Beacon—City Council, 525 Main St., dam at Melzingah Reservoir, to Newburgh Building & Supply Co., 488 Bway., Newburgh, $168,319. Noted July 5.

Railways

PROPOSED WORK

Michigan—Detroit Connecting Ry., 1526 Dime Bank Bldg., Detroit, plans 88 mi. electric line from Delray connecting Ecorse, Pontiac, Sylvan Lake Village, Mt. Clemens and Marine City. G. H. Kimball, Sr., Pontiac, ch. engr.

Wisconsin—Wisconsin Southern Ry. Co., 53 15th St., Fond du Lac, plans railroad system from Madison to Sturgeon Bay. $2,000,000. C. D. Smith, pres. Engineer not selected.

Oregon—See "Miscellaneous."

Canada—Dept. Pub. Wks., Railways and Canals, Ottawa, plans following supplementary work, Hudsons Bay Railway from Le Pas, Man., to Port Nelson, $350,000; survey of new railway into Peace River Dist., Alberta, $50,000. W. A. Bowden, chn. engr.

Ontario—Ontario Hydro Power Comn., University Ave., preparing plans new belt line, extensions and general rebuilding of system in Windsor and Walkerville. $900,000. Work will be done under supervision of T. U. Fairlie, engr., Border St. Ry. offices, Windsor. Interested in prices of rails and equipment. A. Beck, London, chn. Noted Apr. 5.

Railways (Continued)

BIDS DESIRED

Florida — See "Miscellaneous, under Miami."

CONTRACTS AWARDED

Alabama—Tennessee Coal & Iron R.R. Co., Brown-Marx Bldg., Birmingham, 6 mi. line from Fairfield to Wenonah, incl. grading, bridging and track laying, 130,000 cu. yd. earth excav., 700,000 cu.yd. slag fill, 20,000 cu.yd. slag ballast, 1,600 ft. steel bridges, 100 lb. rails, 24,000 cu.yd. concrete. $4,000,000. Large portion of work will be done by company forces. Contracts will be let for certain units. Address J. B. McYntise, Fairfield, ch. engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Calif., Carmel—See "Miscellaneous."

Calif., Oakdale—Oakdale Irrigation Dist. to vote on $300,000 bonds for concrete pipe, deepening canals, and replacing steel pipe lines.

Ont., Harriston—Minto Twp. soon takes bids drainage work as follows: Drain 1, 25,800 cu.yd. excav.; Drain 11, 17,422 cu.yd. excav.; Drain 12, 6,450 cu.yd. excav., and 3,550 lin.ft. tile drains. $30,000. W. D. McLenna, clk.

BIDS DESIRED

Wis., Green Bay—Foeller, Schober & Stephenson, archts., Nicollet Bldg., taking bids on excavation for 4 story and basement, brick and concrete, plain foundation, for Y.M.C.A. % A. F. Grim, secy., Minahan Bldg. Noted July 19 under buildings.

Minn., Worthington—Aug. 3, by C. J. Kall, aud. Nobles Co., Consolidated Judicial Ditch 1, 21,900 lin.ft. open ditch, 139,365 cu.yd. excav. $19,511; waste bank leveling $2,250; 3 flood water inlets $600; 36,400 lin.ft. 6-28 in. tile $21,909.

Tex., Harlington—Aug. 1, by Cameron Co. Water Impvt. Dist. 1, 15 mi. drainage ditch. $25,000

Que., St. Emelie — July 27, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, dredging here.

CONTRACTS AWARDED

Miss., Charleston—For 474,000 cu.yd. excavating and channel work, to N. C. McGinnis & Co., Exch. Bldg., Memphis, Tenn.

Miss., Corinth—White Oak and Hatchie D. D. of Tippah and Alcorn Counties. 246,327 cu.yd. drainage canals, to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $0.112 per cu.yd., total $27,589. Noted July 28.

Ky., Owensboro—Davies Co. D. D., 250,556 cu.yd. earthwork, 54 acres clearing, one 14 x 16 ft. and one 14 x 30 ft. wooden bridge, one 12 x 85 ft. concrete and steel, wood floor bridge, one 12 x 36 ft. and one 65 ft. concrete and steel bridge, 197,314 cu.yd. excav., to J. D. Church, Owensboro. Noted July 12.

Calif., Merced—A. L. Cowell, secy. Merced Irrigation Dist., to J. Phillips, 637 Santa Ray Ave., Oakland, earthwork in Lingard Lateral $0.17 per cu.yd., total $10,371, Lateral 9, $0.17, total $10,429. Noted June 28.

Streets and Roads

PROPOSED WORK

Conn., Bristol—School Bd. plans grading around new high school, also tennis courts, sidewalk, etc. $25,000.

N. Y., Lakewood—Plans paving Chautauqua Ave. and Terrace St., various types material. $25,000. Engineer not announced.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., received no bids July 23, repaving Metropolitan Ave. and Sheridan Blvd., sheet asphalt; grading, curbing and laying sidewalks, etc., on Beach 92nd St. Noted July 19.

N. Y., Tonawanda—Plans repaving Main St. $70,000. C. S. Warren, mayor.

N. J., Bloomfield—J. C. Johnson, town clk., soon takes bids paving 2,500 sq.yd. Race St., 8 in. penetration macadam, $12,000; laying sidewalks and paving State St. 2 in. bituminous concrete on 6 in. concrete, $10,000; blue stone curbing 1,300 ft. Bay Ave., $2,700; storm sewer in 1,000 ft. East Passaic Ave., $2,500. E. Baechlin, town engr.

N. J., Trenton—Plans paving Liberty St., granite block between car tracks and sheet asphalt from tracks to gutter. $80,000. J. E. English, City Hall, engr.

Pennsylvania—State Hy. Dept., Harrisburg, plans 275 mi. durable highway. $15,000,000 available. The 275 mi. program will exhaust all present funds for construction purposes. There can be no additional road construction during 1923 and 1924 unless voters in November approve $50,000,000 bond issue. P. D. Wright, secy.

Pa., Elwood City—Plans paving 2nd St., Hillside and South 2nd Aves., brick on concrete. $36,000. A main, Boro Bldg., engr.

Pa., Farrell—Plans paving Hamilton Ave., Franch, Union, Washington, Federal and Kishon Sts., various materials. $25,000. Engineer not announced.

Pa., Franklin—Venango Co. plans election to vote on $500,000 bonds for constructing new roads. Engineer not announced.

Pa., Lewistown—See "Sewers."

Pa., Pittsburgh—Plans grading, paving and curbing Kleber St. from California Ave. to Brighton Rd. $29,000. F. W. Lyons, city engr.

Pa., Pittsburgh—Plans grading, paving and curbing Baker St. from Morningside to Butler Sts. $92,000. F. W. Lyons, city engr.

Pa., Pittsburgh—Plans grading, curbing and paving St. Martin St. from Birmingham to Monastery Sts., 3,690 sq.yd. blockstone and brick, 7,169 cu.yd. excav., etc., $46,000; grading, regrading, paving, repaving, curbing and recurbing and improving storm sewers in Arlington Ave. from South 26th St. to Clover St., $195,000; repaving, asphalt concrete base on Rosedale St. from Hamilton to Hill Aves., $25,000; grading, paving, curbing and storm sewers in Los Angeles Ave. from Shiras to Mackinaw Aves., $40,000. F. W. Lyon, city engr.

W. Va., Wheeling—Comrs. Ohio Co. having plans prepared concrete curbing, widening and paving with brick on 7 in. concrete, 3,600 ft. Chapline St., 36 ft. $180,000. A. C. Hoffman, Court-house, engr.

North Carolina—State Hy. Dept., Raleigh, rejected bids clearing, grading and topsoiling 6.42 mi. road between Northampton Co. line and Aulander on Route 305, State Project 146, Hertford and Bertie Counties, $50,000; grading and waterbound macadam paving 4.03 mi. between Graham and Randolph Co. line on Route 62, State Project 507, Alamance Co., $115,000; grading, reconstructing and asphaltic paving 9.92 mi. around town of Wilson, State Project 295, Wilson Co., $180,000; clearing, grading, topsoiling and rein.-con. bridges and culverts on 8.64 mi. between Big Creek and Danbury via Moores Springs, State Project 750B, Stokes Co., $171,000; grading and waterbound or penetration macadam surfacing 8.27 mi. between Project 960 and Franklin on Route 286, State Project 961A and extension, Macon Co., $120,000. Will readvertise. C. M. Upham, state highway engr. Noted July 12.

Fla., Indian River City—Indian River City Town Site Corp. plans 6 mi. paving, curbing and guttering. $50,000. H. F. William, c/o Hotel Pines, Titusville, mgr.

Fla., West Palm Beach—Palm Beach Co. election Aug. 6 to vote on $30,000 bonds for 10 mi. Rds. 5 and 6, beginning at north line Gomez Grant and Indian River; $25,000 bonds 15 mi. Rds. 1 and 2, beginning at north line of Gomez Grant and Indian River; $25,000 bonds 20 mi. Rds. 3 and 4, beginning at north line of Gomez Grant and Indian River; $25,000 bonds 10 mi. Rd. 1 from northwest corner of Hanson Grant; $30,000 bonds 12 mi. Rds. 2, 3 and 4 from northwest corner of Hanson Grant. C. Holtshaw, West Palm Beach, engr.

Tenn., Columbia—Maury Co. plans bituminous macadam surfacing on old base 12 mi. highway between here and Mt. Pleasant, under supervision of State Hy. Dept., Nashville. $16,000 per mile.

Tenn., McMinnville—Voted $75,000 bonds paving various streets. O. C. Jennings, mayor. Noted Mar. 22.

Tenn., Nashville — Plans paving 18th and 19th Sts. from Church to Cedar Sts. and State St. from McMillan to 20th Sts., probably asphalt. W. N. Southgate, city engr.

Kentucky—State Hy. Comn., Frankfort, making plans grading 12.5 mi. Glasgow-Burksville Rd., Federal Aid Project 40, Barren Co., 22-24 ft. J. Boggs, state highway engr.

Ky., Booneville — Owsley Co. plans to construct roads. $75,000. V. Thomas, co. judge.

Ky., Frankfort—Soon takes bids removing existing paving and paving with rock asphalt on concrete St. Clair and Main Sts. State pays one half cost. J. S. Boggs, state highway engr.

O., Cleveland—Davis & Farley Realty Co. soon takes bids laying sidewalks, mains and sewers in Independence Rd. allotment. $50,000. P. A. Jones, Leader-News Bldg., engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 2,125 ft. Essex St., 30 ft., and 1,432 ft. Camden Ave., 26 ft., brick or asphalt; 309 ft. alley west of Garfield Ave., 20 ft., brick or concrete; 2,387 ft. 6 in. mains in 4th and Roys Aves. R. H. Simpson, city engr.

O., Steubenville—Jefferson Co. plans rebuilding about 3.5 mi. road between Toronto and Stratton, 40 ft. $50,000. State will appropriate toward cost. L. Leech, Steubenville, engr.

Mich., Detroit—Making plans paving with 3½ in. sheet asphalt on 8 in. concrete, grading and Berea or medina curbstone, 5,100 sq.yd. Mackie Ave. $30,720; 7,100 sq.yd. La Salle Ave. $48,880; 3,300 sq.yd. Seneca Ave. $19,520. J. W. Reid, city engr.

Ill., East St. Louis—Making plans grading and paving 7,000 ft. Forest Blvd., McCausland, 10th, 19th and Henrietta Sts., 28 and 30 ft. $100,000. W. McK. Brown, City Hall, engr.

Kan., Garnett—Anderson Co. soon takes bids grading and gravel surfacing 8.474 mi. King of Trails Highway, 43,853 cu.yd. earth and 258 cu.yd. rock excav., 18,681 cu.yd. feather edge gravel, etc. F. T. Bonebrake, co. engr.

Kan., Kansas City—Soon takes bids concrete or brick paving 10 blocks. $25,000. R. L. McAlpine, city engr.

Kan., Lincoln Center—Making surveys paving various streets. $25,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Kan., Strong City—July 31, to vote on $68,000 bond issue repaving 6,000 ft. Cottonwood Ave.

South Dakota—State Hy. Comn., Pierre, plans grading 11 mi. Federal Aid Project 143, Marshall Co. $46,530. F. D. Hudgins, state highway engr.

N. D., Grand Forks—Plans paving 2nd and Conklin Aves. $46,547. J. H. Solsted, city engr.

Missouri—State Hy. Dept., Jefferson City, rejected bids July 6, improving 1.445 mi. State Project Route 14, Sect. 85, St. Louis Co. Noted July 19.

Mo., Clayton—Soon takes bids concrete paving about 2,800 ft. Forsythe Blvd., Carondelet, Meramec, and Central Aves., 30 ft. $28,374. J. Rapp, Clayton, engr.

Tex., Carrizo Springs—Dimmitt Co. election Aug. 14, to vote on $224,000 bonds for grading and topping 56 mi. highways from Cotula to Maverick Co. line. Total cost $448,000. State Hy. Com. appropriated $224,000.

Tex., Leakey — Real Co. making plans grading 18 mi. Kerrville Rock Springs Rd., 18 ft. $70,000. Federal Aid appropriation $35,000. W. E. Simpson, N. B. C. Bldg., San Antonia, engrs.

Tex., Palestine—Anderson Co. making plans grading, bituminous surfacing on macadam 35 mi. State Highway 19, 18 ft. $784,440. E. W. Davis, co. engr.

Tex., Paris—Lamar Co. making plans grading and concrete surfacing 2.54 mi. Paris-Honey Grove Sect. of State Highway 5, 18 ft. $75,000. W. M. Fooshee, co. engr.

Tex., Pecos—Reeves Co. making plans grading and gravel surfacing 15.5 mi. Old Spanish Trail from intersection of State Highway 1 to point 4.5 mi. west of Toyahvale, 16 ft. $100,000. A. J. Adcock, Grandfalls, co. engr.

Tex., Sulphur Springs—Hopkins Co. election Aug. 18 to vote on $160,000 bonds improving State Highway 1, from Sattillo Precinct to Hunt Co. line. R. E. Bertram, co. judge.

Ark., Newport — Making plans grading and asphaltic concrete paving on concrete 15 blocks in East Newport. $50,000. Bowman Eng. Co., Newport, engrs.

Wash., Seattle—King Co. soon takes bids paving 3 mi. Maple Valley Highway, 20 ft. $80,000. T. R. Beeman, co. engr. Noted July 19.

Wash., Seattle—Comrs. King Co. take bids about Aug. 15, grading and gravel surfacing 1.5 mi. East Valley Rd. $37,000. T. R. Beeman, co. engr.

Streets and **Roads (Continued)**

Wash., Tacoma—Plans paving Portland Ave. et al., 7 in. concrete. $78,003. J. C. Manley, city engr.

Calif., Auburn — Making plans paving various streets with 5 in. concrete. To exceed $50,000. J. Barieau, city engr.

Calif., Beverly Hills—Voted $25,000 bonds for street improvements.

Calif., Carmel—See "Miscellaneous."

Calif., Fresno—Had plans prepared improving E St. between Fresno and Inyo Sts., 100,780 sq.ft. grading, 93,950 sq.ft. 3½ in. asphaltic concrete, 1½ in. surface, 6,120 sq.ft. concrete gutter, 3,370 lin.ft. concrete curb, 18,645 sq.ft. sidewalks, 755 sq.ft. concrete pavement, etc. W. Stranahan, city engr.

Calif., Oakland—City to appropriate $125,000 opening 20th St.; $100,000 paving East 14th St.; $37,500 extending Skyline Blvd.; $14,000 paving portion Foothill Blvd.; $55,000 extending 10th St.; $75,000 opening Jefferson St. W. W. Harmon, city engr.

Calif., Salinas—Had plans prepared grading, laying gutters and paving 18,327 sq.ft. South Capitol St., 6 in. waterbound macadam. H. F. Cozzens, city engr.

Calif., San Diego — Common Council plans improving Elm St. from Columbia St. to Balboa Park, 81,257 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Diego—Had plans prepared curbing and paving 123,763 sq.ft. Imperial Ave., 180,832 sq.ft. Imperial Ave. through Ecanto Dist., and 164,267 sq.ft. 12th St. extension and portion of Park Blvd., 1½ in. willite, warrenite or asphaltic concrete on 3 in. bituminous base. A. H. Wright, city clk.

Calif., San Francisco—Plans reconstructing streets south of Market Dist. $106,000 appropriated. M. M. O'Shaughnessy, city engr.

Ont., Chatham—Plans paving Queen and Mercer Sts., 10,000 sq.yd. asphalt on concrete. $39,615. C. H. R. Fuller, City Hall, engr.

Ont., Hamilton — Takes bids early in August concrete paving Ottawa St. $45,000. Interested in prices of materials. W. L. McFaul, city engr.

Ont., Kitchener—Waterloo Co. plans 1,800 sq.yd. concrete pavement, 800 lin.ft. concrete curb and gutter in Village of Ayr; 3,400 sq.yd. macadam pavement, 1,800 lin.ft. concrete curb and gutter in Preston; 5 rein.-con. bridges and culverts with 4-16 ft. span slab tops. $35,000. L. S. Lichty, County Bldgs., Kitchener, engr.

Ont., Oshawa — Plans concrete curbing, guttering and paving with asphalt on concrete 30,000 sq.yd. Simcoe, King, Division, Bruce, Hillcroft, Masson, Celina, Gretna, Aberdeen, Connaught and Harold Sts., Ritson Rd., Barrie and Olive Aves.; 8,000 lin. ft. 4 ft. concrete sidewalks on Alma, Caradoc, Athol, McGregor and Jarvis Sts., Oshawa Blvd., Lawrence and Eulalie Aves. and Base line. $150,000. W. C. Smith, Town Hall, engr.

Ont., Port Dalhousie—Lincoln Co. (St. Catharines), plans 14,000 sq.yd. concrete pavement, here. $40,000. F. N. Rutherford, County Bldgs., St. Catherines, engr.

BIDS DESIRED

New Hampshire—July 31, by State Hy. Dept., Concord, gravel surfacing 3.17 mi. in Wolfeboro, Chichester and Epsom; paving 1.48 mi. in Hanover, waterbound macadam; 0.85 mi. in Fitzwilliam and Auburn, bituminous macadam. F. E. Everett, state highway comr.

Vermont—Aug. 2, by T. W. Dix, ch. engr., Dept. Highways, Montpelier, 1.33 mi. road in Windsor, 1.85 mi. road incl. one 62 ft. steel truss bridge, in Ferrisburg, one 80 ft. steel truss bridge and approaches in Wolcott, 3.03 mi. road in Randolph; adv. this issue.

Massachusetts—July 31, by W. F. Williams, state highway comr., State House, Boston, 2,400 ft. road, 20 ft., in New Braintree, $25,000; 4,000 ft. in Amesbury, $35,000; 7,700 ft. in Framingham, $70,000, all foregoing bituminous macadam; 9,330 ft. in Mashpee and Sandwich, $90,000. J. R. Rablin, ch. engr.

Rhode Island — July 25, by State Bd. Pub. Wks., Providence, surfacing 1 mi. Tiverton-Stafford Rd., 18 ft., waterbound macadam, Contr. 2306; 1 mi. Little Compton-Adamsville Rd., 18 ft., gravel, Contr. 2307. $25,000. W. A. Patterson, state highway engr.

DYKES—MISSOURI

Bids were opened by Bd. Pub. Serv., St. Louis, June 12, for constructing fifteen 3-row hurdle dykes and 2-story office building along Missouri River near St. Charles, (A) Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (awarded contract); (B) List & Gifford Contg. Co., Merchants Laclede Bldg., St. Louis; (C) Norton Bros. & Massman, St. Louis; (D) Woods Bros. Constr. Co., Railway Exchange, St. Louis. The unit bids were as follows:

	A	B	C	D
1,866,250 sq.ft. mattrass	$0.795	$0.11	$0.09	$0.10
47,500 cu.yd. grading	32	40	.25	60
48,525 cu.yd. stone	3.70	3.40	3.80	4.75
417,726 lin.ft. piling	21	20	.30	26
417,726 lin.ft. pile driving	31	.39	.35	395
Office building (lump sum)	9,680.00	15,000.00	15,750.00	15,525.00
Extended totals	$570,007	$650,731	$651,504	$734,754

ROAD WORK—DELAWARE

Following are lowest three bids opened by State Highway Comn., June 6, for constructing 5.59 mi. road from Kenton to Smyrna, Kent Co., (A) Hamill & Moriarty, Inc., Baltimore; (B) E. R. Mixner Co., Goshen, N. J.; (C) M. Staub, Pitman, N. J.

	A	B	C
33,000 cu.yd. excavation	$1.15	$1.25	$1.35
1,200 cu.yd. borrow	1.00	1.50	1.65
200 ton sub-base	5.00	5.00	6.00
9,725 cu.yd. concrete pavement	13.95	14.06	14.70
375 cu.yd. class "A" concrete	28.00	35.00	32.00
13,000 lb. reinforcement	10	.10	10
1,000 lin.ft. 15 in. rein-con. pipe	3.00	2.75	3.00
188 lin.ft. 18 in. rein.-con. pipe	3.60	3.45	4.50
154 lin.ft. 24 in. rein.-con. pipe	5.50	5.40	7.00
30 lin.ft. 42 in. rein.-con. pipe	15.00	10.50	20.00
200 lin.ft. relaid pipe	3.00	2.00	2.50
2,000 lin.ft. w.c. guard rail	.55	.80	.75
3,000 lin.ft. wood shoulder curb	.45	.30	.40
Extended totals	$195,665	$202,654	$212,712

VIADUCT—ST. LOUIS, MO.

Following are lowest three bids opened by Bd. Pub. Serv., June 5, for rein.-con. viaduct on 14th St., (A) F. A. Stiers, 4500 Enright Ave., (awarded contract); (B) Fruin-Colnon Contg. Co., Merchants-Laclede Bldg.; (C) Higgins-Wall-Dyer Co., International Life Bldg. The units bids were as follows:

	A	B	C
5,120 sq.yd. removing paving blocks	$0.50	$0.60	$0.50
18,900 cu.ft. removing old masonry	19	30	10
4,400 cu.yd. grading	1.50	1.50	1.00
27,840 cu.ft. excavation, class "A"	.37	.45	.70
117,070 cu.ft. excavation, class "B"	.13	.20	.30
65,930 cu.ft. excavation, class "C"	.14	.10	.15
1,940 cu.ft. excavation, class "D"	42	50	.50
35,170 lin.ft. concrete piling	2.10	2.25	3.00
Sewer drainage (lump sum)	3,690.00	6,000.00	3,300.00
12,090 cu.ft. concrete, class "A"	.96	.75	.60
239,895 cu.ft. concrete, class "B"	.66	.70	.60
68,285 cu.ft. concrete, class "C"	.42	.6^	.73
33,360 cu.ft. concrete, class "D"	.44	.50	.60
30,040 cu.ft. concrete, class "E"	.32	.40	.60
2,025,000 lb. steel reinforcing	.05½	.04½	.03¼
98,300 sq.ft. surface finish	06	.05	05
Expansion joints, waterproofing (lump sum)	2,400.00	1,600.00	2,000.00
800 cu.ft. rubble masonry	.50	.60	.50
Wooden railing (lump sum)	100.00	200.00	250.00
Extended totals	$468,944	$488,961	$495,585

New York—Aug. 10, by F. S. Greene, comr. of highways, Albany, constructing and reconstructing highways in Chautauqua, Columbia, Genesee, Greene, Orange, Rensselaer, St. Lawrence, Steuben, Tioga, Tompkins and Westchester Counties. W. A. Patton, secy.; adv. this issue.

N. Y., Brooklyn—Aug. 1, by E. Riegelmann, boro pres., Boro Hall, paving Ave. J, Rutland Rd., Dumont and East New York Aves., East 36th, East 37th and 53rd Sts.; curbing and paving East 26th St. and Ave. J.; recurbing and paving Lincoln Ave.; repaving 41st St., southerly portion of Atlantic Ave., Miller, Franklin and Ocean Aves.; paving and repaving Troutman St., all asphalt; grading, curbing and flagging Ave. J, Leroy Rd., East 36th and East 37th Sts.; resurfacing with asphalt by heater method Clermont, Evergreen, Putnam and Saratoga Aves., Downing, Henry and Raymond Sts.

N. Y., Dobbs Ferry—Bd. Village Trustees taking bids repairing and improving portion Main St. L. C. French, pres.; adv. this issue.

N. Y., Long Island City—July 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading sidewalk spaces in Clermont Ave.; curbing, laying sidewalks and paving Forest Ave., sheet asphalt; repaving Grand St., improved granite block; recurbing and paving George St., sheet asphalt on concrete; grading, curbing and laying sidewalks on Provoost St.; curbing and laying sidewalks, etc., from Graham to Jackson Aves.; paving 13th Ave., sheet asphalt on concrete.

N. Y., St. George — July 30, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and laying sidewalks on Castleton Ave.; concrete curbing and guttering Mountainview Ave.; temporary sewer in Alabama St.

New Jersey—Aug. 6, by State Hy. Dept., Trenton, rein. con. paving, constructing or reconstructing 4 rein.-con. bridges on Route 8, Sect. 4, Charlottesburg-Smiths Mills, Passaic Co.; rein.-con. paving Route 14, Sect. 8, Swainton to Oceon View, Cape May Co. A. L. Grover, ch. clk.; adv. this issue.

N. J., Freehold — Aug. 8, by Bd. Freeholders Monmouth Co., Court House, reconstructing extension to Farmingdale-Manasquan Rd. 34, Sect. 3. G. D. Cooper, 60 Broad St., Red Bank, civil engr.; adv. this issue.

N. J., Mays Landing—Aug. 8, by Bd. Freeholders Atlantic Co., Guarantee Trust Bldg., Atlantic City, repairing or reconstructing Absecon Blvd. joining Absecon and Atlantic City. F. W. Willetts, clk.; adv. this issue.

N. J., Park Ridge—Aug. 6, by Mayor and Boro Council, Century Hook and Ladder Hall, curbing and laying concrete sidewalks on Main St., Ridge and Park Aves. H. G. Hering, Jr., 3 Westwood Ave., Westwood, boro engr.; adv. this issue.

Pa., Greenburg — Aug. 10, by Comrs. Westmoreland Co., 1 mi. Bolivar Rd., 16 ft., rein.-con., $30,000; 4,670 ft. Edgecliff-Braeburn Rd., concrete, $30,000. Former bids rejected. W. G. Muse, Co. Court House, engr.

Pa., Lewistown—Aug. 6, by Boro Council, paving 4th, Grand, Dorcas and Hale Sts., 7,969 sq.yd. rein.-con., etc. W. Fosnot, Pres. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

Delaware—Aug. 8, by State Hy. Dept., Dover, constructing 4.58 mi. highway from Kirkwood to Tybouts Corner, Contr. CN 13; 0.91 mi. through Dagsboro, Contr. CS 28; adv. this issue.

Md., Baltimore—Aug. 1, by Bd. Awards grading and paving streets, Contrs. 241-OONA, 244-OA, 241-OANA, 17,615 sq.yd. sheet asphalt, 2,100 sq.yd. granite block repaved, Contr. 244-OA, 1,600 sq.yd. con-

Streets and Roads (Continued)

crete. $40,000. R. K. Compton, 214 East Lexington St., chn. paving com.

W. Va., Bluefield—Aug. 14, at office of C. E. Ridley, city mgr., paving Projects 1, 2, 3 and 4; adv. this issue.

W. Va., Clarksburg—Aug. 14, by Comrs. Harrison Co., 2 mi. concrete surfacing; 1 mi. Telford base, slag surface; grading and surfacing 4,000 ft. with concrete, also building 9 concrete bridges. G. L. Coyle, Clarksburg, engr.

S. C., Walterboro—Aug. 9, at office of P. M. Buckner, Walterboro, sand clay surfacing 40,500 cu yd. State Route 30, incl. 146,000 cu.yd. excav., 3 timber bridges, etc., Colleton Co. W. C. Cathey, Orangeburg, engr.

Georgia—Aug. 3, by State Hy. Dept., at East Point, grading 2.014 mi. Federal Aid Project 320, Habersham Co., H. W. Morgan, Gainesville, engr.; clearing and graveling 6.124 mi. Federal Aid Project 337, Ware Co., alternate bids on 64,674 sq.yd. 8 in. compacted clay gravel and local semi-gravel surface; 148,493 sq.yd. Federal Aid Project 334, Ware Co., compacted clay gravel. C. L. Rhodes, Waycross, engr.

Florida — Aug. 8, by State Rd. Dept., Tallahassee, constructing or improving 2.3 mi. Rd. 1, Project 38, Escambia Co., being embankment portion of Escambia River Bridge. W. F. Cocke, state highway engr.

Fla., Clearwater — Aug. 23 (change of date) by Comrs. Pinellas Co., paving Rds. 1, 2, 3, 4, 6, 7 and 8, vitr. brick with bituminous filler, asphalt block, sheet asphalt, bituminous macadam penetration or inverted penetration method, all on compacted lime rock base, with concrete curb, or portland cement concrete; Rd. 5, relaid vitr. brick, with bituminous filler and double bituminous surface-treated lime rock shoulders. C. E. Burleson, co. engr.; adv. this issue. Noted July 12.

Fla., DeLand—Aug. 6, by Comrs. Volusia Co., hard surfacing 39.5 mi. road in Turnbull Special Rd. & Br. Dist. $100,000. N. A. Hotard, New Smyrna, engr.

Fla., Inverness—July 31, by Comrs. Citrus Co., improving 80 mi. highways, 155,000 cu.yd. grading, 55,000 cu.yd. limestone and sand-clay surfacing. Twelve separate roads, bids on all or part. E. V. Camp & Co., Jacksonville, and Decatur Court House, Atlanta, Ga., engrs.

Fla., Tavares—July 30, by M. V. Simpson, chn. Comrs. Lake Co., grading and sand-clay surfacing 17.3 mi., Rds. 4 to 7 inclusive, $26,000; 19½ mi. Rds. 8 to 13 inclusive, $29,250; 25.1 mi. Rds. 1 B, 2 and 3, $37,500. All roads in South Lake Special Road & Bridge Dist. G. E. Heller, Tavares, engr.

Ala., Bessemer — Aug. 27, by Mayor, grading and paving 14 blocks Pearson Ave., 2 or 2½ in. sheet asphalt or bitulithic concrete on 6 in. concrete, 30 and 25 ft., $47,750, 4 blocks sidewalks, 2 in. asphaltic concrete on 5 in. concrete, $4,500.

Miss., Belzoni — Aug. 6, by highway comrs. of Northern Separate Rd. Dist. of Supervs. Dist. 1, Humphreys Co., at office of Chancery Clerk, improving roads, 28,905 cu.yd. borrow excav., 9.56 mi. common machine grading, 17,218 cu.yd. road gravel furnished, hauled one mile and placed, 146,267 units, cu.yd. overhauled ½ mile and placed, etc. C. E. Miller, Belzoni, engr.

Miss., Gulfport — Aug. 9, at Chancery Clerk's Office, Harrison Co., grading, paving 1.543 mi. roads, 18 ft., warrenite bitulithic, asphaltic concrete, or brick on concrete base course or one course concrete. $46,305. H. D. Dietzer, Jackson, state highway engr.

Louisiana—Aug. 7, by State Hy. Dept., Reymond Bldg., Baton Rouge, grading, timber bridges and sand clay gravel surfacing 10,083 cu.yd. Sect. B Vinton-Orange Highway, Federal Aid Project 43, Calcasieu Parish; gravel surfacing 2,987 cu.yd. Sect. C Vinton-Orange Highway, Calcasieu Parish; grading, bridging and gravel surfacing 6.93 mi. Sects. A and B Walker-Dutchtown Highway, State Project 350, Ascension Parish. J. M. Fourmy, state highway engr.

Louisiana—Aug. 14, by State Hy. Dept., Baton Rouge, grading, gravel surfacing, etc., 9.555 mi. Minden-Shreveport Highway, Federal Aid Project 116, Sect. A, Webster Parish. J. M. Fourmy, state highway engr.

La., Baton Rouge—Aug. 2, by Commission Council paving 23,600 sq.yd. St. Louis and Government Sts., brick, bitulithic, sheet asphalt, asphaltic concrete or rein.-con. J. W. Billingsley, Interstate Bldg., New Orleans, engr.

La., Baton Rouge—Aug. 7, by Commission Council at office of Mayor, City Hall, paving St. Louis and Government Sts. J. W. Billingsley, consult. engr.; adv. this issue.

La., Rayville—Aug. 7, by Police Jury Richland Parish, clearing, grading and gravel surfacing 7.5 mi. highway. J. C. Salmon, clk.

Tennessee — Aug. 10, by State Dept. of Hys. and Pub. Wks., Nashville, grading, surfacing and bridging, etc., 7.99 mi. Federal Project 94; 11.02 mi. Federal Project 96; 14.64 mi. State Project 113; 7.53 mi. State Project 115; 10.78 mi. State Project 126; 12.3 mi. State Project 127; 8.6 mi. State Project 128; 5 mi. State Project 130; 281 ft. bridge over Stones River, Federal Project 89; 2 bridges State Rd. 47, State Project 129; bridge over Drake Creek, Federal Project 63-D. J. G. Creveling, Jr., comr; adv. this issue.

Ohio—Dept. Highways and Pub. Wks., Columbus, taking new bids grading, bridging and paving Sects. "G" and "L" Mt. Gilead-Galion Rd., Morrow Co. Noted June 7.

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.002 mi. Sect. "P" Akron-Wooster Rd., Wayne Co., monolithic brick, $58,307. A. V. Donaheys, dir. highways.

O., Akron—July 30, by S. Porter, clk. Summit Co. grading, curbing and paving 79,500 sq.yd. Cleveland-East Liverpool Rd. 12, and Sects. E, E2, F and G Richfield-Hudson Rd., bituminous concrete, bituminous macadam or bitoslag. $314,909. J. Weaver, Delaware Bldg., engr.

O., Akron—July 30, by W. F. Peters, dir. Pub. Serv., grading, curbing, guttering, laying sidewalks and paving Mt. Vernon Ave., 4,420 sq.yd. vitr. brick or 3,520 sq.yd. 3 in. asphalt, $35,000; Murray Ave., 4,730 sq.yd. vitr. brick or 3,780 sq.yd. asphalt, $39,000; resurfacing 2,875 sq.yd. Campbell St., 3 in. asphalt, $20,000; grading, laying sidewalks, etc., on 1,100 cu.yd. East South St., cinders or gravel, $14,000. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—Aug. 13, by W. F. Peters, dir. Pub. Serv., repaving 7,600 sq.yd. Johnston St., $75,000; grading, paving and laying sidewalks on 2,600 sq.yd. Berwin St., vitr. brick or asphalt, $25,000; Rentschler Court and Power St., 2,700 sq.yd. vitr. brick $27,411 or 2,150 sq.yd. asphalt, $26,606. E. A. Kemmler, Delaware Bldg., engr.

O., Bellaire—Aug. 1, at office of G. T. Kreglow, dir. Pub. Serv., City Bldg., grading, curbing, paving, etc. Colerain Lane (49th St.), Archison Rd. (Noble St.), and Trumbull and Gurnsey Sts.

O., Cincinnati—Aug. 3, by Hamilton Co., grading, bridging and paving Sheed Rd., 39,500 sq.yd. bituminous macadam, 103,000 gal. tar grade 1 and 1,900 cu.yd. 1:2:4 concrete. $109,111. E. A. Gast, Court House, co. surv.

O., Cleveland—Aug. 6, by Bd. Educ., East 6th St. and Rockwell Ave., grading walks, landscaping, retaining walls, etc., at Patrick Henry, Benjamin Franklin, Lincoln High and John Adams Schools. To exceed $100,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Columbus—July 31, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewers and paving 2,092 ft. Monroe Ave., 24 ft., asphalt, $33,149; 719 ft. Park St. S., 24 ft. and 469 ft. 8th St., 26 ft., brick or asphalt; 3,226 ft. alley north of Norwich Ave., alley north of Fulton St. from Parsons to Monroe Aves. and alley north of Fulton St. from 18th St. to east line of lot No. 28, 20 ft., 501 ft. alley north of Blake Ave., 15 ft., 762 ft. alley north of Hanford St., 16 ft., and 552 ft. alley west of 20th St., 17 ft., brick or concrete.

Michigan—Aug. 1, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 93, Ingham Co., 63,420 sq.yd. concrete, 30,201 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—Aug. 6, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 125, Gratiot Co., 22,288 cu.yd. earth excav., 56,731 sq.yd. asphalt, concrete or bituminous macadam. F. F. Rogers, comr.

Michigan—Aug. 7, by State Hy. Dept., Lansing, grading, surfacing, etc., 1.324 mi. State Trunk Line Rd. 27-2A, Middleville, 10,003 sq.yd. concrete, 6,731 cu.yd. earth excav. and 4,464 sq.yd. gravel; 3.32 mi. State Trunk Line Rd. 66-16, Missaukee Co., 21,905 cu.yd. earth excav. and 31,778 sq.yd. gravel. F. F. Rogers, comr.

Michigan—Aug. 8, by State Hy. Dept., Lansing, grading and gravel surfacing State Trunk Line Rd. 66-17, Kalkaska Co., 65,664 sq.yd. gravel, 82,909 cu.yd. earth. F. F. Rogers, comr.

Michigan—Aug. 9, by State Hy. Dept., Lansing, grading, surfacing, etc., [illegible]983 mi. State Trunk Line Rd. 46-20, Sanilac Co., 31,713 cu.yd. excav. and 65,3[illegible] sq.yd. gravel, 11.093 mi. State Trunk Line Rd. 27-12 Sects. A, B and C, Sanilac Co., 5,000 sq. yd. concrete, 49,063 cu.yd. earth excav., 101,111 sq.yd. gravel, 1.466 mi. State Trunk Line Rd. 11-9, Sect. B, Muskegon Co., 7,873 cu.yd. earth excav. and 16,279 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, comr.

Wisconsin—July 31, by State Hy. Comn., at div. office 7, Court House, grading and surfacing 3.62 mi. Rhinelander-Cassian Tomahawk Rd., Oneida Co., 10.61 acres clearing, 24,356 cu.yd. earth excav., 4,395 cu.yd. topsoiling, 4,395 cu.yd. gravel, etc. A. R. Hirst, Madison, highway engr.

Wisconsin—July 31, by State Hy. Comn., at div. office 1, 149 East Wilson St., Madison, grading and surfacing Waterloo-Marshall Rd., Dane Co., 2,040 cu.yd. excav., 3,820 cu.yd. fine grading, 31,427 sq.yd. concrete, etc.; Waterloo-Marshall Rd., Jefferson Co., 5,585 cu.yd. earth excav., 5,610 sq.yd. concrete, etc. A. R. Hirst, highway engr.

Wis., North Milwaukee—Aug. 7, by W. E. Chase, city clk., improving 41st, 40th, 38th, 34th, 29th Sts. and 3 alleys, 16,798 sq.yd. concrete, vibrolithic concrete, sheet asphalt or bituminous concrete, 9,687 cu.yd. grading. H. C. Webster, City Hall, engr.

Ia., Knoxville—Aug. 8, by Marion Co. grading 111,614 cu.yd., etc., primary road northwest and southeast of Pella. Iowa Hy. Com., Des Moines, engrs.

Ia., Wapello — Aug. 7, by Louisa Co. grading 9.949 mi. road north and south of Grandview, 89,887 cu.yd. excav., 8,440 ft. tiling, etc. Iowa Hy. Comn., Ames, engrs.

Minn., St. Paul—Aug. 6, by G. J. Ries, aud. Ramsey Co., gravel surfacing 8,301 cu. yd. South Robert St. from Territorial Rd. to end of present paving on South Robert St. extension project, 186,436 cu.yd. earth excav., 247,435 cu.yd. overhaul, etc. $45,000.

Minn., White Bear (White Bear Lake P. O.)—Aug. 13, by aud. Ramsey Co., (St. Paul), paving North Birch Lake Blvd. between Centerville and Bald Eagle Aves., here, 26,000 sq.yd. one course concrete or asphaltic concrete, 4,304 lin.ft. integral curb, 2,710 lin.ft. 15 in. vitr. sewer pipe, etc. $65,000. P. N. Coates, co. surv.

Kan., Bennington—Aug. 10, by Clerk Ottawa Co. (Minneapolis) grading and concrete surfacing 0.748 mi. Nelson St., here, 11,374 sq.yd. concrete, 5,217 lin.ft. concrete curb and gutter, 3,435 cu.yd. earth excav. E. O. Adee, co. engr.

Kan., Independence—Aug. 3, by Clerk Montgomery Co. bituminous macadam surfacing 85,031 sq.yd. Cherryvale-Morehead Rd., Federal Aid Project 79, Sects. A and B. H. K. Hibbard, co. engr. Noted June 21.

Kan., Kansas City—Aug. 13, by Clerk Wyandotte Co., grading, building culverts and surfacing old macadam with rock asphalt on 2.675 mi. Gibbs Rd. O. K. Williamson, co. engr.

Tex., Abilene—City Com. taking bids paving 26,000 sq.yd. 3rd Ave., South 7th, North 3rd and Victoria Sts., brick, concrete or bituminous. $75,000. H. H. Batjer, city engr.

Tex., Eastland — July 31, by E. S. Pritchard, judge Eastland Co., bituminous topping on waterbound macadam 19.14 mi. State Highway 23 A, 30,363 cu.yd. crushed stone, 126,518 gal. asphalt, etc., $125,000; 18.67 mi. State Highway 18, 14,772 cu.yd. crushed rock, 185,513 gal. asphalt, etc., $120,000; 10.04 mi. State Highway 22, 11,892 cu.yd. crushed stone, 66,410 gal. asphalt, etc., $65,000. C. S. Henning, Jr., co. engr.

Utah—Aug. 10, by State Rd. Comn., Salt Lake City, grading and concrete paving Underpass Sect. Price-Castle Gate Highway, also grading, paving, curbing, etc., Main St., Price City, Federal Aid Project 24-C, 18,000 cu.yd. common excav., 24,000 sq.yd. 7 in. concrete, 4,500 lin.ft. curb and gutter, etc. H. C. Means, ch. engr.

Arizona — Aug. 3, by State Hy. Dept., Phoenix, grading, 4 in. gravel surfacing and channel changes on 10 mi. road from Hassayampa River to Gillespie Dam, 18 ft., 39,500 yd. excav., 17,896 yd. borrow, 979 yd. concrete, etc. $126,125. F. R. Goodman, state engr.

Washington—Aug. 7, by State Hy. Comn., Olympia, grading and surfacing with crushed rock on gravel 4.63 mi. Chelan-Okanogan highway from Brewster Flat north, grading and surfacing with crushed gravel 3.65 mi. from Okanogan to Malett, in

Streets and Roads (Continued)

Okanogan Co.; surfacing with crushed rock 12.47 mi. Inland Empire Highway from Ellensburg to Indio, Kittitas Co. J. Allen, state highway engr.

Wash., Seattle — King Co. taking bids grading and gravel surfacing North 110th St. from Greenwood Ave. to Puget Sd. $25,000. T. R. Beeman, co. engr.

Wash., Yakima — Aug. 23, by Comrs. Yakima Co., grading and graveling Yakima Highway, 10,000 cu.yd. gravel and 15,000 cu.yd. excav. $26,000. O. E. Brashears, Yakima, engr.

California—Aug. 6, by State Hy. Comn., Sacramento, grading and gravel surfacing 4.5 mi. road between point 5 mi. east of Gilroy and San Felipe, Santa Clara Co. R. M. Morton, state highway engr.

California—Aug. 13, by State Hy. Comn., Sacramento, grading and gravel surfacing 11.5 mi. road between Baltane and Schellville, Sonoma Co.; paving 3.4 mi. road between San Bruno and San Mateo, San Mateo Co., concrete shoulders and asphaltic concrete surface. R. M. Morton, Forum Bldg., state highway engr.

Calif., Yreka—Aug. 6, by Superv. Siskiyou Co., improving Forest House Mountain Rd. 169. To exceed $35,000. A. F. Parrott, co. surv.

Quebec — Aug. 7, by J. L. Boulanger, dept. minister, Dept. of Rds., Quebec, paving 52,917 ft. highways, 16 ft., oiled waterbound macadam.

BIDS RECEIVED

Conn., Hartford — Paving Preston St., 7,000 sq.yd. 1:1½:3 concrete, from O'Neil Bros., 983 Main St., $28,260. Noted Apr. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Ball, July 18, grading, curbing and flagging (1) Dumont Ave. (2) 48th St., sheet asphalt paving (3) Dumont Ave. (4) Greene Ave. (5) 15th Ave. (6) 4th St. (7) Hegeman Ave., grading, recurbing and reflagging (8) Hegeman Ave., resurfacing (9) Oriental Blvd. (10) West End Ave., both bituminous macadam, repaving (11) Bway. (12) Gold St., both grade 1 granite, grading sidewalk space and flagging (13) Highlawn Ave., asphalt repaving (14) South 5th St., from T. B. Scott, 671 Halsey St., (1) $2,443 (13) $932; C. Bennett Contg. Co., 414 Rutland Rd., (2) $11,119; Cranford Co., 52 9th St., (3) $7,163 (5) $8,151 (6) $10,741; Borough Asphalt Co., 1301 Metropolitan Ave., (4) $63,999 (7) $3,118; R. Lynster, 1364 Sterling Pl., (8) $1,775; Galecor Contg. Co., 507 Greenwich St., New York, (9) $19,389 (10) $10,057; F. J. Gallagher 490 Park Pl., (11) $5,304 (12) $23,926; Sicilian Asphalt Paving Co., 41 Park Row, New York; (14) $17,942. Noted July 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 23, repaving (1) Corona Ave., asphalt, (2) Greenpoint Ave., asphalt block (3) Metropolitan Ave., improved granite block, grading and paving (4) 101st Ave., sheet asphalt, grading, curbing, laying sidewalks, etc., on (5) Liberty Ave. (6) Roosevelt Ave. (7) 2nd Ave. (8) Woodhaven Ave. (9) Hillside Ave., from Cleveland Trinidad Paving Co., Flushing, (1) $8,398 (6) $7,452 (7) $75,296; Welsh Bros. Contg. Co., 32 Queens St., Astoria (2) $58,983; Necaro Co., Inc., 97 Court St., Brooklyn, (3) $85,086; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (4) $47,484 (5) $220,335 (9) $40,080; W. P. McDonald Constr. Co., 17 West 42nd St., New York City, (8) $328,987. Noted July 19.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, etc. (1) Balcom Ave., grading curbing, laying sidewalks on (2) Bronxwood Ave. (3) Walton Ave. (4) Thierot Ave. (5) Mace Ave. (6) Paulding Ave. (7) Grand Ave., paving (8) Morris Park Ave. (9) East 172nd St., both bituminous concrete (10) Rogers Pl. (11) West 192nd St., both sheet asphalt repaving (12) West Tremont Ave. (13) Jerome Ave. (14) Burnside Ave., granite block (15) Crotona Ave., asphalt blocks, grading, regrading, etc. (16) Exterior St., from P. J. Donovan, 30 Church St., (1) $24,060 (2) $42,296 I. F. Cavaluzzo, 1538 Walton Ave., (3) $24,673 (4) $12,536 (5) $26,900; P. J. Kearns Contg. Co., 2306 Creston Ave., (6) $12,122 (13) $73,344; C. D. Beckwith, 2875 Bway., (7) $66,136; Interboro Asphalt Co., 2306 Creston Ave., (8) $43,917; J. E. Gaffney, 438 East 91st St., (9) $4,667 (10) $7,912; Asphalt Constr. Co., 208 Bway., (11) $19,029; Astoria Contg. Co., 169 Hunter Ave., Long Island City, (12) $83,524; Burnside Contg. Co., 270 Burnside Ave., (14) $35,765; Regan Towers, Inc., 124 West 121st St., (15) $78,031 (16) $39,118. Noted July 12.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., N. Y., repaving (1) East 90th St. (2) 104th St. (3) 131st St. (4) Amsterdam Ave., sheet asphalt (5) repairing sheet asphalt pavements in railroad area (6) repairing wood block and granite block pavement in railroad area, from C. D. Beckwith, Inc., 2875 Bway., (1) $15,495; Brusstar Constr. Co., Harlem River and 150th St., (2) $21,301; Sicilian Asphalt Paving Co., 41 Park Row, (3) $57,023; Asphalt Constr. Co., 208 Bway., (4) $161,700; Cleveland Trinidad Paving Co., Flushing, (5) $76,800; Casper Helbock Co., Harlem River and 150th St., (6) $49,680. Noted July 19.

N. J., Bloomfield—See "Sewers."

N. J., Nutley—G. C. Bergen, purch. agt. Essex Co. (Newark) July 3, grading and paving Franklin Ave., here, 3 in. asphalt on 6 in. concrete, from Franklin Contg. Co., 20 Washington Pl., Newark, $106,455; draining above street, from P. Lordi, 147 Bloomfield Ave., $22,937. Noted June 28.

N. J. Trenton — Mercer Co. rein.-con. paving 8,733 sq. yd. Upper River Rd., from Ross & Whelan, Broad St. Bank, $48,561. Engrs. est. $49,561. Noted July 12.

Florida — State Rd. Dept., Tallahassee, grading 7 mi. road between Punta Garda and Lee Co. line, 30 ft., 87,780 cu.yd. excav., Charlotte Co., from Mickler & McLeod, Stovall Bldg., Tampa, $41,623. Noted June 28.

O., Akron—W. F. Peters, dir. Pub. Serv., grading, laying sidewalks and paving 1,075 ft. Rentschler Court, 22 ft., (a) 2,150 sq.yd. asphalt (b) 2,700 sq.yd. vitr. brick, from P. T. and W. P. McCourt, 365 South Main St., (a) $31,740 engrs. est. $26,606, McAlonan Bros., 197 West Buchtel Ave., (b) $32,640, engrs. est. $27,141. Noted July 12.

O., Cleveland—Asphalt paving West 17th St., from Rieley Bros., The Arcade, $2,840; East 93rd St., from Bentley Bros., Union Bldg., $24,204; Bulkley Blvd., from W. E. McHugh, Pavers Exch., $3,683; West 103rd St. and Revere Ave., from Baldwin Bros., 4500 Euclid Ave., $7,081 and $29,316 respectively. Work involves 5,450 lin.ft. stone curb, 6,880 lin.ft. 4 in. tile gutter, 5,240 cu.yd. earth excav. and 7,810 sq.yd. asphalt.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., masonry work at Sunbeam School, East Blvd. and Mt. Overlook Ave., from C. H. Carson Co., 7016 Euclid Ave., $23,800; grading and landscaping at above school, from Independence Nurseries Co., Independence, $20,268. Noted July 5.

O., Cleveland—Curbing, guttering and paving St. Clair Ave., from Gould & Maybach, 16311 Saranec Rd., asphalt $60,791, granite $95,612.

O., Cleveland—Repaving 9,530 sq.yd. West 9th St., asphalt, from Cleveland Trinidad Paving Co., The Arcade, $40,557.

O., Warren—Cement curbing and paving Main St., from F. George, Warren, brick on 6 in. concrete, $139,527; F. Geiger, Warren, 8 in. concrete $154,220; Smith Eng. Co., Warren, 6 in. base asphalt top, $144,547.

Michigan—State Hy. Dept., Lansing, grading and concrete surfacing 13,296 sq.yd. State Trunk Line Rd. 55-4, in Cadillac, from Wexford Co. Road Com., Cadillac, $19,758; cement $8,364; grading and gravel surfacing 32,917 sq.yd. State Trunk Line Rd. 54-7, Newago Co., from New Era Road Bldg. Co., New Era, $49,214. cement furnished by state. Noted June 28 and July 5.

Ill., Urbana—Champaign Co., constructing (1) 6,345 mi. Sect. 33-15 D, Routes 4 and 4-A (2) 7.84 mi. Sect. 34-15 D, Routes 4 and 15 (3) 8.335 mi. Sect. 35-15 D, Route 1 (4) 6.807 mi. Sect. 36-15 D, Route 17 (5) 14.285 mi. Combination A, Sects. 33 and 34-15 D, from R. G. Flaugher, 1105 South Race St., (1) $99,161 (2) $124,153; Verhey Constr. Co., Champaign, (3) $141,362 (4) $129,061 (5) $228,301. Noted July 12.

Ia., Jefferson—Greene Co., 8 in. rein.-con. paving (1) 21,134 sq.yd. in Scranton (2) 16,123 sq.yd. in Grand Junction, from Empire Constr. Co., 308 Flynn Bldg., Des Moines, (1) $2.45 (2) $2.34. Noted July 5.

Missouri — State Hy. Dept., Jefferson City, July 6, constructing roads (**14-75-Franklin means Route 14, Sect. 75, Franklin Co.**) 4.98 mi. **14-75-Franklin**, from E. Berns & Co., Indianapolis, Ind., $225,853; 2.358 mi. **94-5-St. Charles**, from J. P. Sparks, Kirkwood, $18,678; 0.453 mi. **3-36-Lafayette**, from A. J. Gosby, Leeds, $20,155; 2.443 mi. **25-16-Perry**, from Kiefner & Geile, Perryville, $27,133; 5 mi. **8-69-Marion** from J. C. Lyle, 609 Grand Ave., Kansas City, $30,497; 1.186 mi. **32-30-St. Francois**, and 1.799 mi. **32-23-Iron**, from M. E. Gillioz, Monett, $18,462 and $23,546 respectively; **State Project Route 63A**, Ralls Co., and 2,047 mi. **22-18-Pike**, from F. F. O'Dell, Center, $27,066 and $25,158 respectively. Noted June 28.

Mo., St. Louis—Bd. Pub. Serv., concrete paving various alleys (**C. B. 847 means City Block 847**) from Eyerman Constr. Co., 1216 South Grand Ave., 720 sq.yd. **C. B. 817** $2,587, 670 sq.yd. **C. B. 1044** $2,227, 610 sq.yd. **C. B. 1525** $1,647, 1,220 sq.yd. **C. B. 2811** $3,191, 980 sq.yd. **C. B. 2821** $2,358, 1,075 sq.yd. **C. B. 1357** $3,714, 950 sq.yd. **C. B. 2814** $2,435, 1,215 sq.yd. **C. B. 2808** $3,167; from Skrainka Constr. Co., Security Bldg., 610 sq.yd. **C. B. 1525** $1,647, 1,335 sq.yd. **C. B. 5568** $3,385, 1,190 sq.yd. **C. B. 21818** $3,540, 2,755 sq.yd. **C. B. 4498** and **C. B. 4499** $7,473; from W. Hoffner, 715 South Vandeventer St., 1,355 sq.yd. **C. B. 4446W** $3,673, 1,840 sq.yd. **C. B. 4448W** and **4449B** $5,236; from Blackburn-Crean, Syndicate Trust Bldg., 1,755 sq.yd. **C. B. 5164** $4,447, 1,095 sq.yd. **C. B. 3272W** $3,003, 1,000 sq.yd. **C. B. 4071E** $2,562, 925 sq.yd. **C. B. 49248** $2,670, 1,820 sq.yd. **C. B. 5534** $4,779; from J. E. Perkinson, 3237 Carter Ave., 580 sq.yd. **C. B. 2407** $1,828, 4,316 sq.yd. **C. B. 3873** $11,502.

Tex., Edinburg—Hidalgo Co. from W. L. Pearson & Co., 827 1st Natl. Bank Bldg., Houston, grading and surfacing with concrete base 9.65 mi. Federal Aid Project 375, 18 ft., $240,233, surfacing same road with 97,048 sq.yd. 1 in. cold rock asphalt topping $53,862, grading, surfacing with concrete base constructing rein.-con. and timber pile trestle bridges, etc., on 13.74 mi. Federal Aid Project 374, 18 ft., $365,784, surfacing with 134,489 sq.yd. 1 in. cold Uvalde rock asphalt topping $75,536, grading and gravel surfacing (gravel to be furnished by county) 14.81 mi. Federal Aid Project 376, 18 ft. $102,409.

Tex., Falfurrias — Brooks Co., grading, gravel and caliche surfacing 10.08 mi. State Highway 12, 790 cu.yd. concrete, 60,187 cu.yd. roadway and 20,406 cu.yd. borrow excav., from W. W. Vann, Mercedes, $70,614; 18,126 cu.yd. gravel and 18,126 cu.yd. caliche, furnished by county $35,000. Engrs. est. $131,250. Noted July 19.

Tex., Ft. Davis—Jeff Davis Co., grading and building structures on 6.07 mi. State Highway 12, 18,165 cu.yd. earth, 1,250 cu. yd. loose rock and 1,000 cu.yd. solid rock excav., 795.9 cu.yd. concrete, 72,143 lb. reinforcing, etc., from J. C. Bean, Marfa, $25,627.

Tex., Jasper—Jasper Co. grading and gravel surfacing 1.29 mi. State Highway 7, east from Jasper, 16 ft., and 6.06 mi. State Highway 7, between Jasper and Newton Co. line, 16 ft., from J. Thompson, San Augustine, $28,665 and $92,091 respectively. Noted July 5.

Wash., Anacortes—City Comn., 30,000 sq.yd. 6 in. concrete, from R. G. Stevenson, 1327 North 34th St., Seattle, $86,500. Engrs. est. $90,000.

Wash., Seattle—Bd. Pub. Wks., grading and paving 1st Ave. S., from R. G. Stevenson, 1327 North 34th St., 20,000 sq.yd. 8 in. concrete $2.05, 5,500 lin.ft. concrete curb $0.35, 125,000 cu.yd. earth excav. $0.38, total $209.221. Engrs. est. $115,188.

Wash., Seattle—Bd. Pub. Wks., July 6, paving Wilson Ave. et al., from J. L. Smith, Pioneer Bldg., 33,500 sq.yd. concrete $2.10, etc., total $262,691.

California—State Hy. Comn., Sacramento, asphaltic seal coat 7.54 mi. Federal Aid Project 28, Placer Co., from Healy-Tibbits Constr. Co., 64 Pine St., San Francisco, $12,874; grading and gravel surfacing 0.2 mi. highway near Lytton, Sonoma Co., from Tieslau Bros., Berkeley, $10,775. Noted June 21.

Calif., Inglewood—Improving Forest and Hawthorne Aves., 223,560 sq. ft. grading, etc., 142,323 sq. ft. 5 in. macadam, 7,373 ft. curb. etc., to W. D. McCray, Amer. Bank Bldg., Los Angeles, $33,805.

Calif., Modesto—From Standard Paving Co., 1411 9th St., improving F St. between 16th and 17th Sts., 16,025 sq.ft. grading at $0.08 per sq.ft., 15,155 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete $0.17, etc.; Hackberry Ave., 84,767 sq.ft. grading $0.05, 79,129 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete $0.17, 5,638 sq.ft. concrete gutter $0.20, 2,620 lin.ft. concrete curb $0.70, etc. Noted June 7.

CONTRACTS AWARDED

Massachusetts—State Hy. Comn., Boston, resurfacing 30,000 sq.yd. Memorial Dr., to J. H. Fannon, 28 Hinckley St., Somerville, $42,950.

Connecticut—State Hy. Dept., Hartford, to J. Arborio, 82 Church St., New Haven, paving 18,850 sq. yd. Southbury Rd., 3 in. bituminous macadam, etc., $44,639, engrs. est. $40,041, 36,900 sq. yd. Bethlehem Rd., 8 in. native stone, $80,214, engrs. est. $91.225; to Lane Constr, Co., 37 Colony St., Meriden, 51,000 sq. yd. road in Sharon and

Streets and Roads (Continued)

Salisbury, 7 in. macadam, $300,544, engrs. est. $316,552. Noted July 12.

New Jersey—State Hy. Dept., Trenton, paving Chatham-Brantwood Sect. of Route 5, to R. San Giovanni, 5 Hoyt St., Newark, $164,426.

N. J., Keyport—T. L. Smith, mayor, and Boro Council, asphalt paving ¼ mi. Maple Ave., to L. J. Seiling, Broad St., Red Bank, $27,705. Noted June 28.

N. J., New Brunswick—Paving Alexander, Delavan, Morrell, High, Central, Schuyler and Delafield Sts., 4 of above streets, to Utility Constr. Co., 5 Spring St., $63,293; 3 streets, to T. H. Riddle, 102 Church St., $44,055.

N. J., Plainfield—Common Council curbing, guttering, laying sewers and bituminous macadam pavements, to J. F. Burke, 309 Park Ave., $72,851. Noted June 28.

Pennsylvania — State Hy. Dept. Harrisburg, rebuilding 3 mi. road between Buckingham and Doylestown, Bucks Co., concrete, to W. C. Guncheon & Co., Smethport, $78,426.

Pa., Erie—Paving Shore, Shawnee and Seminole Drives to M. A. McCormick, Erie, $3.15 per sq.yd., Frontier and Mohawk Drives, to J. and M. Doyle Constr. Co., Erie, $3.15 per sq.yd. Above work involves 57,672 sq.yd. asphalt on concrete. Engrs. est. $250,000. Noted July 5.

Pa., Greensburg—Westmoreland Co., rein.-con. paving 2¾ mi. Herminie Rillton Rd., Sewickley Twp., 16 ft., to R. H. Cunningham Sons Co., Turtle Creek. $122,838.

Pa., Grove City—Paving Hillcrest and Kinder Aves., 2nd and Poplar Sts., 6260 sq. yd. paving, 5680 lin. ft. curb and gutter, 3800 sq.yd. bituminous surface, etc., to W. McIntyre & Son, Sharon, $28,419.

Pa., Mt. Lebanon—Improving Lebanon Hills Dr., 10,000 cu. yds. grading, 5,263 sq. yds. brick on cement sand filler, to Diulus & Benintend, Hargrove St., Pittsburgh. Engrs. est. $30,000.

Pa., Pittsburgh—Paving Dakota, Bryn Mawr and Alfena Sts., vitr. brick, to North Side Constr. Co., 6939 Hamilton Ave. $70,911.

Md., Baltimore—Bd. Awards, 11,330 sq. yd. old granite block redressed and relaid, Contr. 240-NA, to G. Long Contg. Co., 1st Ave. and 12th St., $59,280. Noted July 12.

W. Va., Fairmont—Marion Co., concrete paving 17,846 ft. Morgantown Rd., Winfield Dist., to Rogers & Shumway, Worthington, $85,768. Noted June 21.

North Carolina—State Hy. Comn., Raleigh, clearing, grading and topsoiling 18.93 mi. State Project 141, Edgecombe and Halifax Counties, to J. P. Dicus, Robersonville, $128,143, 16.3 mi. State Project 168, Northampton Co., to N. L. Teer, Durham, $97,482; grading and asphaltic concrete paving 3.54 mi. State Project 672, Rowan Co., to Stearns Bros., Inc., Statesville, $121,983, 5.83 mi. State Project 837B, Henderson Co., to Dixon Contg. Co., Real Estate Bldg., Savannah, Ga., $75,533; grading and concrete paving 3.82 mi. State Project 438, Harnett Co., to J. M. Gregory & Co., Pittsboro, $130,657, 9 mi. State Project 293, Wilson Co., 5.4 mi. State Project 230, Greene Co. and 5.3 mi. State Project 189, Greene and Pitt Counties, to Smith Bros., Inc., 308 Sumpter Bldg., Dallas, Tex., $311,645, $190,076 and $178,903, respectively; grading 5.68 mi. State Project 802, Avery Co., to Hughes & Ray, Newland, $94,301, 6.49 mi. State Project 702B, Alleghany Co., to Turner-Hartsoe Constr. Co., Warrensville, $76,711; clearing and grading 3.83 mi. State Project 608B, Anson Co., to B. F. Teeter, Harrisburg, $29,941, 9.1 mi. State Project 836, Henderson Co., to J. B. Hawkins, 310 South Cedar St., Charlotte, $57,537, 4.89 mi. State Project 812, Burke Co., to M. A. Kollock, Morganton, $52,531; clearing, grading, topsoiling and rein.-con. structures on 11.58 mi. State Project 464, Person Co., to Michaux Constr. Co., Morganton, $77,697; grading and asphaltic macadam paving 3.07 mi. State Project 556, Montgomery Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $71,631; grading and waterbound macadam paving 10.43 mi. State Project 213, Craven Co., to Eagle Eng. Co., New Bern, $221,924; asphaltic concrete surfacing 10.43 mi. State Project 213, Craven Co., to F. J. McGuire, Paul-Gale-Greenwood Bldg., Norfolk, Va., $126,201; grading, topsoiling and rein.-con. structures on 3.83 mi. State Project 431, Granville Co., to Michaux Constr. Co., Morganton, $38,346. Noted July 12.

N. C., Rutherfordton—See "Sewers."

N. C., Spencer—Curbing, guttering, asphaltic paving on concrete, etc., to R. G. Lassiter & Co., Citizens' Natl. Bank Bldg., Raleigh, $200,000.

Florida — State Rd. Dept., Tallahassee, sheet asphalt surfacing 7.962 mi. road from Paynes Prairie to Marion Co. line, 30 ft., Alachua Co., to W. P. McDonald Constr. Co., Tampa, $302,609. Noted July 12.

Fla., Madison—Madison Co., to R. S. Adams, Jasper, sand-clay surfacing 26.2 mi. Rds. 2 and 5, $30,448, Rd. 7, $20,206; to Bryson Livestock Co., Jacksonville, sand-clay surfacing Rd. 9, $17,815. Noted Mar. 29.

Miss., Houston—Chickasaw Co., grading, gravel surfacing and bridging various roads, to Tate & Co., Brooksville, $42,585. Noted July 5.

Miss., Starkville—Oktibbeha Co. paving 1.736 mi. Federal Aid Project 144, Kentucky rock asphalt on crushed stone or slag binder course, to F. D. Harvey & Co., Memphis, Tenn., $26,124.

Louisiana — State Hy. Comn., Baton Rouge, grading and gravel surfacing 9.36 mi. Abbeville-New Iberia Highway, Vermillion Parish, to Burke & Jones, New Iberia, $77,692. Noted June 7.

Tennessee — State Hy. Dept., Nashville, grading and bituminous macadam surfacing 10 mi. highway between Springfield and Davidson Co. line, to Texas Rd. Constr. Co., Great Southwestern Life Bldg., Dallas, Tex., $147,658; oil surface treatment on 5.1 mi. highway between Tullahoma and Moore Co. line, Coffee Co., to B. Williams, Murfreesboro, $45,493. Noted July 12.

Tenn., Martin—Graveling, asphaltic oil and rock asphalt surfacing 10 mi. various streets, to Murphy & Hall Constr. Co., Martin, $167,889. Noted July 5.

O., Akron—W. F. Peters, dir. Pub. Serv. grading, laying sidewalks and paving 5,000 sq.yd. Noah Ave., Mexican Asphalt, to Columbus Asphalt Paving Co., 304 Buckeye Bldg., $41,187. Engrs. est. $46,898.

O., Bellaire—Grading, extending water mains and paving Washington St., to A. and O. Holderman, 2222 Chapline St., Wheeling, W. Va., $49,300. Noted July 19.

O., Canton—Bd. Control paving ¾ mi. Orchard Ave. N. E., 20 ft., and Winfield Way N. E., 20 ft., both brick, to Burd Constr. Co., Genl. Del., $31,000 and $38,000 respectively, engrs. est. $32,821 and $39,360 respectively; about 1 mi. Arlington Ave. N. W., 20 ft., asphalt, to Garaux Bros. Co., Genl. Del., $45,000, engrs. est. $48,000.

O., Canton—Stark Co. improving 1.5 mi. Whipple Rd., rein.-con., to Garaux Bros., 735 Market Ave. S., $55,856. Engrs. est. $57,500.

O., Cleveland Heights (Warrensville P. O.)—Asphalt paving Quilliams Rd., to H. G. Herring, Pavers Exch., Cleveland, $48,543; Oxford Rd., to Rieley Bros., The Arcade, Cleveland, $41,936; Summit Park and Montford Rds., to Spence Bros., 2078 Random Rd., Cleveland, $41,050; Woodridge Rd., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $38,873. Noted June 21.

O., Columbus — W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 727 ft. Charles St., 40 ft., asphalt, to B. F. Patterson, 1214 Neil Ave., $9,987; 2,812 ft. Leonard Ave., 36 ft., asphalt, to Knight & Wells, 483 Oak Ct., $39,761; 408 ft. alley west of Douglas St., 20 ft., concrete, to R. J. Dienst, 480 South 5th St., $2,610; 655 ft. alley west of Miller Ave., 15 ft., 491 ft. alley north of Mt. Vernon Ave., 16 ft., and 699 ft. 2nd alley north of Leonard Ave., 20 ft., all concrete, to Yale Constr. Co., 146 Yale Ave., $3,391, $2,546 and $3,534 respectively; 2,275 ft. alley west of Oakwood Ave., 20 ft., concrete, to Columbus Constr. Co., 1471 West Broad St., $11,232. Noted July 12.

O., Dover—Resurfacing about ½ mi. Factory and 3rd Sts., also about ¼ mi. East 11th St., 2½ in. sheet asphalt, to Federal Asphalt Paving Co., Genl. Del., Hamilton, $27,945 and $27,663 respectively. Engrs. ests. $28,111 and $28,391 respectively. Noted May 17.

O., Martins Ferry—Grading and paving Washington St., to Holderman Bros. Co., Wheeling, W. Va., $47,330.

O., Warren—Paving South Main St., brick on 7 in. concrete, to F. George, Genl. Del., Youngstown, $147,243. Engrs. est. $165,000.

Indiana—State Hy. Comn., Indianapolis, grading 8.269 mi. Project 34D and 42A, Spencer and Perry Counties, to Van Hay Constr. Co., Loogootee, $70,067; 7.292 mi. Project 42D, Crawford Co., to R. W. Martin, Evansville, $67,057; 5.002 mi. Project 59, Scott Co., to Kelly & Young, Frankfort, $80,747. Noted June 21.

Ill., Chicago—South Park Comrs., 57th St. and Cottage Grove Ave., to R. F. Conway Co., 133 West Washington St., paving drives in Sherman Park $50,124, paving West Drive in Grant Park and extension of Roosevelt Rd., $189,371.

Ia., Creston — To Des Moines Asphalt Paving Co., 2nd St. and New York Ave., Des Moines, 15,915 sq.yd. 5 in. bituminous concrete paving 1¼ aggregate with fine mixture surfacing coat $2.83, 16,569 sq.yd. sheet asphalt $2.67, etc., total $91,670; to F. O. Akin, Corning, 1,524 sq.yd. one course concrete alley paving $2.30, 26,979 ft. 42 in. combined curb and gutter $1.13, storm sewers, intakes, etc., total $36,241; to Western Asphalt Paving Corp., 1st and Nebraska Sts., Sioux City, 9,495 sq.yd. sheet asphalt resurfacing $1.44, total $13,673. Noted July 12.

Ia., Des Moines—Polk Co. paving, etc., road from here to Warren Co. line, to Koss Constr. Co., Ames, 29,506 sq.yd. concrete $2.55 per sq.yd., 24,231 cu.yd. earth excav. $0.50, etc.

Ia., Garner—Hancock Co., grading 11.071 mi. road between Britt and Kanawha, to A. L. Cook, Ottawa, Kan., $0.23 per cu.yd. total $32,752; tiling to A. Nelson, Garner, 6 in. tile $0.104, 8 in. $0.14, 10 in. $0.22, total $9,997.

Ia., Valley Junction—For 13,700 sq.yd. 6 in. reinforced vibrolithic pavement, to Empire Constr. Co., 308 Flynn Bldg., Des Moines, $2.60.

Minn., Faribault — Rice Co., Job 2313, State Rd. 22, grading to M. J. Nolan Constr. Co., 260 Temple Court, Minneapolis, $22,566, corrugated metal culverts to Northfield Iron Co., Northfield, $1,686; Job 2316, State Rd. 28, grading to Weires & Mielke, Rice St. and Crosby Rd., St. Paul, $11,931, corrugated metal culverts to Northfield Iron Co., Northfield, $1,572; Job 2309, State Rd. 48, grading to Nolan Bros., 15 North 2nd St., Minneapolis, $12,612, concrete culverts to Elk River Concrete Products Co., Elk River, $1,381; Job, 2313, State Rd. 30, grading to J. Brown, Madison Lake, $17,757, corrugated metal culverts to Lyle Culvert Co., 171 27th Ave. S. E., Minneapolis, $3,407. Noted June 21.

Kan., Holton—Paving various streets, to E. S. McCandles, Topeka, 3,100 cu.yd. grading $0.90, 4,400 ft. 6 in. curb and gutter $0.85, 6,800 sq.yd. 3 in. vertical fibre on 5 in. base $3.16, etc., total $32,443. Noted June 14.

South Dakota—State Hy. Comn., Pierre, grading 8.51 mi. Federal Aid Project 146A, Corson Co., to H. J. Hawley, Trail City, $34,489. Noted June 21.

N. D., Grand Forks—Rein.-con. paving 8,563 sq.yd. in Dist. 10-18, Project 1039, and 5,414 sq.yd. Dist. 17, Project 1041, to Northern Constr. Co., Grand Forks, $30,000.

Wyo., Casper—Paving, sewers and water mains (1) 7,724 sq.yd. Paving Dist. 28 and 4,724 sq.yd. Paving Dist. 33, to Warren Constr. Co., Caspar, (1) $21,410 (2) $8,457. Noted July 12.

Wyo., Sheridan—Paving Wyoming Ave., Summer, Illinois, East Loucks, East Works, East Burkitt, Park, Jefferson, Dow and Gould Sts., warrenite bitulithic, to Warren Constr. Co., Park Rose, Portland, Ore., bitulithic base $148,517, or concrete base $156,123. Engrs. est. $175,000. Noted June 21.

Missouri—State Hy. Dept., Jefferson City, constructing roads **(6-17-Daviess means Route 6, Sect. 17, Daviess Co.)**, 5 mi. **6-17-Daviess**, to Western Bridge Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $73,084; 5 mi. **33-8-Clinton,** to J. C. Lyle, 609 Grand Ave., Kansas City, $32,084; 3.798 mi. **3-8-Mercer,** to J. L. Simmons, La Plata, $30,091; **43-9**, 4 449 mi. **43-10**, and **43-6-Stope Co.,** to M. E. Gillioz, Monett, $40,037, $23,676 and $41,196 respectively; 0.39 mi. **15-21-Shelby**, to Pan Amer. Bridge Co., Moberly, $6,329; 4.922 mi. **19-21-Dent**, to General Constr. Co., Syndicate Trust Bldg., St. Louis, $25,883; **1-96-Jasper**, and 4.332 mi. **1-91-Barton**, to Carterville Constr. Co., Carterville, $5,386 and $44,841 respectively. Noted July 19.

Mo., St. Louis—Bd. Pub. Serv., paving 9,530 sq.yd. 12th Blvd. and 4,160 sq.yd. Soulard St., both trinidad asphalt, to Central Paving Co., Fullerton Bldg., $57,679 and $27,437, engrs. est. $48,800 and $21,000 respectively; 21,100 sq.yd. Forest Park Blvd., asphalt, to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $50,932, engrs. est $37,400; 1,425 sq.yd. Tennessee Ave., 2,355 sq.yd. Wiesehahn Ave., both asphalt, and 1,955 sq.yd. Elenore Ave., asphaltic concrete, to Bridges Asphalt Paving Co.

Streets and Roads (Continued)

Arcade Bldg., $8,186, $14,484 and $12,266 respectively, engrs. est. $6,450, $10,200 and $8,200 respectively.

Tex., Abilene—Paving 29,000 sq.yd. Pine St. and 6,000 sq.yd. Chestnut St., warrenite bitulithic on black base, to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $2.50 and $2.52 respectively. Noted June 21.

Tex., Hondo—Medina Co., asphalt surfacing 13.44 mi. State Highway 2, 18 ft., to Colglazier & Hoff, Terrell and Verbena Rds., San Antonio, $61,163. Noted Apr. 26.

Tex., Navasota—For 43,000 sq.yd. of 6 in. concrete, to Smith Bros., Sumpter Bldg., Dallas, $90,000. Engrs. est. $85,000. Noted May 24.

Tex., Paris—Lamar Co., concrete surfacing 2.41 mi. Bates Sect. State Highway 5, 25,535 cu.yd. concrete, 30,257 cu.yd. roadway and 63, 764 cu. yd. borrow excav., to J. C. Field Co., Denison, $67,156. Engrs. est. $78,200.

Oklahoma—State Hy. Dept., Oklahoma City, grading and concrete paving 2.93 mi. road east from Ardmore, Federal Aid Project 89, Carter Co., 18 ft., to Southern Constr. Co., Durant, 31,200 sq. yd. paving at $2,35 per sq. yd., etc., total $84,091; 3.84 mi. road from Hartshorne to county line, Federal Aid Project 81, Pittsburg Co., 18 ft., to Smith Bros., 308 Sumpter Bldg., Dallas, Tex., 40,550 sq. yd. paving at $2.50, etc., total $170,114; 5.66 mi. road from McAlester to Crowder, Federal Aid Project 80, Pittsburg Co., 18 ft., to Green Beekman Co., 1st Natl. Bank Bldg., Oklahoma City, 60,000 sq. yd. paving $2.42, etc., total $116,870; 7.42 mi. road from Savanna to Kiowa, Federal Aid Project 79, Pittsburg Co., 18 ft., to Gibson & Mitchell, Pauls Valley, 78,360 sq. yd. paving $2.53, etc., total $230,756; 6 mi. road from Bartlesville to Ramona, Federal Aid Project 15, Washington Co., 18 ft., to Hamilton Constr. Co., Bartlesville, 63,375 sq. yd. paving $2.56, etc., total $199,104.

New Mexico—State Hy. Comn., Santa Fe, grading and surfacing Willard-Mountainair Rd., Federal Aid Project 43, Torrance Co., to Fuqua & Gonzales, Las Cruces, $15,303; 12.321 mi. Mountainair-Scholle Rd., Federal Aid Project 77, Torrance Co., to Standard Eng. & Constr. Co., Ernest & Cranmer Bldg., Denver, Colo., $88,096; 3.099 mi. French-Springer Rd., Federal Aid Project 91-B, Colfax Co., to G. B. Bent, Roswell, $31,090; 10.523 mi. Capulin-Des Moines Rd., Federal Aid Project 94, Union Co., to N. Hanson, Cimarron, $75,501; 0.721 mi. East Central Ave. extension east of Albuquerque, Federal Aid Project 118, Bernalillo Co., to New Mexico Constr. Co., Knights of Pythias Bldg., Albuquerque, $51,904; 5.871 mi. Alameda-Bernalillo Rd., Federal Aid Project 36, Sandoval Co., to Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., $163,168. Noted June 28.

Ark., Hot Springs—Paving several blocks Valley St., 6 in. concrete, 30 ft., to E. B. Mooney, Hot Springs, $30,000.

Ark., Newport—Improving Dist. 8, 8,000 sq.yd. sheet asphalt, 5,000 lin.ft. curb and gutter, Dist. 7, 26,420 sq.yd. pavement, 8,320 cu.yd. sub grading, 8,590 lin.ft. curb and gutter, 2,450 lin.ft. 10 and 12 in. vitr. pipe, etc., to Donathan McClanahan Contg. Co., Homer, La., $123,000.

Idaho — State Hy. Dept., Boise, paving 10.33 mi. North and South Highway, Lewis Co., Evergreen Highway Dist. to F. A. Dole, Lewistown, 10,100 cu.yd. broken stone surfacing $2.20, 36 cu.yd. class B concrete $27.50, total $25,501.

Utah—State Rd. Comn., Salt Lake City, to Gray & Murdock, Dooley Bldg., Sale Lake City, concrete paving and small drainage structures on 3 mi. road from Salina to Redmond, Federal Aid Project 52, Sevier Co., $51,254, 1.5 mi. Main St. in Salina, Federal Aid Project 44, Sevier Co., $25,553; concrete paving, gravel shoulders and drainage structures on 1.5 mi. road from Richfield to Elsinore, Federal Aid Project 43, Sevier Co., $36,583. Noted June 21.

Arizona—State Hy. Dept., Phoenix, grading and one course concrete paving Phoenix-Wickenburg Highway, Federal Aid Project 20, to Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., 41,024 sq.yd. pavement, $2.20, etc., total $123,409.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 6.9 mi. State Rd. 10 from Riverside to Omak, Okanogan Co., to Payne & Hewitt, Spokane, $52,620; 11,590 cu.yd. crushed rock surfacing State Rd. 3, from Pomona to Selah, Yakima Co., to Grant, Smith & Co., Henery Bldg., Seattle, $25,034. Noted June 28.

SUBWAY—ROCHESTER, N. Y.

Following are lowest three bids opened May 9, by Bd. Contr. & Supply, City Hall, for 4 track rapid transit railway, Contr. No. 2, (A) I. M. Ludington's Sons, 124 Powers Bldg., (awarded contract); (B) Empire Eng. Co.; (C) A. Friederich Sons Co. The unit bids were as follows:

	A	B	C
230,000 cu.yd. earth excavation in grading	$1.40	$1.10	$1.50
9,000 cu.yd. earth excavation in trenches and pits	2.00	2.50	1.80
21,000 cu.yd. rock excavation in grading	3.50	2.75	4.75
3,000 cu.yd. rock excavation in trenches and pits	6.00	7.00	7.00
14,000 cu.yd. lock and bridge masonry excavation	5.00	3.50	7.00
20,000 cu.yd. forming embanking	.60	.40	.23
500 cu.yd. cut stone masonry	25.00	80.00	70.00
2,000 cu.yd. slope walls and paving in place	18.00	9.00	8.93
100 cu.yd. brick masonry in place	25.00	60.00	24.00
300 cu.yd. class "A" concrete in place	30.00	35.00	25.00
4,000 cu.yd. class "B" concrete in place	21.00	30.00	20.00
9,800 cu.yd. class "C" concrete in place	12.00	18.00	14.50
1,200 cu.yd. class "D" concrete in place	10.00	13.00	11.00
20,000 lin.ft. line drilling	.35	.40	.27
1,000 lin.ft. jackhammer drilling	.30	.40	.30
1,100 lin.ft. 4-in. galvanized iron weepers	.50	.40	1.50
800 lin.ft. concrete railing	15.00	20.00	6.07
2,000 sq.ft. granolitic finish	.35	1.50	.17
2,000 sq.ft. granolitic finish, tooled	.50	1.70	.77
50 M.Ft.B.M. timber, for temp. br. and walls, in place	90.00	140.00	93.50
20 M.Ft.B.M. sheeting and bracing, in place	60.00	120.00	104.00
20 M.Ft.B.M. timber in place underpinning walls	100.00	120.00	104.00
116,000 lb. structural steel in place	.07	.07	.07
375,000 lb. metal reinforcement in place	.05	.05	0.0595
2,000 lb. iron castings in place	.08	.10	.10¼
1,500 lin.ft. 24-in. vitrified pipe sewer in place	3.00	3.75	3.12
1,100 lin.ft. 20-in. vitrified pipe sewer in place	2.20	3.50	2.19
1,700 lin.ft. 15-in. vitrified pipe sewer in place	1.50	2.00	1.46
6,800 lin.ft. 12-in. vitrified pipe sewer in place	1.00	1.75	1.21
2,200 lin.ft. 8-in. vitrified pipe sewer in place	.60	1.10	.85
1,500 lin.ft. concrete cradle for 24-in. sewer in place	1.80	2.50	2.96
1,100 lin.ft. concrete cradle for 20-in. sewer in place	1.60	2.00	2.37
1,700 lin.ft. concrete cradle for 15-in. sewer in place	1.00	1.60	1.93
6,800 lin.ft. concrete cradle for 12-in. sewer in place	.75	1.30	1.47
2,200 lin.ft. concrete cradle for 8-in. sewer in place	.50	1.00	1.00
5 "Y" branches for 24-in. vitrified pipe laid	6.00	10.00	11.00
5 "Y" branches for 20-in. vitrified pipe laid	5.00	7.00	7.50
5 "Y" branches for 15-in. vitrified pipe laid	2.50	4.00	5.00
5 "Y" branches for 12-in. vitrified pipe laid	2.00	3.00	4.00
5 "Y" branches for 8-in. vitrified pipe laid	1.50	2.00	2.25
51 sewer manhole not exceeding 8 ft.	100.00	100.00	120.00
100 lin.ft. sewer manhole exceeding 8-ft. having 8-in. walls	12.00	10.00	11.25
125 lin.ft. sewer manhole exceeding 8-ft. having 12-in. walls	18.00	15.00	15.60
10 surface sewers complete in intersect, St	40.00	50.00	40.00
10,000 sq.ft. paint waterproofing in place	.05	.10	.05
4,700 sq.yd. preparation, subgrade, pavement intersect, St.	.25	.30	.32
1,500 sq.ft. preparation, subgrade, sidewalk, intersect, St.	.05	.03	.03
1,800 lin.ft. 5-in. medina stone curb in place	1.75	2.00	2.00
200 lin.ft. medina stone curb reset	1.10	1.00	1.10
2,000 lin.ft. 4-in. vitrified pipe tile under curb in place	.25	.25	.62
2,500 sq.yd. 2-in. asphalt wearing surface	1.50	1.40	1.30
2,500 sq.yd. asphalt binder course	.50	.35	.32
1,000 sq.yd. medina stone pavement wearing surface	5.00	4.00	6.00
1,200 sq.yd. brick pavement wearing surface	3.00	3.00	4.50
1,000 sq.yd. 1-in sand cushion, med. stone pavement	.10	.13	.12
1,200 sq.yd. 1-in cement sand cushion, brick pavement	.25	.33	.30
1,200 sq.ft. single course cement walks	.25	.25	.25
1,500 sq.ft. sidewalk relaid	.10	.13	.10
10 removing trees	25.00	25.00	12.00
2,700 gross ton rails delivered	60.00	58.00	58.97
6,600 pair splice bars delivered	1.85	2.00	1.87
33,000 lb. track bolts delivered	.06	.07	.06
27,000 nutlock delivered	.02	.02	.02¼
265,000 lb. track spikes delivered	.06	.045	.0394
94,000 tie plates delivered	.50	.26	.40
6,700 rail joint plates delivered	2.70	1.60	1.50
7,000 rail braces delivered	.40	.66	.58½
5,000 rail braces installed	.15	.10	.15¼
7,000 anti-creepers delivered	.40	.40	.32½
5,000 anti-creepers installed	.15	.05	.15¼
215 gross ton guard rails delivered	96.00	106.00	64.50
10,000 lin.ft. guard rails installed	1.30	.55	.95
46 switches delivered	105.00	177.00	103.50
31 switches installed	100.06	90.00	59.00
17 no. 7 double spring frogs delivered	120.00	167.00	163.50
17 no. 9 double spring frogs delivered	130.00	168.00	169.00
15 no. 7 single spring frogs delivered	110.00	115.00	158.00
16 no. 9 single spring frogs delivered	120.00	116.00	163.50
31 frogs installed	50.00	35.00	47.30
10 derails complete in place	50.00	75.00	40.00
42,000 cu.yd. ballast in place	2.40	3.85	3.83
50,000 track ties delivered	2.75	2.90	3.11
61,000 lin.ft. track laying tangents curves rad. 2,000 ft	1.40	1.40	1.40
4,700 lin.ft. tracklaying curves 700 ft. to 2,000 ft	1.50	1.60	1.55
13,000 lin.ft track laying curves rad. 700 ft. or less	1.60	1.80	1.72
700 lin.ft. station covers	20.00	15.00	30.56
400 lin.ft. stairway covers	40.00	40.00	23.52
900 lin.ft. metal handrailing	2.70	1.50	7.20
111 catch basins in track drains complete	40.00	40.00	56.00
5,000 lin.ft. fencing complete in place	1.00	1.25	.75
300 cu.yd. cinder fill under walks	2.50	1.50	2.70
250 safety treads for stairways	5.00	7.00	5.90
160 M.Ft.B.M. treated timber for switches	125.00	120.00	93.50
200 cu.yd. rubble masonry (lump sum)	12.00	7.00	9.13
1 clearing (lump sum)	3,000.00	500.00	500.00
1 bailing and draining (lump sum)	5,000.00	5,000.00	1,000.00
1 care of surface drainage and sewage (lump sum)	4,000.00	2,000.00	200.00
1 maintaining street traffic (lump sum)	4,000.00	5,000.00	700.00
5 removing bridges (lump sum)	2,000.00	1,000.00	3,000.00
Extended totals	$1,654,765	$1,723,469	$1,797,576

Wash., Bellingham—Bellingham Bay Improvement Co., Elk and Holly Sts., paving 5,000 ft. Sunset Dr., to Riddle & Hawkins, Bellingham, $31,000. Engrs. est. $32,000.

Wash., Montesano—Grays Harbor Co., improving 10 mi. Pacific Beach Highway west of Hoquiam, straightening old road grading and graveling, erecting 3 small bridges, to Peck & Einerson, Hoquiam, $36,933. Engrs. est. $40,000.

Wash., Seattle—Bd. Pub. Wks., to J. L. Smith, Pioneer Bldg., paving Sunnyside Ave. et al., 1,425 sq.yd. 5 in. concrete $1.55, 30,800 sq.yd. 6 in. $1.69, 3,570 sq.yd. 7 in. $1.98, etc., total $66,462; North 50th St. et al., 11,500 sq.yd. 6 in. concrete $1.70, etc., total $29,113.

Streets and Roads (Continued)

Ore., Portland — Paving Montana Ave. and East 55th St., Concrete, and East 40th St., concrete, asphaltic concrete and macadam, to Cochran Constr. Co., 415 South Syracuse St., $27,190. Engrs. est. $35,385.

California—Joint Highway Dist. 3 of Sacramento Co. (Sacramento) and Sutter Co. (Yuba City), constructing Garden Highway, 10.629 mi. Tudor Sect., to J. F. Knapp, Turlock, 14,551 cu.yd. 5 in. concrete at $11.50 per cu.yd., 14,831 cu.yd. earth fill $0.40, 10,972 cu.yd. excav. $1.40, etc., total $205,418; to V. R. Dennis Constr. Co., McMinnville, Ore., 8.188 mi. Verona Sect., 10,675 cu.yd. 3 in. asphaltic concrete, 2 in. surface, $15, 20,543 cu.yd. excav. $0.60, etc., total $172,750, 7.414 mi. Elkhorn Sect., 9,665 cu.yd. 3 in. asphaltic concrete, 2 in. surface, $15, 5,087 cu.yd. excav. $0.60, etc., total $148,327.

Calif., Los Angeles—To G. H. Oswald, 366 East 58th St., improving San Pedro St. between 61st and Mariposa Sts., lump sum for grading $14,500, 462,330 sq.ft. concrete pavement $0.217, 7,260 sq.ft. walks $0.20, etc., total $136,236; to Jahn & Bressi, Byrne Bldg., improving Hill St. between Washington St. and Santa Barbara Ave., lump sum for grading $35,000, 1,946 sq.ft. asphalt pavement $0.35, 589,337 sq.ft. 8 in. concrete $0.30, 1,950 sq.ft. bituminous base $0.25, 184,810 sq.ft. concrete walks $0.20, etc., total $283,750.

Calif., Yuca City — Sutter Co., to Galbraith & Janes, Yuba City, improving Bunce Lateral, Contr. 25, 9,000 sq. yd. grading at $0.21 per sq. yd., 700 cu. yd. concrete $15, total $12,390; to Heafey, Moore & McNair, 2030 High St., Berkeley, asphaltic macadam surface, etc., contr 26, 56,000 sq. yd. grading $0.10, 27,000 sq. yd. base rock $0.555, 29,000 sq.yd. surface $0.44, 10,000 sq. yd. patching $0.70, 150,000 sq. yd. resurfacing $0.135, total $60,595.

Ontario—Dept. Pub. Wks., 110 University Ave., Toronto, Contr. 915 1.75 concrete pavement at Amherstburg to L. Pettypieces, Amherstburg, $50,000; Contr. 1000, 4.4 mi. concrete paving at Burlington Beach to Grant Constr. Co., 50 Front St. E, Toronto, $100,000; Contr. 1,004, 3.2 mi. macadam base from Crofton and Bloomfield, to C. Bryson, Brockville, $35,000; Contr. 1,007, concrete bridge abutments Dodds Creek Bridge at Lambeth, to J. Vance, Woodstock, $15,000; Contr. 1,008, 4.1 mi. grading Main St. to Hamilton City limits, to Nicholson & Bohan, West Monkton, $10,000; Contr. 1009, 4 mi. asphaltic concrete paving on macadam from Whilky to Oshawa, 30 ft., to Johnson Bros., Brantford, $150,000; Contr. 1010, Cayugee Bridge abutments, concrete, to Canadian Eng. & Contg. Co., Hamilton, $15,000.

Ont., Hamilton — Wentworth Suburban Rds. Comn., concrete paving 10,000 sq.yd. in Barton and Binbrook Twps., to Hamilton Contg. Co., Home Bank Bldg., $30,000.

Ont., Ottawa—Paving Wellington St., 22,000 sq.yd. asphalt and wood block on concrete, to O'Learys, Ltd., Bank Nationale Bldg., $99,898.

Industrial Works

PROPOSED WORK

Mass., Brighton (Boston P. O.)—Corey Road Garage, Inc., 112 Corey Rd., having sketches made by J. H. Bickford Co., 6 Beacon St., Boston, 2 story, 106 x 300 ft. garage, brick and steel, Corey Rd.

Mass., Pittsfield—Smith & McCarthy having plans prepared by G. F. Haynes, 184 North St., 3 story, 35 x 60 ft. garage, brick and steel. $44,000.

Conn., Glenbrook—Norma Co. of America, Anable Ave., Long Island City, N. Y., plans 1 story, 100 x 400 ft., brick and steel factory, here. Architect not announced.

Conn., Middletown—Standard Oil Co. of New York, 26 Bway., New York City, plans distributing plant, 2 buildings, dock facilities, storage tanks, etc. $1,000,000.

Conn., Oakville—Oakville Co. had plans prepared by Lockwood, Greene & Co., 24 Federal St., Boston, 2 story, 70 x 120 ft. factory, brick, plain foundation. $40,000.

N. Y., Albany—J. D. Parsons, Inc., Hamilton St., plans rebuilding plant destroyed by fire. $100,000-$150,000. Engineer and architect not announced.

N. Y., Buffalo—W. Rixey, 1146 Niagara St., plans garage and repair shop, Niagara St. $40,000. Engineer and architect not announced.

N. Y., Dansville—Macomber Garage, Inc., plans modern garage and repair shop, Ossian St. $40,000. Engineer and architect not announced.

N. Y., Fort Miller—Fort Miller Pulp & Paper Corp. had plans prepared 1 story, 45x130 ft., rein.-con. and steel mill, plain foundation, Main St. $200,000. Private plans.

Pa., Bellefonte — Decker Bros., North Spring St., plan 3 story and basement, 90 x 120 ft., brick, concrete and steel garage, repair shop and supply station, High and Spring Sts. $75,000. M. Decker, pres. Architect not selected.

Pa., New Castle — Consolidated Motors Co., c/o Bd. Trade, plans assembling plant. To exceed $50,000. W. O. Dayton, vice-pres.

Pa., Oil City—Citizens Light & Power Co. plans sub-station, North Seneca St. Cost will exceed $40,000. Noted Aug. 10.

Pa., Pittsburgh—Lathwood Fdry. Co., 30th and Wayne Sts., having plans prepared by C. H. Dunnells, engr., 135 Riverview Ave., 3 story and basement, 103 x 194 ft. brick and concrete pattern storage shop.

Pa., Pittsburgh — Press Publishing Co., 220 Oliver Ave., having plans prepared by Hunting Davis Co., Century Bldg., 6 story and basement, publishing plant, Bigelow Blvd. and 7th Ave. $700,000.

Pa., Wilkes-Barre — Woodlawn Farm Dairy Co., North Washington and East North Sts., plans 2 story, 60 x 80 ft. dairy, brick. $50,000. G. N. Edson, Connell Bldg., Scranton, archt.

Ga., Griffin—Kincaid Mfg. Co. plans addition to textile mill, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $150,000.

W. Va., Cabin Creek Junction (Coalburg P. O.)—See "Miscellaneous."

La., Shreveport — Kansas City Southern R.R. plans rebuilding 2 story, 85 x 500 ft. car shops, recently destroyed by fire. $100,000. Private plans.

Tenn., Jacksonville—Dupont De Nemours Co., Du Pont Bldg., Wilmington, Del., plans to erect and equip fibre silk plant, here. $4,000,000. Engineer and architect not selected, probably company forces.

Tenn., Memphis—Indiana Board & Filler Co. plans pulp mill addition to plant on Thomas St. $500,000.

Ky., Cynthiana—C. Le Bus having plans prepared by Manley & Young, 814 West Hill Ave., Knoxville, Tenn., 1 story, 90 x 200 ft. garage. $40,000.

Ky., Louisville—R. Rosa, c/o Amer. Mosaic & Tile Co., 309 East Bway., having plans prepared by Joseph & Joseph, Francis Bldg., 2 story garage, East Bway. $75,000.

Ky., Middlesboro—Motch Motor Co. plans 2 story, 50 x 180 ft. garage, steel frame. $50,000.

O., Cleveland—Bolivar-Prospect Co., 1004 Prospect Ave., having plans prepared by Watson Co., 4614 Prospect Ave., 10 story and basement, 116 x 180 ft., shops and garage, brick, steel and concrete, Bolivar Rd. and Prospect Ave. $1,000,000.

O., Toronto — Ohio River Edison Co., Bway., New York City, having plans prepared 1st unit of power plant, 1 story and basement, 200 x 200 ft., 75,000 k.v.a. capacity, $1,000,000. Additional units later (300,000 k.v.a. capacity) to cost $8,000,000. Stevens & Wood, Inc., 120 Bway., New York City ,engrs. Pennsylvania-Ohio Power & Light Co., 2521 East Boardman St., Youngstown, lessee.

Mich., Detroit—Berry Bros., Inc., 211 Lieb St., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., 4 story and basement, 50 x 80 ft., rein.-con. and brick addition to varnish factory.

Ill., Chicago — Chicago Steel and Wire Co., 103rd and Torrence Sts., having plans prepared by L. G. Hallberg & Co., 116 South Michigan St., 1 story, 193 x 300 ft. factory, to be erected in 3 units. $500,000.

Ill., Chicago — Rawson & Eisenberg, archts., 5 North La Salle St., preparing plans 1 story, 50 x 112 ft. auto sales building and garage, fireproof, Roosevelt St. near Independence St. $40,000. Owner's name withheld.

Wis., Eau Claire—Dells Pump & Paper Co., Dells Dam., having preliminary plans prepared by L. A. De Guere, engr., Wood Blk., Wisconsin Rapids, 2 story addition, and reconstructing pulp and paper mill buildings, brick, concrete and steel, plain foundations. $500,000.

Wis., Milwaukee—Curtis Auto Co., 143 8th St., had plans prepared by Federal Eng. Co., engrs., 444 Milwaukee St., 3 story and basement, 100 x 127 ft., brick and concrete garage, plain foundation. Bway. $200,000.

Wis., Prairie du Sac—J. N. Schmidt having plans prepared 1 story, 50 x 90 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. Galeman St. $40,000. Private plans.

Mo., Kansas City—Federal Building & Loan Assn., 531 Scarritt Bldg., having plans prepared 3 story and basement, 96 x 115 ft., rein.-con. and brick garage, 9th and McGee Sts. $75,000. Private plans. H. A. Rubin, 1333 Grand Ave., lessee.

Mo., Kansas City—H. J. Nicholas, c/o Nicholas Crusher Co., 33rd and Wyoming Sts., having plans prepared brick and clay products plant, 33rd and Holly Sts. $100,000. Private plans.

Ark., Little Rock—Arkansas Central Power Co. plans 2 new substations, one on Markham and Cedar Sts., other 23rd and Spring Sts. $100,000.

Tex., Dallas — Brown Cracker & Candy Co., 603 Caruth St., soon lets contract 7 story and basement, 140 x 150 ft., rein.-con., steel and brick, Jefferson, McKinley and Caruth Sts., $300,000. Cost incl. equipment $1,000,000. Noted July 28.

Tex., Dallas—Texas & Pacific R. R., Texas & Pacific Bldg., making plans roundhouses, car shops, etc., near Fair Park. $600,000. E. F. Mitchell, c/o owner, engr.

Tex., Ft. Worth—Trinity Portland Cement Co., Commonwealth Bldg., Dallas, having plans prepared by E. O. Eckels, Wash., D. C., and R. L. Humphrey, Harrison Bldg., Phila., 2,500 bbl. portland cement mill, northwest of here. $1,000,000.

Tex., Luling—United North & South Oil Co. plans large oil refinery. $100,000. Engineer and architect not announced.

Tex., Sanger—See "Waterworks."

Tex., Throckmorton—Had plans prepared complete waterworks system. $40,000 bonds voted. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs. Noted July 28.

Oregon—See "Miscellaneous."

California—L. R. Lurie, 315 Montgomery St., San Francisco, plans auto stage terminals at various points in California and Oregon. To exceed $1,000,000. Pickwick Corp., 683 Market St., San Francisco, lessee.

Calif., Fullerton—Clay Products Co., c/o California Hotel, plans factory. To exceed $50,000.

Calif., Los Angeles—Crescent Creamery Co., 237 Winston Ave., had plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 2 story, 100 x 200 ft., milk plant, 1 story, 80 x 80 ft. boiler plant and 2 story, 93 x 200 ft. ice cream plant, all rein.con., Slauson Ave.

Calif., Los Angeles—J. D. Watson having plans prepared by Milwaukee Building Co., Wright and Callendar Bldg., 4 story, 90 x 275 ft., rein.-con. garage, Figueroa St. near 15th St. $315,000.

Calif., San Francisco—G. A. Clough, Hib. Bank Bldg., plans 2 story and basement, concrete factory, Dore St. near Folsom St. To exceed $40,000. Engineer and architect not selected. Pacific Coast Tag Mfg. Co., Phelan Bldg., lessee.

Calif., San Francisco—L. R. Lurie, 315 Montgomery St., plans factory and warehouse, probably concrete, Folsom and 12th Sts. To exceed $40,000.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., having plans prepared 70 x 100 ft., steam plant, steel and rein.-con., Stevenson St. between 5th and 6th Sts. $250,000. Private plans.

Ont., Bolton—Walshaw & Sons Woolen Mills plan to rebuild plant, recently destroyed by fire. Loss $80,000.

Ont., Ford City—Ford Motor Co. of Canada, Ltd., plans 2 story, 103 x 107 ft. by-products plant, rein.-con., brick and steel, along tracks Grand Trunk Ry. A. Kahn, Ltd., Ford City, archts.

Ont., Weston — Brooks Steam Motors, Ltd., 1304 Canadian Pacific Railway Bldg., Toronto, plans factory, brick, concrete and steel, here. $500,000. Engineer and architect not selected.

BIDS DESIRED

Mass., New Bedford — Leary & Walker, archts. and engrs., Times Bldg., taking bids 1 story, 60 x 365 ft. plant, for Whitman Mills. $50,000.

Conn., Manchester—L. Geer, archt., 62 Prospect St., taking bids 3 story, 140x160 ft. storehouse, brick and steel, for Orford

Industrial Works (Continued)

Soap Co., Hilliard St. $160,000. Noted July 19.

N. Y., Eastview—Aug. 6, at office of F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House (White Plains), central heating plant for county buildings, here.

O., Cincinnati—July 30, by Tietig & Lee, archts., 901 4th Natl. Bank Bldg., 5 story, 42 x 100 ft., rein.-con. and brick plant, Cormany and Township Sts., for J. and F. Schroth Packing Co. To exceed $150,000.

O., Fairport—Koppers Co., engrs., Union Arcade, Pittsburgh, will build and award separate contracts for coke oven plant, here, for Diamond Alkali Co. $1,500,000.

Wis., Milwaukee — Federal Eng. Co, engrs., 444 Milwaukee St., taking bids 3 story and basement, 100 x 127 ft., brick and concrete garage, plain foundation, Bway., for Curtis Auto Co., 143 8th St. $200,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co. 213 Lake St., and Cahill & Douglas, engrs., 217 West Water St., taking bids 2 story, 60 x 80 ft. power house, brick and concrete, plain and wood pile foundation, Lake St. Noted July 19.

Calif., San Francisco — J. D. Phelan, Phelan Bldg., will build 1 story, rein.-con. garage, Valencia and 17th Sts. $200,000. Work will be done by separate contracts under supervision of J. E. Scully, Phelan Bldg. Noted July 12.

Ont., Collingwood—July 28, by Postel Lock Nut Co., Ltd., factory. $50,000.

BIDS RECEIVED

N. Y., New York—G. W. Whaler, comr. Plant & Structures, Municipal Bldg., housing station, Cromwell Ave. south of West 170th St., for Street Cleaning Dept., from M. Miller Co., 709 6th Ave., $84,800. Noted July 12.

Wis., La Crosse—La Crosse Lutheran Hospital, 1910 South Front St., 3 story, 42 x 100 ft., nurses home, and remodeling boiler house and power plant, brick, rein.-con. and steel, plain foundation, from T. Molzahn, Majestic Bldg., $63,621. Noted Apr. 19.

CONTRACTS AWARDED

Mass., North Grafton—Linen Thread Co. of Massachusetts, 418 Grand St., Paterson, N. J., 3 story, 75 x 96 ft. mill, brick and steel, plain foundation, here, to E. D. Ward Co., 82 Foster St., Worcester. Archts. est. $50,000.

R. I., Providence—S. Priest, c/o Imperial Printing & Furnishing Co., Bellefonte (Providence P. O.), 1 story, 190 x 300 ft., brick and concrete garage and service station, Elmwood Ave., to C. I. Bigney Constr. Co., 184 Washington St. Est. cost $150,000. Noted May 24.

R. I., Providence—E. Radding, 144 Westminster St., 2 story garage, brick, concrete and steel, plain foundation, North Main, Frost and Nashua Sts., to E. Radding Constr. Co., 144 Westminster St. Archts. est. $75,000. Noted May 24.

R. I., Woonsocket—Fairmount Worsted Co., Mendon Rd., 2 story, 65 x 100 ft. mill, brick and timber, plain foundation, Mendon Rd., to Mahoney & Tucker, 72 Weybosset St., Providence. Archts. est. $40,000.

Pa., Allenport—Pittsburgh Steel Products Co., Union Arcade, Pittsburgh, 1 story, 120 x 625 ft. shipping and storage building, corrugated iron walls, to Austin Co., Union Arcade, Pittsburgh.

Pa., Pittsburgh—United States Glass Co., 9th and Bingham Sts., will build 2 story and basement, 100 x 120 ft., brick and steel addition, 9th and Sarah Sts., by day labor. Private plans.

O., Cleveland—Fairview Park Hospital Assn., 3305 Franklin Ave., 2 story, 45 x 47 ft. boiler house and laundry, brick and concrete, to C. N. Griffen Constr. Co., 5511 Euclid Ave. Noted May 3 under "Buildings."

O., Cleveland—Fisher Body Ohio Co., General Motors Bldg., Detroit, Mich., 1 story, 120 x 240 ft., brick and steel storage plant, East 140th St. and Coit Rd., here, to Austin Co., 16112 Euclid Ave. Archts. est. $150,000. Noted July 12.

Wis., Cambridge—A. Kravick will build 1 story, 50 x 95 ft., brick and rein.-con. garage, by day labor; plain foundation, to O. Jarlsberg, Cambridge. Archts. est. $40,000. Private plans.

Wis., Cuba City—Connecting Link Milling Co., 1301 Central Ave., Dubuque, Ia., rebuilding power mining and milling plant, 60 x 100 ft., brick and rein.-con., plain foundation, here, to J. J. Hemphill, Cuba City. Archts. est. $40,000. Noted July 13.

Wis., Eau Claire — Lange Canning Co., Mill St., will build 1 story, 47 x 154 ft., brick and timber addition, Madison St., by day labor. $40,000. Private plans.

Wis., Fond du Lac—J. Grebe, 22 Rees St., 1 story, 56 x 106 ft., garage and auto repair shop, brick and rein.-con., plain foundation, to S. Loughlin, 464 Ruggles St. Noted July 28.

Wis., Milwaukee—Froedtert Malting Co., 478 7th St., 2 story, 40x150 ft., concrete factory, plain foundation, Cherry St., to E. Dreyer, 1008 6th St. Archts, est. $45,000.

Wis., New London—Modern Mfg. Co., 2 story, 36 x 72 ft., brick and timber factory, plain foundation, to F. Schoenrock & Sons, New London. Engrs. est. $40,000.

Wis., Rice Lake—C. O. Ronning Co., 2 story, 50 x 160 ft., brick and concrete garage, plain foundation, to Wilcutts Co., 802 Clough Ave., Superior. $60,000.

Calif., San Francisco — L. Barrett, 415 Taylor St., 2 story, concrete garage, O'Farrell St. near Taylor St., to Barrett & Hilp, Sharon Bldg., $75,000.

Calif., San Francisco—E. Soule Co., Rialto Bldg., will build 1 story warehouse, rein.-con., Mississippi and Army Sts.; by day labor. To exceed $40,000. Private plans.

Buildings

PROPOSED WORK

Mass., Gardner—High School—School Dept. plans 2 story and basement, brick and fireproof, Prospect St. $175,000. Engineer and architect not selected.

Mass., Greenfield — Masonic — Greenfield Masonic Assn. having plans prepared by J. W. Beals Sons Co., 62 Summer St., Boston, 3 story, 70 x 120 ft., brick and stone. $175,000. W. E. Dickson, chn. bldg. comn.

Mass., Springfield—Home—Melha Temple—Masonic Assn., Suffield, Conn., having plans prepared by M. H. Westhoff, 293 Bridge St., Springfield, 2 story children's home, brick and steel, Parkside Ave., here. $500,000. G. M. Herdee, chn. building com. Hentz & Adler, 92½ North Forsythe St., Atlanta, Ga., associated archts.

R. I., Pawtucket—Church—St. Cecelia Roman Catholic Church, Central Ave., having plans prepared by W. F. Fontaine, 285 Main St., Woonsocket, 1 story and basement, brick and stone, Central and Newport Aves. $200,000.

R. I., Providence—Armory—State Armory Comn., State House, having plans prepared by W. G. Richards, 17 Exchange St., 3 story addition, North Main St. $380,000.

R. I., Providence—Gymnasium—Brown University, Prospect St., plans 2 story and basement, fireproof, Campus. $750,000. Engineer and architect not announced.

R. I., Providence — Masonic — Masonic Temple Building Assn., 127 Dorrance St., plans brick and stone, Francis, Park and Brownell Sts. $1,500,000. W. G. Upham, 226 Devonshire St., Boston, archt.

Conn., Berlin — School — Town having plans prepared by C. C. Palmer, 87 West Main St., New Britain, 2 story, 16 room, brick and steel, plain foundation. $150,000.

Conn., Bristol—Hospital—Bristol Hospital, Inc., having plans prepared by C. S. Palmer, 114 Whitney Ave., New Haven, 3 story and basement, brick and steel. $450,000. Noted Feb. 23.

Conn., Hartford — Apartment — W. H. Foberg, 509 Hillside Ave., having plans prepared by J. E. Marchetti, 721 Main St., 3 story, 100 x 180 ft., brick and stone, Washington St. $200,000.

Conn., Manchester — Church — Methodist Episcopal Church having plans prepared by A. E. Hill, 75 West Minster St., Providence, R. I., for brick and steel church, $200,000. J. Cooper, 1226 Main St., South Manchester, pastor.

Conn., Meriden — Telephone — Southern New England Telephone Co., 90 West Main St., plans 3 story, 60 x 180 ft. brick, plain foundation, Butler St. $200,000. Private plans.

Conn., Middletown—Nurses' Home—F. M. Salmon, comptroller, State Capitol, Hartford, receiving sketches until Aug. 31, for 3 story, brick, plain foundation, at Connecticut State Hospital, here. $190,000. Noted May 3.

Conn., Mystic—Dormitory—F. M. Salmon, comptroller, State Capitol, Hartford, receiving sketches 3 story dormitory, here, for Mystic Aural School. $225,000. Noted May 10.

Conn., Norwich—Hospital, etc.—Norwich State Hospital having plans prepared by Cudworth & Thompson, Thayer Blk., 2 story ward building, and 2 story nurses home, brick and semi-fireproof. $357,500. Noted June 7.

Conn., Norwich—Nurses Home—Backus Memorial Hospital plans 3 story and basement, brick and fireproof, at hospital. $250,000. Engineer and architect not selected.

Conn., Vernon — High School — George Sykes Memorial School Com., Rockville, having plans prepared by W. B. Chambers, 111 East 40th St., New York City, 2 story, 100 x 130 ft., brick and steel. $300,000.

N. Y., Binghamton—Lodge—Fraternal Order Eagles, 160 Washington St., plans modern fireproof. To exceed $200,000. Engineer and architect not selected.

N. Y., Buffalo—Clubhouse and Cathedral—Buffalo Consistory, 1180 Delaware Ave., had plans prepared by H. F. Cook, 408 Pearl St., 1 and 2 story, 125 x 293 ft., rein.-con., brick and stone, Delaware Ave. $750,000.

N. Y., Niagara Falls — Hospital — Bd. Trustees Memorial Hospital, 640 11th Ave., having plans prepared by Kirkpatrick & Gannon, Niagara Falls, large extensions and additions, 11th and Pine Sts. To exceed $200,000. Noted Sept. 28.

N. Y., Troy—Temple—Troy Masonic Hall Assn. plans 7 story, 190 x 225 ft., rein.-con., brick and steel, plain foundation, 8th St. $650,000. Engineer and architect not selected.

N. J., Boonton—Laboratory—State Building Com., Trenton, plans hydraulic laboratory, along Morris Canal, here. H. F. Critchlow, State House, Trenton, hydraulic engr.

N. J., Mays Landing—High School—Hamilton Twp. Bd. Educ. having plans prepared by J. H. Vaughn, Guarantee Trust Bldg., Atlantic City, 2 story, 107 x 192 ft. $285,000.

Pa., Brownsville—Store and Hotel—S. Tiff, Monongahela House, having plans prepared by E. R. Johnson, Fayette Title & Trust Co., Uniontown, 3 story and basement, 58 x 300 ft., brick, tile and terra cotta. $200,000.

Pa., Midland—High School—Bd. Educ. plans 2 story and basement. $175,000. W. G. Eckles, Lawrence Savings & Trust Bldg., New Castle, archt.

Pa., Pittsburgh—High School—Bd. Educ., Fulton Bldg., having plans prepared by Alden & Harlow, Farmers Bank Bldg., 3 story and basement, brick and stone, Ruth St. $1,000,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, brick, stone, tile and rein.-con., Bonvue Ave., general contract to Pittsburgh Eng. & Constr. Corp., 511 Homewood Ave., $186,716. Noted June 28.

Pa., St. Marys—High School—St. Marys Church having plans prepared by J. P. Brenot, archt., Opera House Bldg., Oil City, 2 story and basement, 80 x 140 ft., brick and tile. $150,000.

Fla., Indian River City—Hotel—Indian River City Town Site Corp. having plans prepared by Marsh & Saxelbye, 415 West Bldg., Jacksonville, hotel, 200 rooms. $600,000.

Fla., St. Augustine—School—St. Johns Co. School Bd. plans election Aug. 2, to vote on $300,000 bonds for various school buildings. D. D. Corbett, supt. pub. institutions.

Fla., Tampa—Lodge and Office—Hillsborough Lodge having plans prepared by M. L. Elliott, Citizens Bank Bldg., 10 story 103 x 120 ft., West Lafayette and Parker Sts. $700,000.

Ala., Birmingham—Office—Southern Ry. Co., 4th and Sycamore Sts., Cincinnati, O., having plans prepared by S. S. and G. H. Godley, 307 East 4th St., Cincinnati, O., 10 story, 50 x 90 ft., rein.-con., brick and stone, 1st Ave. and 22nd St., here. $200,000.

La., Baton Rouge—Penitentiary—State Bd. of Liquidation authorized J. M. Parker, governor, to borrow $454,700 for rehabilitation of penitentiary, here.

La., New Orleans — Hospital — Orleans Anti-Tuberculosis League plans hospital on 18 acre site, to have 500 ft. frontage, and 7 acre park, Gentilly Rd. and St. Bernard Ave., 7th Ward. L. Lyons, of I. L. Lyons & Co., Ltd., 226 Camp St., pres. Engineer and architect not selected.

La., New Orleans — Schools — Orleans Parish authorized issuance of $3,000,000 bonds for school building program. Soon takes bids for Capdau High School.

Streets and Roads (Continued)

La., Shreveport — Schools — Aug. 14, to vote on $1,000,000 bonds for maintenance of schools, erection of modern high school and down town ward school to replace one now in use. E. Goldstein, pres. school staff.

La., Shreveport—Store—J. Katzenstein and associates, Merchants Bldg., plans 4 story and basement, brick and concrete, Texas and Louisiana Aves. $300,000. Engineer and architect not announced.

Tenn., Memphis—Library—Cossitt Library having plans prepared by E. E. Harrison, U & P Bldg., 3 story addition, brick or stone and steel, South Front St. and Monroe Ave. $150,000.

Tenn., Memphis—Store—Peabody Co. having plans prepared by E. Weil, New Orleans, La., and Hanker & Cairns, Scimitar Bldg., Memphis, 8 story, South Main, Monroe and South Front Sts. $600,000. B. Lowenstein Bros., Inc., Main and Court Sts., lessee.

Ky., Louisville — Office — Standard Sanitary Mfg. Co., 6th and A Sts., plans 3 story, brick, 6th and Shipp Sts. $150,000. Engineer and architect not selected.

O., Canton—School—Bd. Educ. had plans prepared by G. F. Hammond, Center Ridge Rd., Cleveland, school, Lincoln Ave. $650,000. Foundation contract awarded.

O., Cleveland — Apartment — Giddings Square Building Co., Erie Bldg., plans 4 story, brick, on 212 x 280 ft. lot, East 70th St. south of Euclid Ave. $200,000. Engineer and architect not selected.

O., Cleveland—Apartment—L. Duchou. 3045 Essex Rd., Cleveland Heights, having sketches made by A. F. Janowitz, 811 Prospect Ave., 6 story and basement, brick and steel, on 160 x 200 ft. lot, West 112th St. and Lake Ave., here. $350,000.

O., Cleveland — Apartment — M. Helper, Realty Co., Garfield Bldg., plans 4 story and basement, 70 x 100 ft., brick and steel, 1858 East 20th St. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial—G. B. Harris and J. Klein, Engineers Bldg., having plans prepared by F. W. Bail, Hanna Bldg., 3 story and basement, 225 x 158 ft., brick and steel, 10221 Euclid Ave. $150,000.

O., Cleveland—Commercial and Apartment—D. B. and H. Steuer, 11224 Euclid Ave., plan 3 story and basement, brick, East 105th St. and Wilbur Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial and office—Ninth-Chester Co., c/o S. H. Kleinman, Treas. Natl. City Bldg., plans 12 story and basement, 64 x 115 ft., brick, steel and concrete, East 9th St. and Chester Ave. $1,000,000. Engineer and architect not selected.

O., Cleveland—Office—Amer. Express Co., c/o A. S. Hibbard, ch. clk., Neman-Stern Bldg., plans brick and steel addition on 132 x 132 ft. lot, 1540 Lakeside Ave. $200,000. Private plans.

O., Cleveland—Store and Apartment—R. H. Stotter, 822 Leader-News Bldg., having plans prepared by Morris & Weinberg, 3226 Euclid Ave., 3 story and basement, brick and timber, on lot 129 x 150 ft., Euclid Ave. and Charles Rd. $200,000.

O., Cortland—School—Bd. Educ. plans new brick school. $150,000. Engineer and architect not announced.

O., Sandusky—Hotel and Store—C. B. Wilcox, 621 Wayne St., interested in corporation which is being formed to build 6 story, on site of old West House. $250,000. J. M. Graham & Co., Cleveland, archts.

Ill., Chicago—Apartment—R. Gregori, archt., 155 North Clark St., preparing plans 3 story and basement 130 x 200 ft., fireproof, Buena St. near Clarendon St. $200,000. Owner's name withheld.

Ill., Chicago—Church—St. Columbana's Catholic Parish, c/o J. Burns, archt., 64 West Randolph St., plans fireproof church, 71st and Calumet Sts. $350,000.

Ill., Chicago—High School—Bd. Educ., 640 South Clark St., plans 4 story high school, fireproof, Wilson, Leland, Kimball and St. Louis Sts. $4,000,000. J. C. Christensen, 640 South Clark St., archt.

Ill., Chicago—Store, Office and Hotel—F. Dubish, 13504 Baltimore Ave., plans 3 story, 100 x 100 ft., fireproof, Baltimore Ave. and 135th St. $150,000. A. Proskauer, 159 North State St., archt.

Ill., Chicago—Theatre, Store and Office—Natl. Theatre Corp., 7542 Cottage Grove Ave., having plans prepared by A. C. Leska and J. E. Eberson, 212 East Superior St., 3 story, 84 x 106 x 144 x 183 ft., 7941-47 South Halsted St. $1,500,000.

TUNNEL—NEW YORK

Following are lowest three bids opened June 26, by New York State Bridge & Tunnel Comn. and New Jersey Interstate Bridge & Tunnel Comn., Hall of Records, for portion of two tunnels as approaches to river section of Hudson River Tunnel, Contr. No. 5, (A) Rogers & Hagerty, Inc., Grand Central Terminal, (awarded contract); (B) P. McGovern, Inc., 50 East 42nd St.; (C) Frederick L. Cranford, Inc., 37[illegible] Bridge St., Brooklyn. The unit bids were as follows:

	A	B	C
5,500 cu.yd. excavation for pipes and excavation not otherwise provided for	$14.00	$16.00	$22.60
25,800 cu.yd. excavation above M.H.W. for tunnel	14.00	18.00	22.60
68,000 cu.yd. excavation below M.H.W. for tunnel	14.00	19.00	22.60
1 underpinning Nos. 293-301 Spring Street (lump sum)	1,000.00	53,000.00	35,000.00
1 Underpinning No. 290 Hudson St. and Nos. 286-288 Spring St. (lump sum)	39,000.00	26,000.00	16,000.00
1,010 lin.ft. maintaining Canal St. sewer	1.00	45.00	155.00
Underpinning 5 railroad columns not within net lines of tunnel excavation	2,000.00	6,400.00	2,000.00
Uunderpinning 3 railroad columns within net lines of tunnel excavation	2,000.00	6,400.00	2,200.00
26,800 cu.yd. concrete	22.60	22.00	24.64
52,600 sq.ft. pre-cast concrete forms	.60	.30	.50
1,000 bbl. mortar batches in connection with placing concrete	5.00	4.50	5.00
85 cu.yd. brick masonry	65.00	40.00	50.00
4,200 lin.ft. granite curbing in tunnel	3.50	4.70	5.50
10 cu.yd. hollow terra cotta tile, 2 in.	65.00	37.00	45.00
10 cu.yd. hollow terra cotta tile, 3 in.	65.00	36.00	45.00
10 cu.yd. hollow terra cotta tile, 4 in.	65.00	32.00	45.00
100 lin.ft. timber piles	1.50	1.00	3.00
1,250 sq.yd. waterproofing, treated fabric laid with asphalt, 2 ply	2.00	1.55	2.00
4,400 sq.yd. waterproofing, treated fabric laid with asphalt, 3 ply	2.25	2.25	2.50
6,960 sq.yd. waterproofing, treated fabric laid with asphalt, 4 ply	3.00	2.95	2.70
10 sq.yd. waterproofing, treated fabric laid with asphalt, 5 ply	4.00	3.65	3.00
200 sq.yd. waterproofing, treated fabric laid with asphalt, 6 ply	4.00	4.35	3.50
3,500 cu.yd. waterproofing, brick in asphalt mastic including 1 ply waterproofing	45.00	50.00	48.00
4,000 ton built-up steel work and tie-rods	150.00	117.00	137.50
15 ton bolts, castings and wrought-iron fixtures not otherwise provided for	350.00	300.00	400.00
470 ton steel beams and shapes	150.00	117.00	137.50
40 ton steel rods and bars	110.00	90.00	105.00
30 ton wire mesh	200.00	400.00	500.00
137,000 sq.ft. steel sheet piling	1.50	1.70	2.10
38 ton copper steel-plates, bolts, nuts and washers	350.00	170.00	300.00
1,000 lb. wrought-iron or steel pipe for sub. chgs., not pipe for electrical conduit	.20	.10	12.00
100 lb. new malleable iron fittings for above	.75	.20	18.00
450 lin.ft. wrought-iron or steel pipe in the tunnel, 2 in.	.45	1.00	1.50
50 lin.ft. wrought-iron or steel pipe in the tunnel, 3 in.	.87	1.50	2.00
5,000 lin.ft. galvanized iron electric conduits in the tunnel, ¾ in.	.45	.30	.55
7,100 lin.ft. galvanized iron electric conduits in the tunnel, 1 in.	.60	.40	.60
100 lin.ft. galvanized iron electric conduits in the tunnel, 1¼ in.	.80	.50	.75
5,900 lin.ft. galvanized iron electric conduits in the tunnel, 1½ in.	.80	.60	.80
100 lin.ft. galvanized iron electric conduits in the tunnel, 2 in.	1.00	1.00	1.00
100 lin.ft. galvanized iron electric conduits in the tunnel, 3 in.	1.50	2.00	1.50
30 galvanized iron fixtures—outlet boxes	2.00	1.00	2.50
300 galvanized iron fixtures—pull boxes 4 x 4 x 3 in.	4.00	1.00	3.50
30 galvanized iron fixtures—pull boxes 6 x 6 x 4 in.	3.00	2.50	4.50
10,000 lb. galvanized iron fixtures—curb guards, ladders and miscellaneous fixtures	.30	.20	.11
40 galvanized iron fixtures—pull boxes 12 x 12 x 6 in.	10.00	9.00	5.00
250 galvanized iron fixtures—boxes for lights	13.00	20.00	5.00
80 ton cast-iron hub and spigot pipe (straight pipe)	150.00	110.00	80.00
10 ton cast-iron hub and spigot pipe (special castings)	200.00	215.00	160.00
75 ton cast-iron pipe, straight pipe, for high-pressure fire system	150.00	150.00	80.00
30 ton cast-iron pipe, special castings for high-pressure fire system	300.00	270.00	160.00
15 ton cast iron fixtures, miscellaneous new manhole, etc.	160.00	180.00	250.00
500 lin.ft. cast iron water or other tunnel pipe, 4 in.	1.75	2.00	1.50
2,600 lin.ft. cast iron water or other tunnel pipe, 6 in.	2.50	3.00	2.00
400 lin.ft. cast iron water or other tunnel pipe, 8 in.	3.25	3.60	3.00
10 lin ft. cast iron water or other tunnel pipe, 10 in.	4.00	5.40	3.00
30 lin.ft. cast iron water or other tunnel pipe, 12 in.	5.00	6.50	3.00
11,000 lb. bronze fixtures—bolts, wedges and hinges	1.25	1.00	.70
19,500 duct. ft. tunnel ducts, single-way	.30	.30	.18
870 sq.ft. asbestos materials—½ in. asbestos lumber	1.00	1.00	.50
100 lin.ft. changing special cast-iron pipe—4 in. pipe for U.S.T.D. cables	4.00	7.00	3.00
200 lin.ft. changing special cast-iron pipe—8 in. pipe for U.S.T.D. pneumatic tube	13.00	11.00	6.00
10 lin.ft. changing cast-iron water pipe—4 in.	2.00	1.00	2.00
650 lin.ft. changing cast-iron water pipe—6 in.	2.50	1.40	2.50
100 lin.ft. changing cast-iron water pipe—8 in.	3.25	1.80	3.00
1,250 lin.ft. changing cast-iron water pipe—12 in.	3.00	2.40	4.00
10 lin.ft. changing cast-iron water pipe—16 in.	4.00	3.00	5.00
70 lin.ft. changing cast-iron pipe for high pressure fire system—8 in.	10.00	2.00	4.00
40 lin.ft. changing cast-iron pipe for high pressure fire system—12 in.	10.00	3.00	5.00
100 lin.ft. changing cast-iron pipe for high pressure fire system—16 in.	10.00	4.00	5.00
300 lin.ft. changing cast-iron pipe for high pressure fire system—24 in.	8.00	6.00	10.00
150 lin.ft. changing gas pipe (not new pipe) 4 in.	2.00	1.00	2.50
550 lin.ft. changing gas pipe (not new pipe) 6 in.	1.50	1.25	3.00
10 lin.ft. changing gas pipe (not new pipe) 8 in.	3.00	1.75	5.00
130 lin.ft. changing gas pipe (not new pipe) 10 in.	3.00	2.00	6.00
140 lin.ft. changing gas pipe (not new pipe) 12 in.	3.00	2.30	6.00
90 lin.ft. changing gas pipe (not new pipe) 16 in.	5.00	2.75	8.00
30 lin.ft. changing gas pipe (not new pipe) 20 in.	10.00	3.20	10.00
800 duct. ft. changing file conduits, and conduits other than wrought-iron, etc.	.60	.50	.40
100 lin.ft. changing wrought-iron, steel or fiber conduits, 2 in.	1.00	1.50	1.50
600 lin.ft. changing wrought-iron, steel or fiber conduits, 2½ in.	1.00	2.00	1.50
14,000 lin.ft. changing wrought-iron, steel or fiber conduits, 3 in.	1.00	.90	2.00
625 lin.ft. changing wrought-iron, steel or fiber conduits, 3½ in.	1.50	1.20	2.00
100 lin.ft. changing wrought-iron, steel or fiber conduits, 4 in.	1.50	1.50	3.00
100 lin.ft. changing wrought-iron, steel or fiber conduits, 4½ in.	1.50	1.80	3.00
165 lin.ft. laying vitrified pipe sewers—12 in. pipe	4.00	5.40	4.00
900 lin.ft. laying vitrified pipe sewers—15 in. pipe	5.00	6.50	5.00
10 lin.ft. laying vitrified pipe sewers—20 in. pipe	10.00	8.50	6.00
10 lin.ft. laying cast-iron pipe sewer—12 in. pipe	2.50	2.25	4.00
10 lin.ft. temporary by-pass gas pipe upon or below street surface, 4 in.	4.00	6.00	5.00
1,350 lin.ft. temporary by-pass. gas pipe upon or below street surface, 6 in.	7.00	7.00	5.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 8 in.	10.00	8.00	5.50
775 lin.ft. temporary by-pass. gas pipe upon or below street surface, 10 in.	9.00	9.00	6.00

	A	B	C
1,080 lin.ft. temporary by-pass. gas pipe upon or below street surface, 12 in.	11.00	10.00	7.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 16 in.	15.00	12.00	8.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 20 in.	15.00	15.00	10.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 4 in.	11.00	7.00	12.50
10 lin.ft. temporary by-pass. gas pipe above street surface, 6 in.	12.00	8.00	14.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 8 in.	15.00	9.00	15.00
100 lin.ft. temporary by-pass. gas pipe above street surface, 10 in.	16.00	10.00	16.00
100 lin.ft. temporary by-pass. gas pipe above street surface, 12 in.	18.00	11.00	17.00
380 lin.ft. temporary by-pass. gas pipe above street surface, 16 in.	20.00	13.00	18.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 20 in.	20.00	16.00	20.00
420 lin.ft. restoring New York Central R.R. tracks	15.00	15.40	10.00
12,600 sq.yd. restoration of granite block pavement	5.00	6.00	5.50
5,200 sq.yd. restoration of sidewalks and other surfaces between curb and building line	4.00	3.00	4.50
3,400 lin.ft. restoration of curbing	1.00	1.00	1.50
100 sq.yd. new granite block pavement other than required for restoration	8.00	8.00	7.00
100 sq.yd. new cement sidewalk other than that required for restoration	3.50	3.50	5.00
100 lin.ft. new granite curb other than that required for restoration	3.50	3.80	6.50
Extended totals	$3,467,414	$3,894,097	$4,593,714

Buildings (Continued)

Wis., Berlin—Grade School—School Bd. plans 2 story and basement, brick, tile and concrete, plain foundation, on West Side. $150,000. P. Talbot, pres. Engineer and architect not selected.

Wis., Burlington—High School—School Bd. had plans prepared by Oppenhamer & Obel, Nicollet Bldg., Green Bay, 2 story and basement, brick, tile and concrete, plain foundation. $200,000.

Wis., Madison—Apartment—M. Woldenberg, 54 West Kenzie St., Chicago, having plans prepared by Claude & Starck, Badger Annex, 5 story, rein.-con., brick and steel, plain foundation, State St. here. $300-000. Noted July 12.

Wis., Madison — City Hall, etc. — Joint Building Com. City of Madison and Dane Co., W. L. Woodword, chn., 17 West Main St., plan city hall and court house, rein.-con., brick and steel, plain foundation, Doty St. $200,000. Engineer and architect not selected.

Wis., Milwaukee — Apartment — All-One Apartment Co., 124 2nd St., having plans prepared by Rosman & Wierdsma, 424 Jefferson St., 4 story and basement, 46 x 134 ft., brick, tile and concrete, plain foundation, 12th St. $165,000.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., preparing preliminary plans 3 story and basement, brick and concrete, plain foundation, on West Side. $150,000. Owner's name withheld.

Wis., New London—High School—School Bd. having preliminary plans prepared by Auler & Jensen, F. R. A. Bldg., Oshkosh, 2 story and basement, brick, tile and concrete. $250,000.

Minn., Duluth—Office and Store—German & Jenssen, archt. and engrs., 407 Exchange Bldg., rejected bids June 12, 5 story and basement, 109 x 140 ft., rein.-con. and brick, Superior St. and Lake Ave., here, for R. M. Bodley Co., Boston. Project deferred. Noted June 7.

Minn., South St. Paul—Church-School—St. Augustine's Catholic Church, c/o H. G. McCall, having plans prepared by Hausler & Kerr, 548 Hamm Bldg., St. Paul, brick and stone. $150,000.

Kan., Ft. Scott—Church—Presbyterian Congregation having revised plans prepared by E. O. Brostrom, 621 Reliance Bldg., Kansas City, Mo., 2 story and basement, native stone. $150,000.

Kan., Kansas City—Memorial and Auditorium—City soon takes bids 3 story and basement, 146 x 185 ft., rein.-con., brick and terra cotta, 7th and Barnett Sts. $400,-000. Rose & Peterson, 434 Brotherhood Bldg., Kansas City, Mo., archts.

Mo., St. Louis—Central Y.M.C.A., c/o B. Moser, 904 Carr St., plans 10 or more story building, rein.-con. and brick, concrete pile foundation, in downtown district. $1,000,-000. Private plans.

Mo., Unionville—Court House—Putnam Co. having preliminary plans prepared by J. G. Braecklein, Federal Reserve Bank Bldg., Kansas City, 3 story and basement, 70 x 90 ft. $150,000. Noted June 14.

Tex., Cisco—Church—Presbyterian Church had plans prepared by R. H. Hunt & Co., engrs. and archts., Southwestern Life Bldg., Dallas, 2 story and basement, brick, plain foundation. $150,000.

Tex., Dallas —Church etc.—Church of Incarnation, c/o C. E. Snowden, pastor, Harwood and McKinney Ave., plans church and parish house, brick, stone and concrete, Carroll and McKinney Aves. $200,000. Engineer and architect not announced.

Tex., Ft. Worth—Dormitory—Masonic Orphans Home takes bids in Fall 3 story, concrete and brick. $175,000. H. M. Greene Co., Northern Texas Bldg., Dallas, engrs. and archts.

Tex., Houston—Library—City had plans prepared and soon takes bids 3 story, rein.-con., brick and stone, McKinney and Smith Sts. $200,000, ultimate cost $700,000. W. W. Watkins, 212 Scanlan Bldg., and L. A. Glover, 604 Binz Bldg., archts.

Tex., San Antonio—Theatre—Corporation being formed (M. Booth-Jones, Exch. Bank Bldg., Spokane, Wash., primary owner), plans theatre, here. $200,000. D. Grovers, St. Louis, Mo., engr.

Tex., Texarkana—City Hall—Aug. 14, to vote on $200,000 bonds for city hall. W. J. Nichols, mayor.

Okla., McAlester—Court House—Pittsburg Co. election Aug. 14, to vote on $300,-000 bonds for 3 story and basement, 80 x 150 ft., brick.

Okla., Norman—Student—Student Union, Oklahoma City, having plans prepared by Sorey & Vahlberg, Terminal Bldg., Oklahoma City, 4 story and basement, 80 x 200 ft., rein.-con., brick and stone, here. $350,000.

Okla., Okmulgee — Schools — Bd. Educ. having plans prepared by Smith & Senter, 401 Commerce Investment Bldg., rein.-con., brick and stone. $195,000.

Wash., Mt. Vernon—Courthouse—T. F. Doan, archt., Sunset Bldg., Bellingham, takes bids about Aug. 30, 5 story, steel and concrete, for Skagit Co. $300,000.

Calif., Berkeley — Store and Office — F. Koerber, 2647 Ashby Ave., having plans prepared 6 story and basement, fireproof, University Ave. near Shattuck St. $150,000. Architect's name withheld.

Calif., Fresno—Church—St. Paul's Methodist Episcopal Church, 417 West Belmont St., had plans prepared 2 story, rein.-con., M and Fresno Sts. $150,000. S. Cooper, secy. finance com. Engineer's and architect's name withheld.

Calif., Fresno—Club—Y. M. C. A., 1660 M St., plans club, N and Tuolumne Sts. $150,000 or more. Engineer and architect not selected.

Calif., Fresno — Office and Store — R. Emirzian, 1002 T St., plans 5 story, 75 x 100 ft., fireproof, Inyo St. and Van Ness Ave. $200,000. Engineer and architect not selected.

Calif., Fullerton — Schools — Fullerton School Dist. plans to vote on $150,000 bonds for new schools and additions to present structures.

Calif., Hollywood—Church—First Presbyterian Church of Hollywood, 1760 North Gower St., had plans prepared by H. M. Patterson, O. T. Johnson Bldg., Los Angeles, 2 story and basement, brick and terra cotta, Gower and San Carlos Sts. $150,000.

Calif., Long Beach—Club—Golden State Club, c/o Milwaukee Building Co., designers, Wright & Callendar Bldg., Los Angeles, having preliminary plans prepared 10 story, 180 x 350 ft., probably rein.-con., here.

Calif., Los Angeles—High School—Bd. Educ. soon takes bids 2 story, 320 x 450 ft., rein.-con. and brick, Fairfax Ave. $600,000. J. and D. Parkinson, Title Insurance Bldg., archts.

Calif., Los Angeles—High School—City having plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 3 story, 160 x 316 ft., brick, Washington St., for Los Angeles Polytechnic High School. $340,000.

Calif., Los Angeles—Office—F. W. Johnson, et al., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 14 story and basement, 90 x 110 ft., rein.-con., 7th and Los Angeles Sts. $750,000.

Calif., Oakland—School—St. Elizabeth's Parish, 1532 34th Ave., having preliminary plans prepared by J. J. Donovan, 1916 Bway., 2 story, rein.-con., 34th Ave. $255,000.

Calif., Sacramento—Store, Office and Lodge—Sacramento Lodge 1020 Loyal Order of Moose having plans prepared 7 story and basement, rein.-con. $250,000. M. L. Burns, Ochsner Bldg., in charge of project. Engineer and architects names withheld.

Calif., San Diego—Art—City had plans prepared by W. T. Johnson, Timkin Bldg., for art building, Balboa Park. To exceed $150,000.

Calif., San Francisco—Apartment—A. Driscoll, c/o S. Schnaittacher, archt., 233 Post St., had plans prepared 5 story and basement, steel and concrete, Geary and Leavenworth Sts. $150,000.

Calif., San Francisco—Hall—Musicians Union, 68 Haight St., having plans prepared by S. Schnaittacher, 233 Post St., 2 story and basement, rein.-con., Jones St. near Eddy St. $80,000. Designed for additional stories, ultimate cost $200,000.

Calif., San Francisco—Synagogue—Temple Emanu-El, Kearny St., having plans prepared by S. Schnaittacher, 233 Post St., and Backwell & Brown, 251 Kearny St., synagogue, Lake St. $500,000. L. C. Block, 248 Battery St., chn. building com. B. R. Maybeck and G. A. Lansburgh, 140 Montgomery St., consult. archts.

Calif., Santa Barbara—Schools—Santa Barbara Grammar School Dist. rejected bids Washington and Franklin Schools, concrete and brick. Incorrectly noted in July 12 issue.

Calif., Santa Paula — City Hall — See "Sewers."

Que., Weedon—Church—Roman Catholic Congregation Parish Church of Weedon soon takes bids church, brick, steel and stone. $175,000. A. Rousseau, pastor.

Ont., Ford—School—Public School Bd. having plans prepared by Nichols & Sheppard, 15 Sandwich St., 2 story and basement, 15 room, rein.-con. and brick. $210,000.

BIDS DESIRED

Mass., Cambridge (Boston P. O.)—School—July 30, by city, 3 story, 68 x 100 ft., brick and steel Putnam Ave. $150,000. E. B. McGirr, archt., and R. D. Kimball Co., engrs., both at 6 Beacon St., Boston. Noted Nov. 2.

Mass., Lynn—Store and Office—Aronson Rubin Realty Co., 294 Washington St., Boston, will build 3 story, 60 x 125 ft., brick and steel, Central Ave., by separate contracts. $200,000. C. L. Betton, 31 Exchange St., archt.

Mass., Springfield—Temple—July 30, by McClintock & Craig, archts., 33 Lyman St., 4 story, 98 x 200 ft., brick and steel, State St., for Springfield Masonic Assn., State and Main Sts. $500,000. E. H. Blodgett, pres. Noted Mar. 15.

Mass., Ware — Church — Mt. Carmel Church, c/o J. T. Sheehan, pastor, taking bids 80 x 140 ft., brick and steel, $165,000. J. Jackson, 185 Church St., New Haven, Conn., archt. Noted Nov. 2.

Mass., Williamstown—High School—Aug. 20, by Peare-Quiner-Nevin & Chickering, 6 Beacon St., Boston, 2 story, 58 x 130 ft. with 62 x 68 ft. ell, brick and steel, for town school com. $150,000. Noted June 7.

N. Y., Brooklyn—High School—Aug. 14, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Girls Commercial High School, Classon Ave. between Union and President Sts., for Bd. Educ. Noted June 14.

N. Y., Scotia—High School—Aug. 6, by Bd. Educ., 3 story, 75 x 125 ft., rein.-con., brick and steel, plain foundation, Main St., in Scotia Twp. $250,000.

N. Y., Wende (Millgrove, P. O.)—Home and Infirmary—Sept. 4, by Bd. Supervs. Erie Co., City Hall, Buffalo, 2 and 3 story, rein.-con., brick, stone, steel, etc., here. $1,500,000. F. J. and W. A. Kidd, 542 Franklin St., Buffalo, archts.

Buildings (Continued)

Pa., Scranton—Hospital—Aug. 6, by W. G. Watkins, Court House, addition to hospital, frame and stucco, at West Mountain, for Comrs. Lackawanna Co. $300,000. D. H. Morgan, Connell Bldg., archt. Noted Mar. 22.

W. Va., Institute—School—Sept. 28, by State Bd. Control, Charleston, 3 story, 76 x 288 ft. with 81 x 90 ft. ell, brick, steel and stone. $250,000. Warne, Tucker & Patteson, Masonic Bldg., Charleston, archts. Noted July 12.

Mich., Alpena—School—Aug. 7, by E. R. Nicholson, secy. Bd. Educ., 2 story and basement, 62 x 137 ft., brick and concrete, in Union School Dist. $150,000. W. Holmes-Powers Co., Tussing Bldg., Lansing, archts.

Ill., Chicago—Apartment—H. J. Liedberg, archt., 77 West Washington St., receiving bids 3 story and basement, 110 x 124 ft., fireproof, Sheffield St. near Fullerton St. $150,000. Owner's name withheld.

Ill., Chicago—Apartment-Hotel—Olson & Urbain, archts., 155 North Clark St., receiving bids 4 story and basement, fireproof, 525-29 Arlington Pl. $750,000. Owner's name withheld.

Ill., Chicago—Apartment—M. Sugar, 4839 North Avers St., receiving bids 3 story and basement, 125 x 150 ft., fireproof, 4415-21 North Whipple St. $150,000. A. L. Himelblau, 30 North Dearborn St., archt.

Ill., Chicago—Store and Hall—Oldefest & Williams, archts., 605 North Michigan Ave., receiving bids 3 story and basement, 100 x 125 ft., fireproof, 7445-53 Cottage Grove Ave., for N. Mannos, 35 East Van Buren St. $200,000.

Ill., Quincy—Theatre, etc.—Pinkelman & Cory, c/o Gem Theatre, taking bids 2 and 4 story, 88 x 187 ft., rein.-con. and brick, concrete pile foundation, Hampden St. $250,000. Levine & Rupert, 822 West 70th St. archts.

Wis., Milwaukee—Exchange—July 31, by A. C. Eschweiler, archt., 141 Wisconsin St., 5 story, 120 x 120 ft., brick and concrete addition, Bway., for Wisconsin Telephone Co., 418 Bway. $500,000. Structural steel contract awarded. Noted Apr. 26.

Wis., Verona—Asylum—Aug. 1, by Dane Co., c/o M. Sommers, 512 West Wilson St., 4 story, 100 x 140 ft., brick, rein.-con. and steel, plain foundation. $150,000. A. D. Conover, Tenney Bldg., Madison, archt. Noted June 14.

Tex., Dallas—Church—Sept. 15, by East Dallas Christian Church, Peak and Junius Sts., 2 story and basement, 83 x 170 ft., brick, concrete and terra cotta, plain foundation. $200,000. C. D. Hill & Co., Central State Bank Bldg., engrs. and archts. Noted May 24.

Tex., Ft. Worth—Club—Aug. 20, by South Side Lodge A.F.&A.M., 1114, 1300½ Henderson St., 4 story and basement, 75 x 100 ft., steel and brick, $150,000. J. B. Davies, 1312 Hemphill St., archt. and engr. Noted June 7.

Calif., Los Angeles—Store and Loft—Morgan, Walls & Morgan, archts., Van Nuys Bldg., receiving bids 2 story, 70 x 130 ft. and 4 story, 40 x 100 ft., brick, Parkview and 7th Sts., for S. Thorpe, Merchants Natl. Bank Bldg. Noted June 21.

B. C., Kamloop—School—Aug. 4, by D. C. Scott, Dept. Indian Affairs, Ottawa, 2 story, brick and timber, Indian Reserve. $175,000. Dept. Indian Affairs, Ottawa, archts.

BIDS RECEIVED

Ia., Winfield—School—School Bd., 2 story and basement, brick and stone, plain foundation, from C. W. Getchell, 2910 High St., Des Moines, $129,920. Noted June 14.

Okla., Pawhuska—Hotel—C. A. and J. L. Duncan, 5 story, 52 x 190 ft., brick, from Turner Constr. Co., Miami, $174,671. Noted June 28.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Hospital—St. Elizabeth's Hospital, 731 Cambridge St., 4 story, 100 x 150 ft., brick and steel, to M. W. Ryan, 2 Central Sq., Cambridge (Boston P. O.), $250,000.

Mass., Cambridge—Court House—Comrs. Middlesex Co., altering and constructing 3 story, 65 x 80 ft., brick and steel addition, to Hudson Constr. Co., 6 Beacon St., Boston, $241,741.

Mass., Chicopee — Dormitory — Roman Catholic Bishop of Springfield, Eliot St., Springfield, 4 story, 123 x 142 ft., brick and steel. Springfield St., here, to Lafrance Constr. Co., 292 Maple St., Holyoke, $225,000. Archts. est $200,000. Noted June 14.

Mass., Needham — High School — School Comn., 2 story, 65 x 216 ft. with 21 x 66 ft. ell, brick and steel, Highland and Oakland Aves., to J. P. Keating, 80 Boylston St., Boston, $250,000. Noted April 4.

Mass., Newton — School — St. Bernards Parish, Washington St., 2 story, 60 x 110 ft., brick and steel, to J. B. Byrne, 71 Magazine St., Cambridge. $150,000.

Mass., Springfield — High School — City Property Comn., City Hall, 3 story and basement, 73 x 330 ft. addition to Technical High School, rein.-con. and brick, plain foundation, Eliot St., to A. E. Stephens Co., 145 State St. Archts. est. $800,000.

Mass., Worcester — Business — State Mutual Life Assurance Co., 340 Main St., 4 story, 112 x 188 ft., brick and steel, plain foundation, Maple St., to E. J. Cross Co., 82 Foster St. Archts. est. $500,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., rejected bids 2 story and basement, rein.-con., brick, stone and tile, Boggs Ave. $200,000. Will readvertise soon. S. F. Heckert, Bessemer Bldg., archt. Noted July 19.

Md., Baltimore — Dormitory — State Bd. Educ., Towson, 5 story, 40 x 140 ft. brick addition, here, to Consolidated Eng. Co., Calvert Bldg., Baltimore. Archts. est. $150,000. Noted July 5.

Md., Baltimore—Parish House—O. G. Simonson Inc., archts., Maryland Casualty Tower, 2 story and basement, 55 x 160 ft., brick, Lombard and Catherine Sts., to J. L. Robinson Constr. Co., 1130 West Lafayette Ave., $150,000, for St. Johns Evangelical Lutheran Church. Noted June 7.

Fla., Miami—Apartment—E. C. McAllister et al, 8 story, brick and terra cotta, East Flagler St., to G. W. Langford Co., Col. Bldg., Louisville, Ky. Archts. est. $872,000.

Ky., Louisville — Clinic — T. M. Dorsey, Francis Bldg., 3 story (ultimately 6 story), 45 x 134 ft., 2nd and Chestnut Sts., to Webb Clark Co., 422 West Liberty St. Archts. est. $85,000 (ultimately $150,000). Noted May 17.

O., Canton—School—Bd. Educ. remodeling present building and erecting 10 room addition, brick with limestone or sandstone trim, 9th St. N. E., to Melbourne Constr. Co., Clark Bldg., $151,415.

O., Cleveland—Church and School—Our Lady of Angels Church, 319 Canal Rd., 2 story and basement, 75 x 83 ft., brick, steel and concrete, 3644 Rocky River Dr., to Hebing Co., West 54th St. Archts. est. $150,000.

O., St. Marys—High and Grade School—Bd. Educ. 2 story and basement, brick and concrete, to H. R. Blagg Co., 1229 East 3rd St., Dayton, $224,800. Noted July 5.

Ill., Chicago—Apartment—W. C. Presto, archt., 111 West Washington St., 3 story and basement, fireproof, Foster St. near Pauline St., to J. E. Grimes, 111 West Washington St. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Apartment-Hotel—Terrace Apartment Hotel Co., c/o R. S. De Golyer, archt., 7 South Dearborn St., 9 story, 43 x 90 ft., fireproof, 806-808 Junior Terrace, to Moraw Building Co., 6407 South Park Ave. Archts. est. $200,000. Noted May 24.

Ill., Chicago—Apartment—Leichenko & Esser, archts., 38 South Dearborn St., 3 story, 70 x 160 ft., fireproof, South Shore Dr. and East 72nd St., to Nelson & Lind, 6404 South State St. Archts. est. $200,000.

Ill., Evanston—Store and Office—Church Street Bldg. Corp., 40 North Dearborn St., Chicago, 2 story and basement, fireproof, Church, Sherman and Orrington Sts., here, to Nelson & Borg, 5853 Glenwood Ave., Chicago. Archts. est. $200,000. Noted Jan. 11.

Ill., Streator—School—Bd. Educ., 2 story and basement, rein.-con., brick and stone, general contract to F. L. Damon, 105 East Bway., Centralia. Archts. est. $500,000. Noted Apr. 6, 1922.

Wis., Manitowoc—Hospital—Holy Family Hospital, c/o Franciscan Sisters, Alverno, R. F. D. Manitowoc, 4 story, 50 x 250 ft., brick and concrete addition, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac, $164,437. Noted July 12.

Kan., Leavenworth—High School—Bd. Educ., general contract 2 story and basement, 120 x 170 ft., brick, rein.-con. and stone, to G. Walker, Salina, $171,000. Noted June 28.

N. D., Bismarck—Cathedral—Holy Ghost Cathedral, c/o V. Wehrle, bishop, general contract 110 x 320 ft., brick, steel and stone, to W. H. Arrell, 711 21st Ave. N., Minneapolis, Minn., $500,000. Noted April 5.

Mo., Kansas City—School—Bd. Educ., 2 story, 42 x 82 ft., rein.-con., brick and stone, 50th and Garfield Sts., general contract to U. B. Senter, Okmulgee, Okla., $193,588.

Mo., St. Louis—Apartment—S. Hamburg, Jr. Real Estate Co., Arcade Bldg., 3 story and basement, rein.-con. and brick, plain foundation, Skinker Rd., to J. Black Masonry & Contg. Co., Arcade Bldg. Archts. est. $270,000.

Mo., St. Louis—Temple—York Rite Temple Assn., 5 story (equal to 14 story), 160 x 300 ft., rein.-con., brick, steel, stone and marble, caisson foundation, Lindell Blvd., to Westlake Constr. Co., Ry. Exch. Bldg., fee basis. Archts. est. $3,000,000. Noted May 25.

Wyo., Laramie—Gymnasium—State Bd. Educ., 3 story, 160 x 180 ft., rein.-con. and limestone, University Campus, here, to J. A. Johnson, Casper, $276,974. Archts. est. $300,000. Noted Jan. 18.

Ore., Portland—High School—Bd. Educ. School Dist. 1, 4 story and basement, 160 x 178 ft., rein.-con., plain foundation, 7th and Clackamas Sts., to Parkers & Bamfield, 62 East 3rd St., $496,350. Noted June 21.

Calif., Los Angeles—Hall—Los Angeles Co., steel for hall of justice, to W. K. Kyle, I. W. Hellman Bldg., $802,900.

Calif., Los Angeles—Store and Loft—W. W. Paden, c/o E. L. Mayberry, archt., Pacific Electric Bldg., 13 story and basement, rein.-con., Hill St., to Robertson & Evans, Grant Bldg., $350,000. Noted Mar. 29.

Calif., Sacramento—Store—W. R. Davis & Bro., 2433 Mission St., reconstructing 3 story and basement, concrete, Mission St. near 22nd St., to C. Stockholm & Son, Monadnock Bldg., $150,000.

Ont., Kitchener—Hospital—Sisters of Mt. St. Joseph, Hamilton, 3 story and basement, 50 x 180 ft. with two 48 x 102 ft. wings, brick and steel, here, to W. M. Sutherland Constr. Co., 43 Adelaide St. W., Toronto. Archts. est. $445,000. Noted June 21.

Federal Government Work

PROPOSED WORK

D. C., Bellevue — Barracks, etc.—Spec. 4889—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans barracks, garage and generating building, here.

Va., Ft. Humphreys—Transmission Line—Constructing Quartermaster plans electric transmission line from here to Ft. Hunt.

Fla., Pensacola—Loop—Spec. 4884—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans circulating loop, here.

Ill., Great Lakes—Ward—Spec. 4883—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans psychiatrical ward, here.

Mo., Excelsior Springs—Hospital—Spec. 4887—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans hospital buildings, here.

Calif., San Diego—Dredging—Spec. 4885—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging, here. Bids to be opened at local yard.

Calif., San Diego—Filling—Spec. 4888—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans additional filling, here.

BIDS DESIRED

Massachusetts—Dredging—Aug. 17, at office U. S. Engineer, Providence, R. I., dredging in New Bedford and Fairhaven Harbor, here; adv. this issue.

Mass., Chelsea—Reroofing—Spec. 4886—Aug. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C. reroofing buildings at Naval Hospital, here.

Conn., Norwalk—Dredging—Aug. 22, at office U. S. Engineer, Providence, R. I., dredging in Harbor, here; adv. this issue.

Federal Government Work (Continued)

N. Y., Buffalo—Dredging, etc.—Aug. 3, at office U. S. Engineer, dredging and rock removal in Black Rock Channel; adv. this issue. Noted July 12.

N. Y., Chelsea—Water Supply—Aug. 15, by J. A. Wetmore, acting superv. archt., Treas. Dept., Wash., D. C., water supply system at U. S. Veterans Hospital, here.

Md., Annapolis—Water Softening Plant—Spec. 4836—Aug. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant, at Naval Academy, here. Noted Apr. 19.

Tenn., Memphis—Sub Post Office—Aug. 22 by Treas. Dept., Wash., D. C., sub post office, here. J. A. Wetmore, acting superv. archt. Noted May 18.

Ky., Louisville—Pump—July 30, by U. S. Engineer, P. O. Box 72, one vertical centrifugal pump to deliver 7,000 g.p.m. against head of 25 ft., complete with motor base, etc., 450 to 575 r.p.m.

Mich., Ludington—Superstructure—Aug. 28, at office U. S. Engineer, Milwaukee, Wis., removing timber superstructure and constructing concrete superstructure, here; adv. this issue.

Ill., Evanston—Extension—Aug. 16, at office J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., for extension with driveway at U. S. Post Office, here; adv. this issue.

Wyoming — Road — July 31 by J. W. Johnson, dist. engr., U. S. Bureau Pub. Rds., 301 Custom House Bldg., Denver, Colo., grading 4.6 mi. Dayton-Steamboat National Forest Rd., Sheridan Co., here. 9,592 cu.yd. rock and 43,328 cu.yd. common excav., etc.

New Mexico—Road—Aug. 6, by E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 11.09 mi. Glenwood Reserve Sect. 4, Forest Highway, 12 or 14 ft. roadway, 178,106 or 193,490 cu.yd. excav., etc. Datil National Forest, Catron Co., here. Noted June 14.

Calif., San Diego—Barracks, etc.—Spec. 4843—Aug. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., barracks and extension to mess hall at Training Station, here. Noted May 18.

BIDS RECEIVED

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging 5 mi. Calcasieu-Sabine Sect., Intracostal Waterway, 998,000 cu.yd. excav., from H. Reynolds, Maison Blanche Bldg., $0.1204. Noted June 21.

Ill., Great Lakes—Incinerator, etc.—Spec. 4869—Bureau Yards & Docks, Navy Dept., Wash., D. C., incinerator, chimney and fine, at Naval Training Sta., here, (1) net price for entire work, from Jones Odorless Garbage Crematory, 1317 Syndicate Trust Bldg., St. Louis, Mo., (1) $10,342 (2) $150 (3) $325 (4) $4,000.

Oregon—Road—U. S. Bureau Pub. Rds.., Post Office Bldg., Portland, grading and crushed rock surfacing. Oregon National Forest Rd., Clackamas Co., from Elliott, Scogin & Pacquet, McKay Bldg., Portland, 13,000 cu.yd. crushed rock $3.25, 32,700 ft. subgrade, per 100 ft., $3, etc., total $45,181.

California—Bridges—U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Pine Creek Bridge, three 40 ft. concrete girders and Alviso Creek Bridge, two 40 ft. girders on concrete piers and abutments, east of Santa Maria, in Santa Barbara Co., from J. Short, Los Angeles, $27,905. Noted June 27.

H. T., Pearl Harbor—Extension—Spec. 4761—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, extension for battery storage and overhaul, here, (1) work complete, from Walker & Olin, Honolulu, (1) $88,900 (210 days) (2) $88,900 (210 days) (3) $5,600 (4) $5,600 (5) add $750 (6) add $4.87. Noted June 21.

H. T., Pearl Harbor—Fire Protection System—Spec. 4827—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, fire protection system at Naval Operation Base, here, from Hawaiian Constr. Co., Honolulu, $28,860 (180 days). Noted May 31.

H. T., Pearl Harbor—Storage Facilities—Spec. 4760—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, mine storage facilities at Naval Operating Base, here, (1) work complete, from W. F. Martens, 112 Cutler Bldg., Rochester, N. Y., (1) $87,497 (310 days) (2) $86,497 (310 days) (3) add $4,100 (15 days), deduct $2,860 (5 days) (4) add $4,050 (15 days) deduct $2,810 (5 days). Noted June 7.

CONTRACTS AWARDED

N. Y., Brooklyn—Steam Main—Spec. 4856—Bureau Yards & Docks, Navy Dept., Wash., D. C., steam main at Navy Supply Depot here, to Fort Dodge, Boiler Wks., Ft. Dodge, Ia., $4,475 (90 days).

Miscellaneous

PROPOSED WORK

Dock Facilities, etc.—Middletown, Conn.—See "Industrial Works."

Heating Work, etc.—Hudson, N. Y.—Aug. 10, by W. L. Visscher, pres. Bd. Mgrs. New York State Training School for Girls, heating work, replacing underground steam and water mains, at school. S. W. Jones, Albany, state archt.; adv. this issue.

Elimination of Grade Crossings—Rochester, N. Y.—New York Central R.R. Co., Grand Central Terminal, New York City, having preliminary surveys made eliminating grade crossings at Winton and East Aves., here. $1,000,000. G. W. Kittredge, ch. engr.

Cemetery Improvements—Corry, Pa.—Pine Grove Cemetery plans improvements to cemetery, incl. brick pillars at entrance, rebuilding fence, roadways, etc. $26,000. D. W. DeRosary, Corry, archt. and engr.

Foundation—New Castle, Pa.—Aug. 1, by Scottish Rite Bodies, F.A.M., foundation for 2 story and basement, 181 x 244 ft., brick or stone, Hiland and Lincoln Sts. Total cost $1,000,000. R. G. Schmid & Co., 152 East Randolph St., Chicago, archts.

Coal Handling Plant, etc.—Cabin Creek Junction (Coalburg P. O.), **W. Va.** — Virginian Power Co., Union Trust bbgkqjj Charleston, having plans prepared coal storage basin, extension to power house, and dredging, here. H. L. Doherty & Co., 60 Wall St., New York City, engrs.

Mechanical Equipment — Sylva, N. C.—Cullohwee Normal and Industrial School plans installing boilers, engines, generators, switchboard, pipe tunnels and water facilities. H. A. Underwood, Raleigh. engr.

Bulkhead—Indian River City, Fla.—Indian River City Town Site Corp. having plans prepared 3,000 ft. bulkhead, 400 ft. out from meander line of Indian River, 600 ft. causeway to connect with artificial island of about 5 acres. $150,000. H. F. Williams, c/o Hotel Pines, Titusville, mgr.

Golf Course, etc. — Indian River City, Fla.—Indian River City Town Site Corp. having plans prepared 18 hole golf course and club house. $100,000. Marsh & Saxelbye, 415 West Bldg., Jacksonville, archts.

Pier and Yacht Basin—Sanford, Fla.—City rescinded contract for pier and yacht basin. Will readvertise. F. T. Williams, Sanford, engr. Noted July 5.

Seawalls—West Palm Beach, Fla.—Election Aug. 14, to vote on $100,000 bonds for seawalls. K. Riddle, city mgr. Noted Feb. 1.

Landing and Facade—New Orleans, La.—Bd. Port. Comrs., New Court Bldg., takes bids about Aug. 1 for Canal St. G Ferry landing and facade. Work involves ferry house and bridge approach, with double deck superstructure on rein.-con. foundation 40 x 110 ft. $150,000.

Wharf Extension—New Orleans, La.—Bd. Port Comrs., New Court Bldg., takes bids about October, extending wharf, Poland St., 400 ft. long 230 ft. wide.

Train Shed and Loading Platform—Cleveland, O.—Fisher Body Ohio Co., c/o E. S. Fisher, General Motors Bldg., Detroit, Mich., taking bids 1 story, 78 x 562 ft. brick and steel, East 140th St. and Colt Rd., here. $150,000. Private plans.

Pleasure Resort — Findlay, O. — M. L. Kelley, Mt. Vernon, plans pleasure resort at Rock Run Cave, near here. Work includes enlarging cave, etc. To exceed $25,000.

River Freight Terminal—Jeffersonville, Ind.—Inland Waterways Co., 316 West Jefferson St., Louisville, Ky., plans river freight terminal, here. $40,000. P. Calhoun, pres.

Subway — Memphis, Tenn. — City and Southern R.R., 1300 Penn Ave., Wash., D. C., plan subway at Bellevue Blvd. and Bway. $200,000. W. B. Fowler, city engr.

Operating Quarries—Missouri—Aug. 11, by State Hy. Comn., Jefferson City, operating 3 quarries in Cooper and Saline Counties. B. H. Piepmeier, ch. engr.; adv. this issue.

Stadium—Tyler, Tex.—Bd. Educ. having plans prepared athletic stadium. $30,000. Dewitt & Lemmon, Southwestern Life Bldg., Dallas, engrs. and archts.

Lumber Town, etc.—Oregon—G. H. Kelly, Spaulding Bldg., Oregon, having plans prepared by W. J. Morris, Spaulding Bldg., new lumber town, 4 mi. east of Oakridge, incl. electric driven sawmill, planing mill, dry kilns, storage sheds and yards, 8 mi. main logging road, standard gauge, 80 lb. rails, spurs and sidings, machine shop, 200 houses, stores, etc. $2,000,000.

Tract Development—Carmel, Calif.—G. G. Moore, 52 Vanderbilt Ave., New York City, had plans prepared developing 25,000 acres in Monterey Co., near here, incl. 8 mi. highway, irrigation ditches, pumping plants, buildings, etc. To exceed $300,000. P. R. Gadd, Forum Bldg., Sacramento, engr.

Park Improvements — Merced, Calif. — Plans to vote on $25,000 bonds for park improvements on Bear Creek.

Grain Elevator—Halifax, N. S.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans grain elevator, here. $200,000. K. M. Cameron, acting ch. engr. Pub. Wks.

Harbor Improvements, etc. — Ontario — Dept. Pub. Wks., Parliament Buildings, Ottawa, plans harbor improvements at Port Stanley $50,000, Toronto $600,000, Ft. William $192,000; wharf extension at Pelee Island $31,000; wharf repairs at Windsor $3,500, Port Burwell $2,500. K. M. Cameron, acting ch. engr.

Power Line Extension, etc.—Ontario—Ontario Hydro Power Comn., London, preparing plans extending power and lighting lines from St. Jacobs to Linwood. $36,000. A. Beck, chn.

Power Lines—Ontario—Ontario Hydro Comn., c/o A. Beck, chn., London, having plans prepared 15 mi. power and light distributing lines to Sombra and Port Lambton. $48,000. Private plans.

Oil Tanks—Oshawa, Ont.—Imperial Oil Co., Ltd., Imperial Oil Bldg., Toronto, plans concrete and steel storage oil tanks, here. $40,000. Private plans.

Elevator Extension—Port Colborne, Ont.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans elevator extension, here. $350,000. K. M. Cameron, acting ch. engr. Pub. Wks.

Power Distribution—Toronto, Ont.—York Twp. voted $200,000 bonds for extending hydro-electric power distribution system throughout township. Work under supervision of Hydroelectric Power Comn., 190 University Ave. W. A. Clarke, 40 Jarvis St., clk.

Pier—Hamilton Beach, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, voted $50,000 bonds for pier, (mostly wood construction), here. K. M. Cameron, ch. engr.

Wading Pools—Windsor, Ont.—City plans 6 concrete wading pools, one in Clay Park, Assumption School, McDougall St., Dougall Rd. Park, Church St. and West end of city. $50,000. M. E. Brian, City Hall, engr.

Grain Elevator—Edmonton, Alta.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans grain elevator, here. $200,000. K. M. Cameron, acting ch. engr. Pub. Wks.

BIDS DESIRED

Piers—New York—See "Bridges."

Heating Work—Syracuse, N. Y.—Aug. 7, by G. R. Lunn, lieutenant governor, pres. State Fair Comn., 428 South Salina St., heating work for coliseum, New York State Fair Grounds. S. W. Jones, Albany, state archt.; adv. this issue.

Concrete Mixer, etc.—Trenton, N. J.—Aug. 3, by City Comn., one No. 7 Ramsome improved Bantam concrete mixer, 10 cu.ft. capacity, and 75 tons pulverized bauxite, for Water Dept. A. Bugbee, City Hall, engr.

Rails, Pipe, etc.—Miami, Fla.—City receiving bids for 7 mi. street railway rails, 8 mi. 30 in. c.i. or wood stave pipe, and steel sheet piling for 3,000 ft. sea wall. C. L. Huddleston, dir. finance; adv. this issue.

Mechanical and Electrical Equipment—Greensboro, N. C.—Aug. 1, by Building Comm. Agricultural and Technical College,

Miscellaneous (Continued)

plumbing, heating and electrical equipment in new dormitory and refectory buildings. H. Barton, Greensboro, archt.

Transmission Line—Iron Mountain, Mich.—Michigan Iron, Land & Lumber Co. taking bids high voltage transmission line from here to factory on Menominee River. $25,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs. Noted July 5.

Tunnels—Abilene, Tex.—McMurray College taking bids concrete or brick tunnels for heating plant. $25,000-$30,000. D. Castle & Co., Abilene, engrs.

Pipe, etc.—Sweetwater, Tex.—W. H. Bartlett, city secy., taking bids 2½ mi. 6 in. Class B, c.i. pipe, sixty-one 6 in. fire hydrant, etc.

Tunnel—Colorado — Aug. 25, by Moffat Tunnel Comn., 1731 Arapahoe St., Denver, 6.04 mi. tunnel on line of Denver & Salt Lake Ry., 50 mi. from Denver, 24 ft. high, 16 ft. wide, paralleled by pioneer or water tunnel, 8 x 8 ft. R. H. Keays, ch. engr. Noted July 6, 1922 under Denver.

Cement, etc.—San Diego, Calif.—Aug. 6, by San Diego Co., 20,500 bbl. cement and 16,000 tons crushed rock to be used on portion of Mission Rd. 1-C. J. B. McLees, co. clk.

Ice Arena—London, Ont.—Aug. 11, by Watt & Blackwell, archts., Bank of Toronto, 100 x 242 ft. ice arena, Bathurst St., for London Arena Co. $300,000. J. Pringle, pres. Prices wanted on piping and steel work.

BIDS RECEIVED

Lignim Binder—Trenton, N. J.—State Hy. Dept., 574,230 gal. lignim binder for surface treatment of gravel roads, from M. R. Young, 435 East State St., $56,275. Noted July 5.

Electrolier System—Fresno, Calif.—Furnishing and installing 155 electroliers in portions of Kerchkoff Ave., Huntington Blvd., etc., from Robinson Electric Co., 1162 Bway., $30,900. Noted July 12.

Revetment—Sacramento, Calif.—City, 4 in. concrete revetment on slope of Sacramento River, from Tieslau Bros., 2814 Grove St., Berkeley, $92,881. Noted July 12.

Cement—San Diego, Calif.—San Diego Co., July 16, 15,000 bbl. cement for highway work, from California Portland Cement Co., Timken Bldg., and Spreckels Bros. Commercial Co., Santa Fe Wharf, both $3.25 per bbl. f.o.b. plant.

CONTRACTS AWARDED

Foundation—Cambridge, Wis.—See "Industrial Works."

Elevation of Tracks — Chicago, Ill. — Pennsylvania R.R. System, Pennsylvania Bldg., filling and track work in connection with elevation of tracks at Garfield Blvd., to J. G. Kenan Co., 4300 Euclid Bldg., Cleveland, O.

Tanks—Mexia, Tex.—Sinclair Crude Oil Purchasing Co., 10 additional 80,000 bbl. tanks, here, to Chicago Bridge & Iron Wks., 30 Church St., New York City. Noted July 5.

Grain Elevator—Vancouver, B. C.—Harbor Comrs., 712 Pender St., W., superstructure and foundation for elevator No. 2, rein.-con., to Northern Constr. Co., 736 Granville St., $1,450,000, and $150,000 respectively. Noted May 24.

Cement—San Diego, Calif.—W. H. Cameron, city purch. agt., 18,600 bbl. cement for use in construction of wharf for Municipal Pier 2, f.o.b. San Diego, to Fenton-Parker Material Co., 168 10th St., J. S. Schirm Commercial Co., 268 4th St., and W. J. Bailey Co., 708 West G St., all bid $3.76 per bbl. Each contract involves 6,200 bbl.

Pier—San Diego, Calif. — City Council, for Contr. B, on Municipal Pier 2, comprising concrete apron wharf for mole type pier, to F. H. Doran, 3735 7th St., $292,700. Noted June 28.

Elevator — Vancouver, B. C. — Harbor Comrs., 712 Pender St., W., superstructure of addition to elevator No. 1, rein.-con., to Pacific Constr. Co., Ltd., foot Salisbury Dr., $350,000.

Grain Elevator—Tiffin, Ont.—Canadian Natl. R.R. Co., 230 St. James St., Montreal, Que., 2,500,000 bu. elevator, here, to Fegles Constr. Co., Ft. William.

OFFICIAL PROPOSALS

Rails, Pipe Piling

Miami, Fla.

The City of Miami is in immediate need of:

Approximately seven miles of street railway rails with necessary connections and spikes.

Eight miles of 30-in. cast iron or wood stave water pipe suitable for 100 ft. head.

Steel sheet piling for 3,000 ft. sea wall.

This material will be purchased by the undersigned at the lowest price obtainable. Bidders should furnish descriptive pamphlets with prices on the different makes.

C. L. HUDDLESTON,
Director of Finance.

Bids: Aug. 6.

Grading, Curbing and Paving

Highland Park, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Highland Park, N. J., at the Council Chambers, in the Masonic Building, (Second Floor) at the Northeast corner of Raritan Avenue and Fourth Avenue, Highland Park, N. J., on Monday August 6, 1923, at 8 o'clock P.M., ordinance time, (7 P.M. Eastern Standard time) for the grading, curbing and paving of portions of

Harrison Avenue,
Walter Avenue,
Harper Street,
Harper Place,
S. Fourth Avenue.

The work will in general consist of about.

4,527	Cu. Yds. of Excavation.
11,422	Sq. Yds. of One Course Reinforced Cement Concrete Pavement, 6" in depth at the sides, and 8" in depth at the center.
4,965	Lin. Ft. of concrete Curbing, set integral with the pavement.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Raymond P. Wilson, Civil Engineer, 46 Paterson Street, New Brunswick, N. J., which said plans, profiles and specifications have been adopted by the Borough Council of the Borough of Highland Park, and are now on file at the office of the Borough Collector, No. 10 North Second Avenue, Highland Park, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Raymond P. Wilson, Civil Engr., by depositing five dollars ($5.00) which sum will be refunded on return of the plans, profiles and specification within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Engineer.

Each bidder must accompany his bid by a certified check for four thousand dollars, ($4,000) payable unconditionally to the Collector of the Borough of Highland Park, which said check must be presented with the bid as a guarantee that the bidder will, if the contract be awarded to him, within ten days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract. Each bid must be in a sealed envelope and marked "Proposal for concrete pavements." The successful bidder will be required to furnish a Surety Company Bond to the Borough of Highland Park in the full amount of the contract price, for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Highland Park as liquidated damages.

The Borough of Highland Park shall reserve the right to reject any or all bids.

All of said work shall be completed within sixty working days.

Bids: August 8.

Sludge Digestion Tanks and Drying Beds

Baltimore, Md.

Sealed bids or proposals, in duplicate, addressed to the Board of Awards for constructing Sludge Digestion Tanks Nos. 24, 25 and 26 and Sludge Drying Beds No. 9 and 10 at the Baltimore Sewage Treatment Works, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11:00 A.M., Wednesday, August 8th, 1923, at which time and place they will be publicly opened by the Board of Awards and read.

Plans and specifications may be obtained at the office of the Highways Engineer, Room 8, City Hall, Baltimore, Md. A charge of $15.00 will be made for each set of plans and specifications, which amount will be refunded if the plans are returned in case a bid is submitted or the plans and specifications are returned in case no bid is submitted, to the office of the Highways Engineer, in good condition before 11:00 o'clock A.M. on the date set for opening bids.

The approximate quantities involved are as follows:

Excavation	18,500	cu.yds.
Rolled Embankment	8,800	cu.yds.
Concrete Masonry	4,655	cu.yds.
Reinforcing Bars	450,000	lbs.
Sand for Sludge Beds....	1,100	cu.yds.
Four (4) Inch Drain Tile..	4,500	lin.ft.
Sluice Gates and Gate Valves	83	
Cast Iron Pipe..........	87	tons
Industrial Railroad Track	910	lin.ft.
Gravel for Sludge Beds..	3,000	cu.yds.

Bond in the amount of the contract price will be required of the successful bidder.

The Board of Awards reserves the right to reject any and all bids.

Certified check of the bidder on a clearing-house bank, made payable to the Mayor and City Council of Baltimore in the amount of Ten Thousand Dolars ($10,000) must accompany each bid.

Approved:

BERNARD L. CROZIER,
Highways Engineer.
STEUART PURCELL,
Chief Engineer.

HOWARD W. JACKSON,
President, Board of Awards.

Approved:
FRANK DRISCOLL,
Asst. City Solicitor.

Bids: July 31.

Bridges

Baltimore, Md.

SEALED PROPOSALS for building the following bridges:

Frederick Co. Cont. F-65—Reinforced concrete arch bridge over Toms Creek near Emmitsburg on the road from Frederick to Emmitsburg, consisting of a single span 80′ 0″ Clear and a 24′ 0″ clear roadway.

Garrett Co. Cont. G-26—Reinforced concrete arch bridge over Youghiogheny River near Crellin on the road from Oakland to Hutton.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of July, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of July, 1923.

JOHN N. MACKALL,
Chairman.
L. H. STEUART,
Secretary.

Bids: Aug. 15.

Centrifugal Pumps

Wellsburg, W. Va.

The City Water Board of Wellsburg, West Virginia, will receive bids up to 7:30 P.M., Eastern Standard Time, August 15th, 1923, for the furnishing and installation of a two million gallon motor driven centrifugal low-lift pump and a two million gallon motor driven centrifugal high-lift pump with all necessary appurtenances, as specified by the engineers. Also the structural work in connection with the division and lining of a dry well, which consists principally of approximately 100 cubic yards of reinforced concrete. The piping incidental to the installation will also be included in the bid. The work will be divided into two parts; that of the mechanical features and that of the structural features and contractors may bid upon either one or both parts.

For full particulars, bidding blanks, specifications and other data apply to the engineers, Hudson & Myron, 808 Wabash Building, after July 25th, 1923.

The City Water Board reserves the right to reject any or all bids, or any part of any or all bids.

E. A. SHEETS, President.
J. F. THOMPSON, Secretary.

HUDSON & MYRON, Engineers,
808 Wabash Building,
Pittsburgh, Pa.

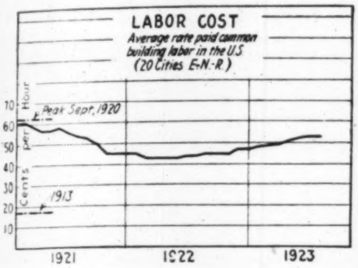
CONSTRUCTION NEWS

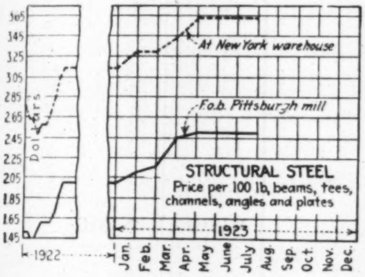
Engineering News-Record, August 2, 1923

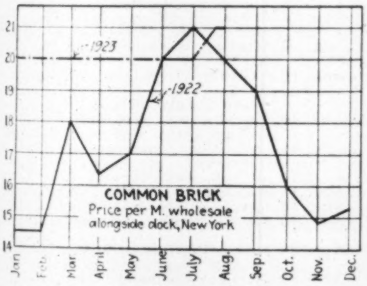
The Construction Barometer

Price Trend Toward Stabilization—Some Declines

THE undertone of the market appears to be steadier, particularly in steel and cement. The few changes occurring in these two materials in the last month have been upward. Common brick, in those districts affected by shortage, has developed a strong upward trend. Further recessions in pig-iron and lumber prices marked the first three weeks of July. During the last week of the month, however, these, together with most other materials, showed firmer tendencies. The average common labor rate for the nation has not changed since May. Of twenty-one cities reporting regularly to *E. N.-R.*, only two, New Orleans and St. Louis, show strikes or wage demands on the part of the skilled building crafts.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
July 12	$26,812,000	$27,135,000	$53,947,000
July 19	14,514,000	18,552,000	33,066,000
July 26	23,772,000	13,340,000	37,112,000
3 Weeks	$65,098,000	$59,027,000	$124,125,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

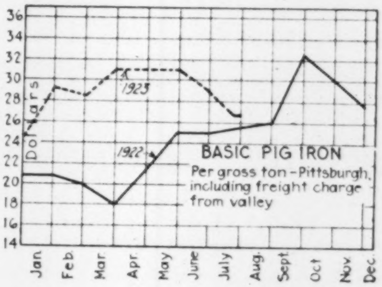
Week Ended	No.	Public Work	No.	Private Work
July 12	10	$2,409,000	32	$20,619,000
July 19	12	4,681,000	34	13,523,000
July 26	13	3,808,000	18	8,285,000
3 weeks	35	$10,898,000	84	$42,427,000

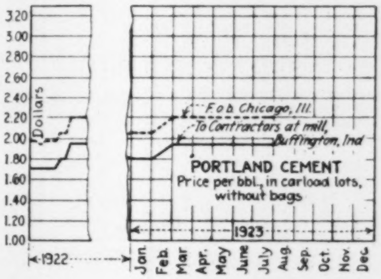
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

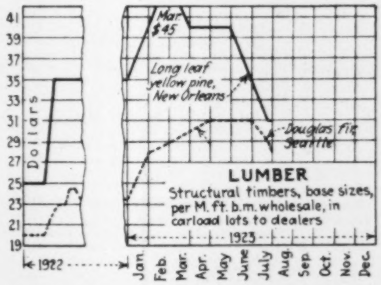
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
July 12	32	161	73	38	42
July 19	30	223	86	37	42
July 26	33	261	95	50	41

BASE PRICES UNCHANGED IN MONTH

	Quoted On Aug. 2, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 6	Stone Harbor, N. J.	July 19
Aug. 6	Flandreau, S. D.	July 26
Aug. 6	Cumberland, Md.	Aug. 2
Aug. 7	Bedford, O.	July 26
Aug. 7	St. Paul, Minn.	Aug. 2
Aug. 7	New London, Wis.	Aug. 2
Aug. 10	Cleveland, O.	July 26
	Adv. July 26 and Aug. 2.	
Aug. 10	Ralston, Pa.	Aug. 2
Aug. 10	Cleveland, O.	Aug. 2
Aug. 10	Waupun, Wis.	Aug. 2
Aug. 10	New York	Aug. 2
Aug. 10	Mt. Pleasant, N. Y.	Aug. 2
Aug. 10	Brooklyn, N. Y.	Aug. 2
Aug. 14	Douglas, Wyo.	July 26
Aug. 14	Maple Shade, N. J.	Aug. 2
	Adv. Aug. 2.	
Aug. 14	New York, N. Y.	Aug. 2
	Adv. July 26 and Aug. 2.	
Aug. 15	Jennings Lodge, Ore	July 26
Aug. 15	Memphis, Tenn.	July 26
Aug. 15	Wellsburg, W. Va.	July 26
Aug. 16	Evanston, Ill.	July 19
Aug. 21	Detroit, Mich.	July 26
Aug. 22	Andrews, S. C.	July 26
Aug. 22	Joy, Ill.	Aug. 2
	Adv. Aug. 2.	
Aug. 22	Central Islip, N. Y.	Aug. 2
	Adv. Aug. 2.	
Aug. 26	Pennington, N. J.	July 26
Aug. 27	San Diego, Calif.	July 26
Aug. 29	Watertown, S. D.	July 26
	Adv. July 26 and Aug. 2.	

SEWERS

Bids Close		See Eng. News-Record
Aug. 6	Euclid, O.	July 26
Aug. 6	Wichita, Kan.	Aug. 2
Aug. 7	Rhinelander, Wis.	July 19
Aug. 7	Bedford, O.	July 26
Aug. 7	Ashland, Ky.	Aug. 2
Aug. 7	Canton, O.	Aug. 2
Aug. 8	Baltimore, Md.	July 26
	Adv. July 26 and Aug. 2.	
Aug. 8	Richmond Heights (St. Louis P. O.), Mo.	Aug. 2
Aug. 8	Brooklyn, N. Y.	Aug. 2
Aug. 9	Marshfield, Wis.	Aug. 2
Aug. 9	Tracy, Calif.	Aug. 2
Aug. 9	New York, N. Y.	Aug. 2
Aug. 9	Long Island City, N. Y.	Aug. 2
Aug. 10	Millville, N. J	July 26
Aug. 10	Harrison, N. Y.	Aug. 2
	Adv. Aug. 2.	
Aug. 10	New York	Aug. 2
Aug. 13	Arvada, Colo.	July 12
Aug. 13	Pensauken (Camden P. O.), N. J.	July 19
Aug. 13	Leonia, N. J.	Aug. 2
	Adv. July 26 and Aug. 2.	
Aug. 16	Haddonfield, N. J.	July 26
Aug. 19	Alliance, O.	Aug. 2
Aug. 21	Toronto, Ont.	Aug. 2
Aug. 22	Andrews, S. C.	July 26
Aug. 22	High Point, N. C.	Aug. 2
	Adv. Aug. 2.	
Aug. 24	Spencer, W. Va.	July 26

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Aug. 28	St. Louis, Mo.	Aug. 2

BRIDGES

Bids Close		See Eng. News-Record
Aug. 3	New York	July 26
Aug. 6	California	July 19
Aug. 6	North Adams, Mass.	July 26
Aug. 6	Daytona, Fla.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 7	Beaumont, Tex.	July 5
Aug. 7	Forrestville, Conn.	July 26
Aug. 7	Alcova, Wyo.	Aug. 2
Aug. 8	Ventura, Calif.	July 26
Aug. 8	Illinois	Aug. 2
Aug. 9	Charleston, Miss.	Aug. 2
Aug. 10	Murfreesboro, Tenn.	July 19
Aug. 13	New Jersey Adv. Aug. 2.	July 26
Aug. 14	Charleston, S. C.	July 5
Aug. 14	Baton Rouge, La.	July 26
Aug. 14	Annapolis, Md. Adv. Aug. 2.	Aug. 2
Aug. 15	Phila., Pa. Adv. July 19 and Aug. 2.	July 5
Aug. 16	Effingham, S. C.	Aug. 2
Aug. 17	Allenhurst, Fla.	July 26
Aug. 17	Clendenin, W Va. Adv. July 26 and Aug. 2.	July 26
Aug. 17	Marion, S. C.	Aug. 2
Aug. 20	Minneapolis, Minn.	Aug. 2
Aug. 23	Clearwater, Fla.	July 26
Sept. 11	New Jersey Adv. July 26 and Aug. 2.	July 26
Nov. 30	Sydney, Australia Adv. Apr. 19, May 3, June 7, July 5 and Aug. 2.	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Aug. 6	New York, N. Y.	Aug. 2
Aug. 8	Sioux City, Ia.	July 19
Aug. 8	Oroville, Calif.	Aug. 2
Aug. 8	Portage, Wis.	Aug. 2
Aug. 15	Minneapolis, Minn.	Aug. 2
Aug. 15	New Jersey	Aug. 2

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 3	Altoona, Pa.	Aug. 2
Aug. 4	Cleveland, O.	Aug. 2
Aug. 6	Sayre, Okla.	July 12
Aug. 6	St. Paul, Minn.	July 19
Aug. 6	Park Ridge, N. J. Adv. July 26 and Aug. 2.	July 26
Aug. 6	Cleveland, O.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 6	Belzoni, Miss.	July 26
Aug. 6	Lewistown, Pa.	July 26
Aug. 6	New Jersey Adv. July 26 and Aug. 2.	July 26
Aug. 6	California	July 26
Aug. 6	St. Paul, Minn.	July 26
Aug. 6	De Land, Fla.	July 26
Aug. 6	Michigan	July 26
Aug. 6	New York Adv. Aug. 2.	Aug. 2
Aug. 6	Cameron, W. Va.	Aug. 2
Aug. 6	Dayton, O.	Aug. 2
Aug. 6	Portage, Pa.	Aug. 2
Aug. 6	Highland Park, N. J. Adv. July 26 and Aug. 2.	Aug. 2
Aug. 6	Bloomfield, N. J.	Aug. 2
Aug. 6	Valley City, N. D.	Aug. 2
Aug. 6	St. Paul, Minn.	Aug. 2
Aug. 6	Milwaukee, Wis.	Aug. 2
Aug. 7	St. Louis, Mo.	July 12
Aug. 7	Pennsylvania	July 19
Aug. 7	Beaumont, Tex.	July 19
Aug. 7	Wapallo, Ia.	July 26
Aug. 7	Quebec	July 26
Aug. 7	Rayville, La.	July 26
Aug. 7	Louisiana	July 26
Aug. 7	Gulfport, Miss.	July 26
Aug. 7	Baton Rouge, La. Adv. July 26 and Aug. 2.	July 26
Aug. 7	Michigan	July 26
Aug. 7	North Milwaukee, Wis.	July 26
Aug. 7	Washington	July 26
Aug. 7	Mississippi	Aug. 2
Aug. 7	Michigan	Aug. 2
Aug. 7	Decatur, Tex.	Aug. 2
Aug. 7	Maryland Adv. Aug. 2.	Aug. 2
Aug. 7	Trenton, N. J.	Aug. 2
Aug. 7	Wyoming	Aug. 2
Aug. 7	Ft. Worth, Tex.	Aug. 2
Aug. 7	Linton, Ind.	Aug. 2
Aug. 8	Pennsylvania	July 19
Aug. 8	Freehold N. J. Adv. July 26 and Aug. 2.	July 26
Aug. 8	Mays Landing, N. J.	July 26
Aug. 8	Florida	July 26
Aug. 8	Dover, Del.	July 26
Aug. 8	Knoxville, Ia.	July 26
Aug. 8	Michigan	July 26
Aug. 8	Richmond Heights (St. Louis P. O.), Mo.	Aug. 2
Aug. 8	Illinois	Aug. 2
Aug. 8	Cleveland, O.	Aug. 2
Aug. 8	Michigan	Aug. 2
Aug. 8	Peru, Ind.	Aug. 2
Aug. 8	Montreal, Que.	Aug. 2
Aug. 8	Martinez, Calif.	Aug. 2
Aug. 8	Irvington (Newark P. O.), N. J.	Aug. 2
Aug. 9	Michigan	July 26
Aug. 9	Gulfport, Miss.	July 26
Aug. 9	Walterboro, S. C.	July 26
Aug. 9	Michigan	Aug. 2
Aug. 9	Logansport, Ind.	Aug. 2
Aug. 9	New York, N. Y.	Aug. 2
Aug. 10	Utah	July 26
Aug. 10	New York Adv. July 26 and Aug. 2.	July 26
Aug. 10	Tennessee	July 26
Aug. 10	Bennington, Kan.	July 26
Aug. 10	Greensburg, Pa.	July 26
Aug. 10	Cincinnati, O.	Aug. 2
Aug. 10	Michigan	Aug. 2
Aug. 10	Sayre, Okla.	Aug. 2
Aug. 10	Indiana	Aug. 2
Aug. 11	Grenada, Miss.	July 19
Aug. 11	Grenada, Miss.	Aug. 2
Aug. 13	Akron, O.	July 26
Aug. 13	California	July 26
Aug. 13	White Bear (White Bear Lake P. O.), Minn.	July 26
Aug. 13	Kansas City, Kan.	July 26
Aug. 13	Forest, Miss.	Aug. 2
Aug. 14	St. Louis, Mo.	July 19
Aug. 14	Fayetteville, W. Va. Adv. July 19 to Aug. 2.	July 19
Aug. 14	Louisiana	July 26
Aug. 14	Bluefield, W. Va Adv. July 26 and Aug. 2.	July 26
Aug. 14	Clarksburg, W. Va.	July 26
Aug. 14	Meridian, Miss.	Aug. 2
Aug. 14	Maryland Adv. Aug. 2.	Aug. 2
Aug. 15	Ripley, W. Va.	Aug. 2
Aug. 15	Birmingham, Ala.	Aug. 2
Aug. 18	Abbeville, La.	Aug. 2
Aug. 21	Virginia Adv. Aug. 2.	Aug. 2
Aug. 23	Clearwater, Fla.	July 26
Aug. 23	Yakima, Wash.	July 26
Aug. 27	Bessemer, Ala.	July 26
Aug. 27	Iola, Kan.	Aug. 2
Aug. 28	St. Louis, Mo.	Aug. 2
Aug. 29	Kentucky	Aug. 2

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Aug. 6	East View, N. Y	July 26
Aug. 6	Forest City, Ark.	Aug. 2

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 6	Syracuse, N. Y.	July 19
Aug. 6	Scotia, N. Y.	July 26
Aug. 6	Scranton, Pa.	July 26
Aug. 6	Norwood (Cincinnati P. O.), O.	Aug. 2
Aug. 6	Milwaukee, Wis.	Aug. 2
Aug. 7	Corsicana, Tex.	July 12
Aug. 7	Alpena, Mich.	July 26
Aug. 8	Arkansas City, Kan.	Aug. 2
Aug. 8	Wash., D. C. Adv. Aug. 2.	Aug. 2
Aug. 8	Detroit, Mich.	Aug. 2
Aug. 8	Kew Gardens (Jamaica P. O.), N. Y.	Aug. 2
Aug. 9	Granville, O.	July 19
Aug. 9	Redondo, Calif.	Aug. 2
Aug. 10	New Orleans, La	July 19
Aug. 10	Union Grove, Wis.	Aug. 2
Aug. 10	Portsmouth, O.	Aug. 2
Aug. 11	Centerville, Calif.	July 19
Aug. 13	Zanesville, O.	July 19
Aug. 13	Cincinnati, O.	Aug. 2
Aug. 14	Nashville, Tenn.	July 19
Aug. 14	Brooklyn, N. Y.	July 26
Aug. 15	Eagle Lake, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	July 19
Aug. 15	Dallas, Tex.	July 12
Aug. 15	Dallas, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	Aug. 2
Aug. 15	Los Angeles, Calif.	Aug. 2
Aug. 15	Louisville, Ky.	Aug. 2
Aug. 15	St. Louis, Mo.	Aug. 2
Aug. 16	Nashville, Tenn.	July 19
Aug. 20	Williamstown, Mass.	July 26
Aug 20	Ft. Worth, Tex.	July 26
Aug. 21	Hartford, Conn.	July 19
Aug. 22	Cedar Rapids, Ia.	Aug. 2
Aug. 23	Harrisburg, Pa. Adv. July 26 and Aug. 2.	Aug. 2
Aug. 28	Akron, O.	Aug. 2
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 15	Dallas, Tex.	July 26
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 3	Dredging, etc.—Buffalo, N. Y. Adv. July 19 to Aug. 2.	July 26
Aug. 6	Extension—Spartanburg, S. C.	July 12
Aug. 6	Removal—Seattle, Wash.	July 19
Aug. 6	Road—New Mexico	July 26
Aug. 7	Water System, Neenah, Wis.	July 12
Aug. 7	Driveway—Fond du Lac, Wis.	July 12
Aug. 7	Fire Protection System—Wash., D. C.	Aug. 2
Aug. 8	Buildings—St. Juliens Creek, Va.	July 12
Aug. 8	Remodeling—Concord, N. H.	July 12
Aug. 8	Mailing Shed—Ft. Scott, Kan.	July 19
Aug. 8	Water Softening Plant — Annapolis, Md.	July 26
Aug. 8	Reroofing—Chelsea, Mass.	July 26
Aug. 8	Bridge—Alaska	Aug. 2
Aug. 9	Lookout — Port Huron, Mich.	July 19
Aug. 9	Dredging — New York, N. Y. Adv. Aug. 2.	Aug. 2
Aug. 10	Removal of Pile Protection —Chicago, Ill. Adv. July 19 to Aug. 2.	July 19
Aug. 10	Lookout—Wheeling, W. Va.	July 19
Aug. 13	Dredging—Baltimore, Md. Adv. July 19 to Aug. 2.	July 12
Aug. 13	Stamp Cages—New Orleans, La.	July 19
Aug. 14	Road—Zion National Park (Springdale P. O.), Utah	July 19
Aug. 14	Buildings—Knoxville, Ia. Adv. July 26 and Aug. 2.	July 19
Aug. 15	Water Supply — Chelsea, N. Y.	July 26
Aug. 15	Barracks, etc.—San Diego, Calif.	July 26
Aug. 15	Road—Arizona	Aug. 2
Aug. 15	Riprap Stone—Baltimore, Md.	Aug. 2
Aug. 16	Extension—Evanston, Ill.	July 26
Aug. 16	Stone — Harbor Beach, Mich.	Aug. 2
Aug. 17	Dredging—Massachusetts Adv. July 19 to Aug. 2.	July 26
Aug. 20	Shed, etc.—Wash., D. C.	Aug. 2
Aug. 22	Dredging—Norwalk, Conn. Adv. July 26 and Aug. 2.	July 26
Aug. 22	Sub Post Office—Memphis, Tenn.	July 26
Aug. 23	Lock—Pittsburgh, Pa. Adv. July 26 and Aug. 2.	Aug. 2
Aug. 28	Superstructure—Ludington, Mich. Adv. July 19 to Aug. 2.	July 26
Aug. 30	Dredging—Boston, Mass. Adv. Aug. 2.	Aug. 2
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19
Sept. 12	Bins and Trestle — Pearl Harbor, H. T.	Aug. 2

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 3	Concrete Mixer, etc.—Trenton, N. J.	July 26
Aug. 6	Cement, etc.—San Diego, Calif.	July 26
Aug. 6	Conduits—Montreal, Que.	Aug. 2
Aug. 6	Creosoted Piling, etc. — Mayersville, Miss.)	Aug. 2
Aug. 7	Heating Work—Syracuse, N. Y.	July 26
Aug. 10	Heating Work, etc.—Hudson, N. Y. Adv. July 26 and Aug. 2.	July 26
Aug. 10	Heating and Ventilating, etc —New York, N. Y.	Aug. 2
Aug. 11	Operating Quarries — Missouri Adv. July 26 and Aug. 2.	July 26
Aug. 11	Ice Arena—London, Ont.	July 26
Aug. 14	Levee—Clarksdale, Miss.	Aug. 2
Aug. 15	Levee—Bridge Junction, Ark.	Aug. 2
Aug. 22	Pier—Charleston, S. C. Adv. Aug. 2.	Aug. 2
Aug. 25	Tunnel—Colorado	July 26
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. C., Elizabeth City — See "Industrial Works."

Fla., Daytona—Plans election to vote on $100,000 bonds improving waterworks and extending distribution system. R. P. Wilson, acting city mgr.

Tenn., Nashville—Plans new filter plant unit, force main from reservoir to pumping station and new 600 hp. steam boiler for plant. G. Reyer, supt. waterworks.

Ark., Marianna—Making plans reconstructing pumping plant, mains, sewer improvements, etc. Plans to issue $200,000

Waterworks (Continued)

bonds. T. H. Allen, 510 Bank of Commerce, Memphis, Tenn., engrs.

O., Barberton—Plans to sell $275,000 bonds for water plant, Wolf Run. W. R. Alcorn, City Bldg., engr. G. Clark, Toledo, consult. engr.

Wis., Athens—Plans water and sewerage systems, incl. water supply, pumping equipment, water and sewer mains, sewage disposal plant. $75,000. Engineer not selected.

Wyo., Casper—Aug. 7 to vote on $200,000 bonds for waterworks incl. 1 m.g. reservoir $75,000, mains, etc. $125,000. F. S. Knittle, city engr. Noted June 7.

Mo., Burlington Junction—Election soon to vote on $50,000 bonds for pumping plant and distributing system. E. T. Archer & Co., New England Bldg., Kansas City, engrs.

Tex., Brenham—Plans sedimentation basins and filtration plant $30,000-$35,000. L. H. Earnest, city engr.

Ia., Morning Sun—Plans waterworks improvements. $15,000. W. B. Garvin, clk.

Okla., Cushing—Having plans prepared reservoir, pipe lines, purification plant and pumping machinery. $250,000. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted May 17.

Colo., Denver—Plans to install 10 mg. steam turbine driven centrifugal pump at Capitol Hill station, $14,210, 8 mg. electric motor driven centrifugal pump at Ashland Ave. station $4,820, one 4 mg. electric motor driven centrifugal pump at University Park pumping station, $2,945. A. K. Vickery, city engr.

Ont., Durham—Will vote on $40,000 bonds for waterworks. Prices wanted on standpipe, pumps and mains. W. B. Vollett clk.

BIDS DESIRED

New York—Aug. 10, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Queens Blvd., Bway., 8th St. and Newton Rd., Jackson, Trimble and Woodside Aves., in Boro of Queens.

N. Y., Brooklyn—Aug. 10, by N. J. Hayes, comr. Water Supply & Electricity, Municipal Bldg., New York, mains in Ocean Parkway, Ave. P and 65th St., here.

N. Y., Central Islip—Aug. 22, by State Hospital Comn., Albany, sanitary work—deep well, at Central Islip State Hospital here. S. W. Jones, Albany, state archt., adv. this issue.

N. Y., Mount Pleasant—Aug. 10, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, removing old Croton Aqueduct arch over Bway. near North Tarrytown, here, and installing inverted steel syphon, venturi meter and appurtenances.

N. Y., New York—Aug. 14, by Bd. Water Supply, Municipal Bldg., making test borings in Boros of Bronx, Queens and Brooklyn, New York City, city of Yonkers, Westchester Co., Contr. 214. G. J. Gillespie, pres.; adv. this issue.

N. J., Maple Shade—Aug. 14, by Com. Chester Twp., steel stand pipe and foundation. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

Pa., Ralston—Aug. 10, by Ralston Water & Water Power Co., rein.-con. reservoir, 100 m.g. capacity, and 4,500 lin.ft. 4-6 in. c.i. mains. About $40,000. M. H. Krause, Susquehanna Trust Bldg., Williamsport, engr.

Md., Cumberland—Aug. 6, by Mayor and City Council at office of City Clerk, laying 8,260 lin.ft. 36 in. concrete pipe, 9 valve chambers, 43 tons c.i. specials and connections, 8 blow-off connections. R. L. Rizer, city engr.

O., Cleveland—Aug. 4, by Cuyahoga Co., 24,730 ft. 8 and 12 in. c.i. mains in Pleasant Valley and Broadview Rds., Impvt. 41. F. R. Lander, Court House, engr.

O., Cleveland—Aug. 10, 973 tons c.i. mains in Superior Ave., 8,000 cu.yd. excav., Contr. 28. $125,000. Former bids rejected. G. W. Hamlin, City Hall, engr. Noted July 26.

Ill., Joy—Aug. 22, complete water distribution system. Caldwell Eng. Co., Jacksonville, engrs.; adv. this issue.

Wis., New London—Aug. 7, by C. J. Thompson, city clk., rein.-con. reservoir, 200,000 gal. capacity. $20,000. H. R. Albert, c/o Court House, Green Bay, engr.

Wis., Waupun—Aug. 10, by Water & Light Com., 200,000 gal. rein.-con. circular reservoir, 58 ft. diam., 8 ft. deep, incl. piping and manholes. Kaudy & Dick Eng. Co., Ripon, engrs.

Minn., St. Paul—Aug. 7, by H. W. Austin, city purch. agt., 1 triplex portable pump, gasoline engine driven, for Water Dept.; 499,736 tons reinforcing, 20,000 bbl. portland cement for Mississippi River conduit. G. M. Shepard, city engr.

BIDS RECEIVED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York July 24, mains in Rockaway Blvd., from S. Gallucci, Corona, $396,000. Noted July 19.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ave. D, Huntley Dr., Bradford Pl., Newton, 58th, and head of Vleigh Rds., Woolsey, 12th, Gardiner, Hammel, Maurice, 12th, 32nd, 34th and 59th Aves., Chauncey, Crescent, Howland, Merchant, Sunswick, 15th, 118th, 164th, 165th, 189th and 206th Sts., here, from J. A. Gregory, Inc., 351 East 124th St., New York, $27,649. Noted July 19.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., July 24, mains in Madison and Pinehurst Aves., West 44th, 174th, 175th and 183rd Sts., from Knight & Demicco, Inc., 448 East Tremont Ave., $19,863. Noted July 19.

O., Cleveland—Cuyahoga Co., 4,800 ft. of 12 in. c.i. mains in Sect. B of Impvt. 20 of Co. Sewer Dist., from Langahan Constr. Co., Marshall Bldg., $28,055.

O., Cleveland—For 2,390 tons c.i. mains for West Side 1st High Service Main. Sect. 1, 11,500 cu. yd. excav., from Division of Water, from D. Lowensohn, Fairchild Ave., $268,623. Noted July 12.

Wash., Seattle—Watermains in 35th Ave. S. W., 2,940 ft. 20 in., 64 ft. 16 in. and 24 ft. 8 in. pipe, from Tomano & Co., Seattle, $28,698. Engrs. est. $30,573.

CONTRACTS AWARDED

O., Cleveland—Piping for main pumping units at Fairmount Pumping Station, to Natl. Valve & Mfg. Co., 3101 Liberty Ave., Pittsburgh, Pa., $66,976. Noted July 26.

O., Lyndhurst (Cleveland Heights, P. O.)—For 8,080 ft. 6 and 8 in. c. i. mains in Churchill and Winchester Rds., to A. Marra Co., Ulmer Bldg., Cleveland, $21,364; 11,610 ft. 6 and 8 in. c.i. mains in Gordon Rd., Sunview and Irene Aves., to A. C. Hattendorf, Stop 14, Euclid Ave., Euclid Ave., Cleveland, $32,254.

O., Columbus—See "Streets and Roads."

Mich., Ecorse—Furnishing and laying 14,000 lin. ft. 6-8 in. c.i. water pipe, hydrants, valves, etc. in various streets, to J. McDace, 1992 Webb Ave., Detroit. $25,000.

Mich., Lincoln Park Village—Pump house and installing machinery for village water supply, to Oakwood Constr. Co., Oakwood Ave., Detroit, $15,000.

Ill., Anna—See "Sewers."

Ill., Niles—Mains to J. Donohue, Stevens Point, Wis. Engrs. est. $42,000. Noted June 28.

Ill., Vandalia—Will build 500,000 gal. filter plant, 600 ft. intake, chemical treatment plant, 1 mi. 4 in. c.i. mains, etc., by day labor. A. H. Beard, engr., Title Guaranty Bldg., St. Louis, Mo., will buy materials as needed. $30,000. Noted Nov. 2.

Wis., Oshkosh—Addition to filtration plant for pumping station, to Flour Bros. Constr. Co, 52 Otter St., $23,052.

Wis., Ft. Atkinson—Brick, rein.-con. and steel pumping station and 300,000 gal. reservoir, to T. S. Willis, 330 Hayes Blk., Janesville. Engrs. est. $15,000. Noted July 19.

Wash., Camas—Hauling and laying 8.5 mi. 8 and 10 in. welded steel pipe, furnishing and placing pipe line appurtenances, building intake structures and steel tank, 50,000 gal. capacity, to H. W. Troutman & Co., Securities Bldg., Seattle, $41,996. Noted July 12.

Que., Levis—Filtration plant to R. T. Smith Constr. Co., 27 Hillside Ave., Montreal, $154,000. Noted May 10.

Sewers

PROPOSED WORK

Fla., Daytona—Plans election to vote on $100,000 bonds for extending sewers. R. P. Wilson, acting city mgr.

Mich., Romeo—Had plans prepared 6,500 ft. 8-10 in. vitr. crock sewer extensions in various streets. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Highland Park, engrs.

Ark., Marianna—Making preliminary plans and soon takes bids sanitary and storm sewerage system. $79,000. T. H. Allen, Bank of Commerce Bldg., Memphis, Tenn., engr.

Ark., Newport—Making plans storm and sanitary sewers in 15 blocks East Newport. $25,000. Bowman Eng. Co., Newport, engrs.

Wyo., Casper—Aug. 7 to vote on $75,000 bonds for storm sewer extensions. F. S. Knittle, city engr. Noted June 7.

Calif., Porterville—Had plans prepared 1,900 lin.ft. 8 in. vitr. main sewer and 3,035 lin.ft. 6 in. vitr. lateral sewers, etc., in Orange, Howard and Date Sts. (Cornell Addition). F. Pease, city engr.

Ont., Hamilton—Plans 15,000 ft. vitr. tile sanitary sewers in North Oval, Arkell, Marion and Paisley Aves., 8 in. up. $40,000. W. L. McFaul, city engr.

Ont., Niagara Falls—Stamford Twp. will vote for $281,000 bonds for sewerage system. M. Kerr, Ferry St., engr. Noted Apr. 19.

Ont., Port Elgin—Having plans prepared sewerage system. $35,000. Engineer not selected.

Ont., Toronto—Having plans prepared large sanitary sewerage system in northern section of city, concrete, brick and tile, $8,811,700, also concrete disposal plant, $1,000,000. R. C. Harris, city engr.

BIDS DESIRED

New York—Aug. 10, by Transit Comn., 49 Lafayette St., New York City, miscellaneous drainage and sewers in Boroughs of Manhattan, Brooklyn and Queens, Agreement "CO."

N. Y., New York—Aug. 9, by J. Miller, pres. Manhattan Boro, Municipal Bldg., altering and improving sewer in East 12th St.; altering and improving sewer crossing West St. near Duane St. and in West St. between Duane and Jay Sts.

N. Y., Brooklyn—Aug. 8, by E. Riegelmann, boro pres., Boro Hall, sewers in 84th St.

N. Y., Harrison—Aug. 10, by Bd. Sewer Comrs., extensions to sewage disposal plant, etc. A. Potter, 50 Church St., New York City, consult. engr.; adv. this issue.

N. Y., Long Island City—Aug. 9, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Voorhees and Coe Places, Station Rd., Cracow Court, Metropolitan and Sanford Aves., Hinman, Proctor, Steuben, Wayne, Pulaski, Banta, Idaho, Lake, 40th and 161st Sts., in Boro of Queens.

N. J., Bloomfield—See "Streets and Roads."

N. J., Irvington (branch of Newark)—See "Streets and Roads."

N. J., Leonia—Aug. 13, by Mayor and Boro Council, Boro Hall, septic tank, etc. C. H. Eckerson, 47 Dean St., Englewood, boro engr.; adv. this issue.

N. C., High Point—Aug. 22, by J. W. Hedrick, mayor and City Council at City Hall, constructing 3 pumping stations. A. E Taplin, city engr.; adv. this issue.

Ky., Ashland—Aug. 7, by T. Boggess, city engr., 25 mi. sanitary sewers. To exceed $40,000. Alvord, Burdick & Howson, 1417 Hartford Bldg., Chicago, engrs. Noted Apr. 12.

O., Alliance—Aug. 19, by W. W. Scott, dir. Pub. Serv., 8 in. sanitary sewers in State and Liberty Sts. $59,150.

O., Canton—Aug. 7, by Bd. Control, about 1 mi. trunk sanitary Sewer 1, Sewer Dist. 1. $75,000. W. E. Sarver, City Bldg., engr.

Wis., Marshfield—Aug. 9, by J. A. Schindler, city clk., 2,105 lin.ft. concrete trunk sewers in various streets, 8 manholes, 6 catch basins.

Kan., Wichita—Aug. 6, by City Comn., 25,335 lin.ft. 12-54 in. sewer in Riverside Dist. 112 catchbasins, 144 manholes, 475 cu.yd. concrete base, 2,845 sq yd. cut pavement, 5,535 sq.yd. resurfaced pavement, 6,330 lin ft. combined curb and gutter, 1,860 sq.ft. side walk removed and replaced, etc. $175,000. P. L. Brockway, city engr.

Mo., Richmond Heights (St. Louis P. O.)—Aug. 8, by G. H. Skillman, city clk., 7409 Lavella Ave., 17,500 ft. 6-30, in. vitr. and 32-60 in. segmental block sewers, also 12,000 cu.yd. excav., in Dist. B. $65,000. Pitzmans Co. of Surveyors & Engineers, 615 Chestnut St., St. Louis, engrs. Noted June 14.

Calif., Tracy—Aug. 9, by G. L. Frerichs, city clk., sewage disposal plant, to include 6,400 ft. 18 in. vitr. concrete or wood stave outfall sewer, pumphouse, with gasoline motor and two pumps, 2 units of Imhoff tanks with appurtenances incl. sludge drying beds, dosing tank with Miller siphon, trickling filter with all appurtenances, 3 units of secondary settling tanks with appurtenances, 400 ft. 12 in. concrete, vitr. or wood stave overflow by-pass, boring well. C. F. Smith, 516 Santa Barbara Rd., Berkeley, consult. sanitary engr.

Ont., Toronto—Aug. 21 (change of date), by C. A. Maguire, mayor, furnishing two 2,880,000 gal. electric driven centrifugal sewage pumps. R. C. Harris, city engr. Noted July 12.

BIDS RECEIVED

Md., Baltimore—Bd. Awards, sewers and appurtenances in Dist. 25, 1,190 ft. 10-15 in. vitr. pipe sewer, 13,605 lin.ft. 6 in.

Sewers (Continued)

vitr. pipe sewer, 250 lin.ft. 5 in. vitr. pipe house connections, 480 lin.ft. c.i. pipe connections, from Marrocco & Martell, 609 South Decker Ave., $48,768. Noted July 19.

Mich., Detroit—Vitr. crock sewers 10-30 in., backfilling and brick manholes (1) Lateral sewer 3959 in blocks bounded by Bewick, Garland, Warren and Shoemaker Aves. (2) 3962 in blocks bounded by Bradford, Gratiot, Sanford and Whithorn Sts. (3) 3974 in blocks bounded by Roseberry, Nelson, Chelsea Promenade Sts. (4) 3975 in blocks bounded by Roseberry, Nelson, Promenade and Rosemary Sts. (5) 3975 in blocks bounded by Connors, Roseberry, Wade and Corbet Sts. (6) 3979 in blocks bounded by Cloverlawn, Fenkell, Roselawn and Puritan Aves., from W. Blanck Co., 827 Ford Bldg., (1) $14,900; Detroit Drainage Constr. Co., Detroit (2) $3,859; Oakwood Constr. Co., Oakwood Ave. (3) $19,700; Hammen & Co., 4612 Woodward Ave. (4) $13,249 (5) $19,498; J. Leo, 1762 Puritan St., (6) $9,300.

Calif., Redwood City—For 25,402 lin.ft. 4-8 in. vitr. and 125 lin.ft. 6 in. w.i. sewers in Hudson and Johnson Sts., etc., from Chambers & De Golyer, Bacon Bldg., Oakland, $19,890. Noted July 5.

Calif., Sacramento—For 3,360 lin.ft. 12-24 in. vitr. and 3,570 lin.ft. 27, 30 and 33 in. monolithic concrete sewers in 7th St., from Frederickson & Shannon, Cory Bldg., Fresno, $55,200. Noted July 12.

CONTRACTS AWARDED

O., Cleveland—For 700 ft. 5 ft. and 680 ft. 3 ft. circular E sewer in Bessemer Ave., to W. McDowell & Son Co., 10319 Miles Ave., $60,995. Noted July 19.

O., Cleveland Heights (Warrensville P. O.)—For 6,230 ft. 8-18 in. vitr. tile sewers in 3 streets, to Hadded Mall Co., Schofield Bldg., Cleveland, $15,668; 3,940 ft. 8-18 in. vitr. tile sewers in 2 streets, to Iafarnaro Constr. Co., 2218 Murray Hill Rd., Cleveland, $14,049.

O., Columbus—See "Streets and Roads."

O., Euclid — Sewers in 4 streets, to Hadded-Mall Co., Schofield Bldg., Cleveland, $47,315; 3 streets, to A. C. Hattendorf, Stop 14, Euclid Ave., Cleveland, $38,461; 2 streets, to J. B. Lynn, Euclid, $21,644; 1 street, to A. J. Galvin, Newman Stern Bldg., Cleveland, $23,762.

Mich., Ecorse—Extending sewers in various streets, incl. 13,147 ft. 18-10 in. vitr. pipe, 46 manholes, to T. F. Nolan, 22 Highland Ave., Highland Park, $25,000.

Mich., Springwells—Vitr. pipe and two ring brick sewers, with brick manholes, to Cusino-Mercier Co., Springwells, Assessment Dist. 9, $14,174, Dist. 10, $44,500, Dist. 16, $63,500; to Rennie & Dibble, Springwells, Dist. 11, $65,516, Dist. 12, $15,339; to C. R. Lennane, 2631 Woodward Ave., Detroit, Dist. 13, $3,194. Noted June 21.

Wis., Milwaukee—Storm sewers in Lincoln Ave., to M. Synovitz, 944 2nd Ave., $111,116; in Vine St., to W. T. Werner, 675 Hi Mount Blvd. $19,889.

Ill., Anna—Extension to sewer and water distribution systems, to F. Seifert & Son, Peoria, $55,000.

Wis., Milwaukee — Sewerage Com., 508 Market St., concrete foundation for 220 x 330 ft. filter and drier house on Jones Island, to P. Riesens Sons, 1018 Humboldt Ave., Milwaukee, $113,833. Noted July 12.

Kan., Pittsburg—Sanitary sewerage system, to Reed & Wheelock, Clay Center, $38,390.

Mo., St. Louis—See "Streets and Roads."

Calif., Los Angeles—To T. Haverty Co., 8th and Maple Sts., for outfall sewer, Sect. 11 $109,575, Sect. 12 $120,560, Sect. 13 $172,605, Sect. 14 $249,000; to Western Reinforced Concrete Pipe Co., 6th and Utah Sts., furnishing from 4 ft. 9 in. to 8 ft. 6 in. rein.-con. pipe for above, $822,312.

Ont., Owen Sound—F. F. Fry, 43 Scott St., Toronto, has taken over contract previously awarded to Mitchell Contg. Co., Elmwood Ave., London, for 5,000 ft. 12-42 in. rein.-con. sewer. Est. cost $50,000. Noted July 19.

Ont., Sandwich — Sewers in Fanchette Ave., to C. W. Cadwell, Sandwich St., Windsor, $4,341. Detroit, Rosedale, Peter, King and Bloomfield Aves., to S. P. West, Sandwich, $47,000.

Waste Disposal

BIDS DESIRED

Mo., St. Louis—Aug. 28, by Bd. Pub. Serv., 208 City Hall, 42 x 75 ft. brick incinerator, 36 ft. high, 150 ft. chimney, 4 forced draft furnaces, 100 ton daily capacity, De Tonty St. along tracks of Missouri Pacific R.R. $71,000. L. E. Bowen, 301 City Hall, engr.

Bridges

PROPOSED WORK

Alabama—State Hy. Dept., Montgomery, making plans 292 ft. treated timber bridge, Federal Aid Project 134, Choctaw Co. $29,000. W. S. Keller, state highway engr.

Ky., Lebanon Junction — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans 350 ft. structural steel bridge over Rolling Fork, near here. $85,000. W. H. Courtenay, ch. engr.

O., Cleveland—Cuyahoga Co. having preliminary plans prepared and takes bids in fall 900 ft. concrete bridge, 80 ft., Hilliard Rd. $930,000. F. R. Lander, Court House, engr.

O., Niles—Trumbull Co. (Warren) plans 1,040 ft. rein.-con. viaduct, (including approaches) 60 ft. wide, 40 ft. roadway, here. $500,000.

Ill., Belleville—Plans rein.-con. bridge on Lebanon Ave., to replace wooden structure. $25,000-$30,000. C. A. Heinzelman, city engr.

Ill., Libertyville—Lake Co., (Waukegan) plans bridge east of here. $25,000. L. E. Russell, Waukegan, co. engr.

Missouri—State Hy. Dept., Jefferson City, plans one 50 ft. steel truss and two 16 ft. I-beam spans, on Sta. 42 plus 00, Boone Co.; one 40 ft. rein.-con. deck girder span, over King Mt. Creek, one 30 ft. rein.-con. deck girder span over Smith Draft, one 18 ft. rein.-con. slab span over Hutton Draft, three 20 ft. rein.-con. slab spans over Sims Valley Creek, three 25 ft., rein.-con. deck girder spans over Robins Draft, all Howell Co.; two 12 ft. rein.-con. slab spans over Wichet Creek, three 20 ft. rein.-con. slab spans over Milky Branch, eight 30 ft. I-beam spans over Davis Creek, Lafayette Co.; one 20 ft. rein.-con. slab span on Sta. 1392 plus 70, and one 40 ft. rein.-con. deck girder span over Arthur Creek, Texas Co.; two 10 ft. rein.-con. slab spans over Hampton Branch, and one 60 ft. steel truss span over Brush Creek, Iron Co.; eight 8 ft. rein.-con. slab spans, one 40 ft. and six 20 ft. I-beam spans over Medicine Creek, one 40 ft. and eight 20 ft. I-beam spans over Medicine Creek Drainage Ditch, ten 20 ft. I-beam spans over overflow of Medicine Creek, thirty 20 ft. rein.-con. slab spans over overflow Grand River, one 160 ft., one 60 ft. and two 120 ft. steel truss and thirty-two 20 ft. rein.-con slab spans over Grand River, all Livingston Co. B. H. Piepmeier, state highway engr.

Ark., Newport—See "Excavation, Drainage and Irrigation."

BIDS DESIRED

Md., Annapolis—Aug. 14, by State Rds. Comn., Baltimore, fill to approaches to Severn River Bridge, here, Contr. AB-10-E. J. N. Mackall, chn.; adv. this issue.

Virginia—See "Streets and Roads."

S. C., Effingham — Aug. 16, by S. R. Phillips, superv. Florence Co. (Florence), 3 bridges over Lynches River, near here, Federal Aid Project 180 B, one with 168 ft. through steel span, one with five 14 ft. and other with seven 14 ft. treated timber spans. J. M. Martin, Court House, Florence, engr.

S. C., Marion—Aug. 17, at office Marion Co. Comrs., 4 timber bridges over Lumber River, between Marion and Horry Counties, on State Route 3, Federal Aid Project 219, totaling fifty-two 14 ft. spans. J. M. Martin, Florence, engr.

Miss., Charleston—Aug. 9, by Supervs. Tallahatchie Co., constructing various bridges, 200,000 ft. creosoted structural timber and 12,000 lin.ft. creosoted wooden piling. H. J. French, Sumner, engr.

Miss., Forest—See "Streets and Roads."

Miss., Grenada—See "Streets and Roads."

Miss., Meridian—See "Streets and Roads."

Illinois—Aug. 8 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing 19 rein.-con. girders, 14 rein.-con. slabs and 3 steel bridges, also 6 rein.-con. culverts. C. H. Older, ch. engr.

Minn., Minneapolis—Aug. 20, by A. P. Erickson, aud. Hennepin Co., three 80 ft. pony trusses, rein.-con. slab floor, 2 concrete piers and 2 concrete abutments, over Crow River, for Hennepin and Wright Counties. $25,000. J. W. Shaffer, co. surv.

Wyo., Alcova—Aug. 7, by State Hy. Dept. Cheyenne, steel truss bridge, two 161 ft. spans over North Platte River, near here, Natrona Co. $40,000. J. F. Seiler, state highway engr.

BIDS RECEIVED

New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York City, July 30, piers for bridge over North Channel, Jamaica Bay Blvd., Queens Boro, from A. McMiller Co., $466,000. Noted July 26.

Kentucky — State Hy. Dept., Frankfort, two 170 ft. rein.-con. bridges, five 34 ft. spans, one over Grassey Creek and other over Blackwater Creek, Federal Aid Project 95, Morgan Co., from Ellis & Smeathers, Owensboro, $32,451; 120 ft. rein.-con., four 30 ft. spans, over Triplett Creek, Federal Aid Project 67, Rowan Co., and 108 ft. rein.-con., with two 34 ft. and one 40 ft. span, over Bank Lick Creek, Federal Aid Project 62, Kenton Co., from Broadus & Forbes Co., Richmond, $9,72[illegible] and $20,782 respectively. Noted July 12.

O., Cleveland — Cuyahoga Co., July 21, concrete and steel bridge, Hillside Rd., from R. J. Burke Co., Newman-Stern Bldg., $53,068. Engrs. est. $68,385. Noted July 12.

Calif., Napa—Napa Co. July 23, rein.-con. over Napa River, on Oak Knoll Ave. 850 cu.yd. concrete, 161,000 lb. reinforcing, etc., from J. H. May, Napa, $29,977.

CONTRACTS AWARDED

Pa., Waynesburg — Comrs. Greene Co., 150 ft. concrete bridge, two 75 ft. spans, over South Ten Mile Creek, Waynesburg-Jefferson Rd., to Concrete Steel Bridge Co., Clarksburg, W. Va., $32,763. Noted July 5.

Alabama—State Hy. Dept., Montgomery, bridge on Federal Aid Project 125, 303 ft., 25 spans, treated timber, to S. P. Boyd, Columbus, Miss., $17,732; 512 ft. rein.-con. bridges on Federal Aid Project 123, Blount Co., to W. T. Weaver, Collinsville, $47,033; 703 ft. concrete girder bridges on Federal Aid Project 131, to Newell Contg. Co., 3828 Ave. A, Birmingham, $76,697.

Ala., Fairfield—Tennessee Coal, Iron and R.R. Co., Brown-Marx Bldg., Birmingham, substructure of single track railway bridge near here, 2 abutments, and 6 piers, 5,800 cu.yd. concrete, 6,000 cu.yd. excav., to Reid & Lowe, Brown-Marx Bldg., Birmingham, $50,000.

La., Algiers (New Orleans, P. O.)—New Orleans Commission Council reconstructing Newton St. viaduct, here, to Doullut & Williams, Howard St., New Orleans, $80,000. Cost to be borne by Southern Pacific Ry. and South New Orleans Street Ry. Noted May 10.

O., Akron—W. F. Peters, dir. Pub. Serv. 685 ft. concrete deck girder bridge, 60 ft. wide, 36 ft. roadway and two 12 ft. walks, State St., to T. E. McShaffrey Constr. Co., 171 South Forge St., $160,751. Noted July 19.

Wis., Milwaukee—Steel structure, double leaf trunnion bascule bridge on State St., superstructure to Milwaukee Bridge Co., 1400 34th St., $224,768; substructure to E. E. Gillen Co., 288 East Water St., $227,900. Noted July 26.

Missouri—See "Streets and Roads."

California—Yolo Co., Woodland, and Solano Co., Fairfield, 337 ft. rein.-con. bridge, 2 large and 2 small rein.-con. spans, over Putah Creek, to J. L. Webster, Chico, $41,230. Noted July 19.

Ontario—See "Railways."

Dams

PROPOSED WORK

N. H., Marlboro—See "Industrial Works."

Conn., Leesville (Moodus P. O.) — Connecticut Power & Light Co., East Hampton, plans raising dam on Salmon River, here, from 18 ft. to 78 ft. $500,000. Private plans.

Minn., Duluth—See "Miscellaneous" under "Minnesota."

Tex., Three Rivers—Atascosa Water Impvt. Dist. election soon to vote on $500,000 bonds for 60 x 600 ft. concrete dam. 12,000-16,000 acres irrigation by gravity system. C. Tipps, Three Rivers, interested. Terrell, Bartlett Engrs., Calcasier Bldg., San Antonio, engrs.

CONTRACT AWARDED

Ont., Timmins—See "Industrial Works."

Railways

PROPOSED WORK

Michigan—Detroit Dept. Street Ry., St. Jean and Shoemaker Aves., having plans prepared 3,000 ft. double track railway on Trumbull Ave. from Michigan Ave. to Fort St. W., Detroit, turn steel tie construction. $100,000. R. Schram, asst. genl. mgr.

Washington — Longview, Portland & Northern Ry., subsidiary to Long-Bell Lumber Co., Longview, plans 30 mi. railway from near Kelso, across Cowlitz River to Olequa. $2,991,722.

Manitoba—Manitoba Pulp & Paper Co. Ltd., c/o J. D. McArthur Co. Ltd., McArthur Blk., Winnipeg, soon takes bids constructing railway from Beaconia to Fort Alexander. $3,000,000.

Railways (Continued)

BIDS DESIRED

Texas—West Texas Utilites Co., Abilene, taking bids for building and electrifying 12 mi. Roby & Northern R.R. (recently purchased), new rolling stock to be purchased and brick station built at Roby. $100,000. P. Campbell, ch. engr.

CONTRACTS AWARDED

Ontario—Temiskaming & Northern Ontario Ry., North Bay, general contract for 25 mi. branch line from Swastika easterly to Kirkland and Larder Lakes, incl. grading, clearing, earth and rock excav., temporary trestles, concrete structures and foundations, track laying, ballasting and supplying timber, cement reinforcing steel and fences, to R. A. and I. A. Sinclair Co., Excelsior Life Bldg., Toronto. Contract for structural steel work in connection with bridges and trestles not yet awarded. Noted June 7.

Excavation, Drainage Irrigation

PROPOSED WORK

Mich., Detroit—See "Miscellaneous."

Fla., Daytona—Plans election to vote on $260,000 bonds for constructing park by dredging and filling. R. P. Wilson, acting city mgr.

Minn., Redwood Falls—Redwood Co. had plans prepared laying tile in Co. Ditch 73. $25,000. F. B. Forbes, Redwood Falls, engr.

Ark., Newport—Cache River D. D. plans system of drainage ditches in Jackson and Poinsett Counties along Cache River, several million cubic yards earth excav. also several bridges. $1,000,000. Engineer not selected.

Tex., Childress—T. B. Yarborough, 1310 Cannon Ave., plans to irrigate 100,000 acres land along North Pease River. $100,000. Engineer not announced.

Ont., Woodstock—Plans improvements to sewerage system, new sludge beds, filters and extensions. J. Morrison, clk.

BIDS DESIRED

N. Y., New York — Aug. 6, by J. H. Delaney, comr. of Docks, Pier A, North River, dredging slip between Piers 61 and 62, North River, Contr. 1812.

New Jersey — Aug. 15, at office Dept. Commerce & Navigation, Trenton, dredging section of proposed inland waterway connecting Barnegat Bay with Manasquan River, Ocean Co. $55,000. H. J. Sherman, engr. V. Gelineau, State House, Trenton, dir.

Wis., Portage — Aug. 8, by H. V. Tennant, engr., Portage, 14,000 cu.yd. excav. in 1 mi. open ditching, laying 1,000 lin.ft. 16 in. tiling, etc., for Lewiston D. D., c/o Engineer.

Minn., Minneapolis—Aug. 15, by A. P. Erickson, aud. Hennepin Co., Judicial Ditch 2, 3,600 lin.ft. open ditch, 40,431 lin.ft. 6-36 in. tile, 10 surface inlets. $34,256. J. W. Shaffer, co. surv.

Calif., Oroville—See "Miscellaneous."

BIDS RECEIVED

La., New Orleans—Bd. Port Comrs., 200 New Court Bldg., deepening and widening industrial Canal between lock and Florida Walk, (a) dredging 750,000 cu.yd. (b) dredging 1,500,000 cu.yd., from United Dredging Co., 233 Bway., New York City, (a) $225,000, from Atlantic, Gulf & Pacific Dredging Co., 13 Park Row, New York City, (b) $390,000. Noted July 12.

CONTRACTS AWARDED

Wis., Racine—See "Miscellaneous."

Ia., Ottumwa — Wapello Co., drainage ditch and improvements in Cedar Creek D.D. 4, 256,834 cu.yd. and D.D. 6, 148,233 cu.yd., to Rude & Wold, Pomeroy, $0.0871 per cu.yd. Noted June 14.

Minn., Albert Lea—Freeborn Co., Judicial Ditch 6, 300,000 cu.yd. excav., 200,000 lin.ft. 6-24 in. tile, to W. Martin, Albert Lea, $181,782. Noted July 12.

Tex., Point Isabel — State and Federal Government, dredging Port Isabel Channel, 18 ft. depth, to J. Jacobson, Galveston, $314,000.

Streets and Roads

PROPOSED WORK

New York—F. S. Greene, comr. Highways, Albany, received no bids July 20, constructing 0.6 mi. Repair Contr. 3035, Highway 508, Albany Co. $35,941. Noted July 12.

N. J., Montclair—Plans grading, concrete curbing and paving 1,600 ft. Cooper Ave., 32 ft., 2 in. warrenite, 2 in. National, 3 in. sheet asphalt or 2 in. amesite on 6 in. concrete. To exceed $25,000. W. H. Warnock, Town Hall, engr.

Pennsylvania—Supervs. Reade Twp., c/o Controller Cambria Co., (Ebensburg), plan paving 3 mi. roads in Frugality, Glasgow, Fallen Timber and Blandburg, concrete, brick or bituminous material. $127,000 bonds voted.

West Virginia—State Rd. Comn., Charleston, rejected bids opened July 24, grading and paving 5 mi. Project 3186, Thomas-Gnegy Church Rd., Preston Co., concrete, 18 ft., 1.5 mi. Projest 3197-B, Sistersville-Middleburne Rd., Tyler Co., waterbound macadam, 18 ft.; paving 1 mi. Project 3114-B and D, River Rd., Brooke Co., concrete, 18 ft.; received no bids paving 0.8 mi. Project 3176, River Rd., Brooke Co., concrete, 18 ft.; rejected bids constructing Five Mile Bridge 857, concrete deck girder, 60 ft. span, and Three Mile Bridge 858, concrete deck girder, 35 ft. span, across Five and Three Mile Creeks, Mason Co.; received no bids 8 x 10 ft. concrete culvert over Springdale Creek, Project 2064, Ohio Co. Will readvertise soon. Noted June 28.

N. C., Elizabeth City—See "Industrial Works."

N. C., Fayetteville—Plans paving various streets. $300,000. H. McD. Robinson, mayor.

Fla., Cocoa—Voted $33,000 bonds paving and resurfacing streets. J. J. Bracco, city clk. Noted Apr. 26.

Fla., Daytona—Plans election to vote on $200,000 bonds paving streets and avenues. R. P. Wilson, acting city mgr.

Fla., DeLand—Volusia Co. voted $170,000 bonds for Rd. 3 from DeLand to Orange City, Harden Ferry Bridge, Enterprise and Osteen. C. M. Rogers, DeLand, engr.

Alabama—State Hy. Dept., Montgomery, making plans grading and gravel surfacing 9.756 mi. road, 24 ft. roadway, 18 ft. surface, Federal Aid Project 134, Choctaw Co. $153,637. W. S. Keller, state highway engr.

La., Natchitochez — Police Jury Natchitochez Parish authorized Rd. Dist. 31 to sell $125,000 bonds Aug. 6, for hard surfaced roads. A. Tanzier, secy.

Tenn., Hartsville—Trousdale Co. plans 6 mi. highway from here to Sumner Co. line, 12 ft. $30,000 voted.

Tenn., Lawrenceburg — Lawrence Co. plans 14 mi. highway from here to Maury Co. line, 16 ft Work will probably be done by county forces.

Tenn., Waverly—Humphrey Co. making plans grading 12 mi. highway, 18 ft.

Kentucky—State Hy. Dept., Frankfort, making plans grading 5.11 mi. Whitesburg-Hazard Rd., Federal Aid Project 4, Fletcher Co., 24 and 28 ft. J. S. Boggs, state highway engr.

Ky., Manchester—Clay Co. plans road work. $160,000 bonds sold.

Ky., Paducah—McCracken Co. plans hard surfacing 5-6 mi. Cairo Rd. B. Weille, comr.

O., Canton — Plans asphalt paving and brick guttering about 1 mi. Market Ave. S. 60 ft., $60,000-$75,000. W. E. Sarver, City Bldg., engr.; widening about 1 mi. West Market St., from 20 to 40 ft., $75,000, J. Weaver, City Bldg., engr.

O., Cleveland—Cuyahoga Co. opens bids in fall paving Bway. Rd. through Maple Heights and Bedford, $194,300; Wooster Pike, Broadview and I. C. H. 91 Solon Rds., $168,200. F .R. Lander, Court House, engr.

Indiana—State Hy. Comn., Indianapolis, plans 40 mi. highway, 18 ft., involving concrete road from Seymour to New Albany. $2,000,000. C. Gray, state highway engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 2 mi. Federal Aid Project 45, Sect. B 1, Ingham Co., 20 ft. asphalt, concrete or bituminous concrete. F. F. Rogers, comr.

Mich., Birmingham—Had plans prepared paving with one course concrete 4,480 sq. yd. Midland Ave., for Quarton Lake Estates. $25,000. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Mich., Detroit — Having plans prepared 17,500 sq.yd. concrete pavement along Gratiot Ave. $50,000. J. W. Reid, city engr.

Mich., Detroit—Making plans paving with 3 in. sheet asphalt on 6 in. concrete 9,200 sq.yd. Wilshire Ave. $46,050; 3½ in. sheet asphalt on 8 in. concrete, 5,000 sq.yd. Crossley Ave. $29,960, 21,000 sq.yd. Monica Ave. $126,590. J. W. Reid, city engr.

Mich., Highland Park—Had plans prepared paving 9 alleys, 49,328 sq.yd. one course concrete. $150,000. L. C. Whitsit, City Hall, engr.

Ill., Waukegan—Lake Co. plans concrete paving 4 mi. Green Bay Rd. $100,000. L. E. Russell, co. engr.

Minn., Detroit—Comrs. Becker Co. plan to issue $250,000 bonds for trunk highway improvements. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., Duluth—Having plans prepared grading and surfacing with gravel on crushed rock, 3 mi. Rogers Blvd., 40 ft. $45,000. J. Wilson, city engr.

Kan., Gaylord—Preparing plans grading and paving 4 bocks Main St., 28 ft. $44,000.

Kan., Wichita—Plans grading, curbing, guttering and paving with concrete on 7 in. base, 19 blocks, incl. Wichita, Johnson, Franklin, Ellis, Maple, St. Clair, Coolidge, Parker, Gilbert, Lewis and 10th Sts., and 2 alleys, 15-36 ft., $100,000; brick block paving, etc., 8½ blocks Dayton St. and alley south of English St., 16-32 ft., $70,000; asphaltic concrete paving 5 blocks, Yale, Washington, 10th and Exposition Sts., 26 ft., $40,000; sheet asphalt paving 3 blocks, 26 ft., $24,000. P. L. Brockway, City Bldg., engr.

N. D., Mandan—Making plans paving 32 blocks, and 1 mi. Mandan-Bismarck Highway, various types material. $100,000. W. J. Seitz, city clk.

Wyoming — State Hy. Dept., Cheyenne, plans grading and surfacing 11 mi. Lincoln Highway, Federal Aid Project 156, Albany Co., 24 ft., 89,000 cu.yd. earth and 150 cu.yd. rock excav., $85,000; grading, surfacing and building structures on 7.4 mi. Cover Cut-Kirby Rd., Yellowstone Highway, Federal Aid Project 141, Hot Springs Co., 24 ft., 65,000 cu.yd. earth and 2,100 cu.yd. rock excav. $70,000. Z. E. Sevison, state highway engr.

Tex., Bonham—Fannin Co. making plans grading and concrete surfacing 5.9 mi. Paris-Bonham Rd., 18 ft. $196,000. P. B. Price, Honey Grove, co. engr.

Tex., Brady—McCulloch Co. making plans grading and limestone shale surfacing 5 mi. State Highway 9, 16 ft. $50,000. E. A. Burrows, co. engr.

Tex., Denton—Denton Co. making plans grading and gravel surfacing 13 mi. State Highway 39, 16 ft. $100,000. H. T. Brewster, co. engr.

Tex., Greenville—Hunt Co. making plans grading, etc., Jacobia-Fannin Rd. $75,000. A. D. Duck, co. engr.

Tex., Hondo—Medina Co. making plans grading and surfacing with 1 in. Uvalde rock asphalt on gravel 1.56 mi. State Highway 3, 18 ft. $38,840. A. Y. Walton, co. engr.

Tex., Kerrville—Kerr Co. making plans grading, bituminous topping on gravel 6.3 mi. State Highway 27. $61,700. W. E. Simpson, 414 Natl. Bank of Commerce Bldg., San Antonio, engr.

Tex., Palo Pinto—Palo Pinto Co. making plans grading and surfacing with macadam base, bituminous topping 3.37 mi. Bankhead Highway, 18 ft. $60,000. G. W. Courter, co. engr.

Tex., Pittsburg—Camp Co. making plans grading and bituminous macadam surfacing 6.2 mi. State Highway 11, 18 ft. $160,000. C. Chappell, co. engr.

Tex., Rio Grande — Starr Co. making plans grading and gravel surfacing 17.6 mi. State Highway 12, 18 ft. $115,000. P. S. Devine, Pharr, co. engr.

Calif., Calistoga—Soon takes bids paving 25 blocks. $75,000. Noted June 7.

Calif., Glendale—Had plans prepared grading and paving approximately 2 mi. Glendale Ave., 1½ in. national wearing surface on 4 in. asphaltic concrete. $180,000; cement curbing, guttering, sidewalks and paving approximately 2 mi. Colorado St., Lincoln Ave. and Verdugo Rd., etc., 5½ in. asphaltic concrete. B. F. Dupuy, city engr.

Calif., Martinez—Contra Costa Co. plans concrete paving 1½ mi. Marsh Creek Rd. R. R. Arnold, co. surv.

Calif., San Mateo—Had plans prepared improving Cypress, Mt. Diablo and Tilton Sts., etc., $545,000 sq.ft. 5 in. concrete paving, 13,500 cu.yd. excav., 33,900 lin.ft. concrete curb, 8,800 lin.ft. 4 and 6 in. vitr. sewer, etc. G. S. Whitehead, city engr.

Calif., San Pablo—Making plans paving 450,000 sq.ft. various streets, warrenite-bitulithic. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Calif., Santa Ana—Had plans prepared grading, curbing and paving 77,000 sq.ft. West Walnut St., 5 in. concrete. W. G. Knox, city engr.

Ont., North Bay—Plans 7,500 sq.yd. asphalt or bitulithic pavement on concrete with 3,200 lin.ft. concrete curb and gutter on portions Fraser and Main Sts. $30,000. W. Mackie, Town Hall, engr.

Ont., Windsor—Plans cement pavement on Lillian St. $30,000. M. E. Brian, city engr. Prices wanted on materials.

BIDS DESIRED

New York—Aug. 6, by C. H. Smith, supt. highways Orange Co., Times Press Bldg., 15 King St., Middletown, bituminous macadamizing 3 mi. road in town of Warwick, also concrete paving 3.75 mi. road in

Streets and Roads (Continued)

towns of Minisink and Greenville; adv. this issue.

N. Y., New York—Aug. 9, by J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving Edgecombe Ave., West 63rd, East 107th and 109th Sts.; widening and sheet asphalt repaving 56th St.

N. J., Bloomfield—Aug. 6, at office of J. C. Johnson, town clk., paving 2,500 sq.yd. Race St., asphalt penetration Telford, $12,000; 300 sq.ft. new bluestone sidewalk and grading and relaying 5,000 sq.ft. bluestone sidewalk on Watsessing Ave., $5,000; bluestone curbing 1,200 lin.ft. Bay Ave., $2,700; asphalt paving 800 sq.yd. State St., $10,000; sewer in 1,000 lin.ft. East Passaic Ave., $2,500. E. Baechlin, town engr. Noted July 26.

N. J., Highland Park—Aug. 6, by Mayor and Boro Council, Masonic Bldg., Raritan and 4th Aves., grading, curbing and paving portions of Harper Pl., Harper St., Harrison, Walter and South 4th Aves., concrete. R. P. Wilson, 46 Paterson St., New Brunswick, civil engr.; adv. this issue.

N. J., Irvington (branch of Newark)—Aug. 8, by Bd. Town Comrs. curbing, laying sewer connections and paving 4,600 sq.yd. Madison Ave.; grading and paving Mill Rd.; recurbing, laying sewer connections and paving 2,600 sq.yd. Smalley Terrace, all foregoing rein.-con.; widening west side of Washington Ave.; 3,340 lin.ft. 8 in. sanitary sewer in Woolsey St. To exceed $50,000. I. J. Casey, town engr.

N. J., Trenton—Aug. 27, by Hamilton Twp. Com., Greenwood School, 14,930 lin.ft. concrete curbing, 68,750 ft. concrete sidewalks and 2,140 ft. gutters. $50,000. W. R. Hart, twp. clk. C. S. Sincerbeaux, Mechanic Bldg., Trenton, engr.

Pa., Altoona—Aug. 3, by City Council, paving 2,224 sq.yd. 24th St., 3rd, 15th, Broad and Furnace Aves., 5th, 20th and 22nd alleys, concrete, brick or bituminous material. H. J. Baum, City Hall, city engr.

Pa., Portage—Aug. 6, by Boro Council, paving 3,867 sq.yd. Main St., vitr. brick on concrete. P. F. Campbell, boro engr.

Maryland—Aug. 7, by State Rds. Comn., Baltimore, concrete paving 1 mi. highway in Harford County, Contr. H-32. J. N. Mackall, chn.; adv. this issue.

Maryland—Aug. 14, by State Rds. Comn., Baltimore, constructing state highways, 3 mi. concrete and 1 mi. macadam, penetration method, in Howard Co., Contrs. Ho-31, Ho-40, Ho-42 and Ho-34. J. N. Mackall, chn.; adv. this issue.

Virginia—Aug. 21, at office State Hy. Dept., 413 North 3rd St., Richmond, grading and surfacing, etc., 1.8 mi. Project S 328, Elizabeth City Co., 9.9 mi. Project F-276, Louisa and Albemarle Counties, 8.7 mi. Project S-263 Dickenson Co.; bridge over Allen Creek, Project S-248 C, Nelson Co., bridge over Piney River, Project S-248 B, Amherst and Nelson Counties, bridges on Project S-196, Craig Co., bridge over South Anna River, Project F-276 B, Louisa Co. H. G. Shirley, comr.; adv. this issue.

W. Va., Cameron—Aug. 6, brick paving 2,000 ft. North Ave., 18 ft. J. S. Fish, clk

W. Va., Parkersburg—Smith & Quynn, 302 Union Trust Bldg., receiving bids 50,000 sq.yd. 2 in. asphaltic concrete, Topeka mix; adv. this issue.

W. Va., Ripley—Aug. 15 by Jackson Co. Court, grading 6 mi. Ripley-Charleston Pike. H. E. Snyder, Parkersburg, div. engr.

Ala., Birmingham — Aug. 15, by City Clerk, paving 9 blocks 3rd Ave., S., and 14th St. S., 5 in. concrete base with 2 or 2½ bitulithic surface; also sidewalks, curbs and gutters on 9 blocks. $86,000. A. J. Hawkins, city engr.

Mississippi—Aug. 7, by State Hy. Dept., Jackson, grading and paving 1½ mi. at West Biloxi Beach, Biloxi. H. T. Dietzer, Jackson, engr.

Miss., Forest — Aug. 13, by Scott Co., grading, gravel surfacing and bridging 6.7 Federal Aid Project 134. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Grenada—Aug. 11, by Grenada Co., grading, gravel surfacing and bridging 15.831 mi. Federal Aid Project 140, 16 ft. Bids will also be received for furnishing gravel. $153,725. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Meridian—Aug. 14, by Lauderdale Co., grading, gravel surfacing and bridging 4.678 mi. Federal Aid Project 158, 14 ft. Bids also on 12,795 tons gravel. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

La., Abbeville—Aug. 18, by Police Jury Vermillion Parish, graveling approximately 11.5 mi. road in Rd. Dist. 2. R. P. LeBlanc, secy.

Kentucky—Aug. 29, by State Hy. Dept., Frankfort, constructing and surfacing with waterbound macadam 5,409 mi. Hodgenville-Glasgow Rd., State Project 41, Sect. A, Larue Co., 18 ft.; grading 2.646 mi. Hazard-Jackson Rd., State Project 4, Sect. B, Perry Co., 24 and 28 ft., 3.996 mi. Hazard-Whitesburg Rd., State Project 4, Sect. C, Perry Co., 24 and 28 ft. J. S. Boggs, state highway engr. Noted July 12.

O., Alliance—Aug. 10, by W. W. Scott, dir. Pub. Serv., widening and repaving about 1 mi. South Arch St., 40 ft., $112,000; East Main St., brick, $40,000. Noted June 21.

O., Cincinnati—Aug. 10, by Hamilton Co., grading and paving 7,900 sq.yd. Benson St., concrete. $29,070. E. A. Gast, Court House, co. surv.

O., Cleveland—Aug. 4, by Cuyahoga Co., paving Highland Rd., and Sprague Rds. 1 and 3, $154,940. F. R. Lander, Court House, engr.

O., Cleveland—Aug. 8, grading, curbing, guttering and paving Laflin and Ruby Aves., East 111th, East 131st and West 17th Sts., vitr. brick or asphalt. To exceed $25,000. R. Hoffman, City Hall, engr.

O., Dayton—Aug. 6, by G. F. Baker, dir. Pub. Serv., curbing and paving 900 ft. Lefevre Court, 30 ft., rein.-con., sheet asphalt or Kentucky rock asphalt, $15,000; 5 alleys, 7,000 ft. long 16 ft. wide, rein.-con., $20,000. I. E. Houk, city engr.

Indiana — Aug. 10, by C. Gray, state Highway engr., Indianapolis, concrete paving 18,110 sq.yd. Federal Aid Project 61, Vigo Co., 72,087 sq.yd. Federal Aid Rd. 60, Sect. A, Orange Co.; repairing 7.5 mi. Federal Aid Rd., 42, Sect. C, Perry and Crawford Counties, 93,184 cu.yd. earth excav., 30,485 lb. steel reinforcing; 6.399 mi. Federal Aid Rd. 42, Sect. B, Perry Co., 15,391 lb. steel reinforcing, 82,106 cu.yd. excav., 9,590 ft. concrete paved side ditch; 5.048 mi. Federal Aid Rd. 50, Sect. A, Perry Co., 18,348 lb. steel reinforcing, 9,020 ft. concrete paved side ditch, 55,706 cu.yd. excav.

Ind., Linton—Aug. 7, 4,000 sq.yd. brick, bitulithic asphalt, or wooden block, etc. J. A. Boudousquie, city engr.

Ind., Logansport — Aug. 9, by Auditor Cass Co., grading and gravel surfacing 19,420 ft. Berkshire Rd., 24 ft., $29,098; paving 18,462 sq.yd. Fettig Rd., concrete, $40,074. R. A. Hyman, Logansport, engr.

Ind., Peru—Aug. 8, by Auditor Miami Co., grading and gravel surfacing 22,000 ft. Co. Unit Rd. 3, 18 ft., $31,850; concrete paving 29,080 sq.yd. Co. Unit Rd. 4, $82,700; 11,400 sq.yd. Co. Unit Rd. 5, $27,270; 10,476 sq.yd. Co. Rd. 6, $27,700; 28,206 sq.yd. Co. Rd. 7, $71,809. B. Welch, Peru, engr.

Michigan—Aug. 7, by State Hy. Dept., Lansing, fine grading and surfacing Federal Aid Project 108, 93,799 sq.yd. concrete, 7,626 cu.yd. earth excav., 397 stas. fine grading. F. F. Rogers, comr.

Michigan—Aug. 8, by State Hy. Dept., Lansing, fine grading and surfacing Federal Aid Project 491 A, Cass Co., 68,061 sq.yd. concrete, 340.3 stas. fine grading. F. F. Rogers, comr.

Michigan—Aug. 9, by State Hy. Dept., Lansing, grading, etc., Federal Aid Project 95, Sects. D and F, Lenawee Co., 187,310 cu.yd. earth excav. F. F. Rogers, cor.

Michigan—Aug. 9, by State Hy. Dept., Lansing, grading and surfacing 1.956 mi. State Trunk Line Rd. 12-38, Dickinson Co., 23,023 cu.yd. excav., 10,428 sq.yd. concrete and 11,281 sq.yd. bituminous macadam. F. F. Rogers, comr.

Michigan—Aug. 10, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 47-8, and 21-10, Sect. A, Shiawassee Co., 6,030 cu.yd. excav., 16,564 sq.yd. asphalt, concrete or bituminous concrete, also State Trunk Line Rd. 26-7, Sect. B, Gogebic Co., 6,000 sq.yd. excav., 80,860 sq.yd. gravel. F. F. Rogers, state comr.

Michigan—Aug. 10, by State Hy. Dept., Lansing, grading, etc., Federal Aid Project 67, Sect. E, Washtenaw Co., 80,468 cu.yd. earth excav. F. F. Rogers, comr.

Illinois—Aug. 8 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 85.1 mi. in White, Edwards, Lawrence, Knox, Ford, Fulton, Peoria, Richland, Clinton, Christian, Livingston and McHenry Counties, 18 ft.; also 1,157,028 cu.yd. excav. and 5,176 cu.yd. Class A concrete. C. H. Older, ch. engr.

Wis., Milwaukee—Aug. 6, by Dept. Pub. Wks., paving 1,647 cu.yd. Green Bay Ave., vibrolithic concrete on present concrete; 15,780 sq.yd. concrete paving in 13 alleys, $80,000. J. Schwada, city engr.

Minn., St. Paul—Aug. 6, by H. W. Austin, city purch. agt., paving Colbourne St. from West 7th St. to Jefferson Ave., and Front St. from Dale St. to Lexington Ave., asphaltic concrete and vertical fibre brick. $60,000. G. M. Shepard, city engr.

Kan., Iola—Aug. 27, by Clerk Allen Co., subgrading and surfacing 12.906 mi. Humbolt-Elmore Rd., 16 ft., bituminous macadam. $200,000. A. R. Stroup, engr.

Kan., Wichita—See "Sewers."

N. D., Valley City—Aug. 6, paving 21,000 sq.yd. in Dists. 1 and 2, concrete, sheet asphalt or warrenite bitulithic concrete base. $60,000. Dakota Eng. & Constr. Co., Valley City, engrs.

Mo., Richmond Heights (St. Louis P.O.)—Aug. 8, by G. H. Skillman, city clk., 7409 Lavelle Ave., grading, curbing, guttering and asphaltic concrete paving 17,600 sq.yd Bellevue Ave. $65,000. Pitzmans Co. of Surveyors & Engineers, 615 Chestnut St., St. Louis, engrs. Noted June 14.

Mo., St. Louis—Aug. 28, by Bd. Pub Serv., 208 City Hall, resurfacing 1,470 sq.yd. Compton St., asphalt, $3,900; 7,451 sq.yd. Whittier St., bitulithic, $19,550; grading, granite curbing and paving 4,245 sq.yd. Linton, De Soto and Christy Sts., $25,528; grading and paving 5,335 sq.yd Ohio St., bitulithic, $30,600. W. W. Horner city engr. Noted July 12.

Wyoming—Aug. 7, by State Hy. Comn., Cheyenne, grading, surfacing and building 2 timber bridges, one 20 ft. span and other with three 19 ft. spans, on 7.1 mi. Cowley-Deaver Rd., Federal Aid Project 145, Cowley Co., 24 ft., $59,000; grading, surfacing and building one 20 ft. concrete span on 3.9 mi. Laramie-East Rd., Lincoln Highway, Federal Aid Project 153, Albany Co., 24 ft., $68,000. Z. E. Sevison, state highway engr.

Tex., Decatur—Aug. 7, by S. M. Ward, judge Wise Co., grading and gravel surfacing 10.3 mi. County Highway, 640 cu.yd. concrete, 98,700 cu.yd. earth, 1,675 cu.yd solid and 2,040 cu.yd. loose rock excav., 54,200 lb. reinforcing and 32,600 lb. structural steel. $80,000. H. R. Smith, co. engr.

Tex., Ft. Worth—Aug. 7, by City Com. 13,275 sq.yd. paving 9,400 ft. curbing and guttering and 4,400 cu.yd. excav. on Lee Ave., Cherry and East Magnolia Sts., 3 in. vertical fibre brick, 2 in. Warrenite bitulithic, 2 or 1½ in. Uvalde rock asphalt or 2 in. amiesite. $50,000. D. L. Lewis, city engr.

Okla., Sayre—Aug. 10, by T. J. Means, clk., grading and paving Bway., Walnut and 2nd Sts., 13,100 sq.yd. concrete, 6,600 lin.ft. curb, 4,000 cu.yd. earth and 100 cu.yd. rock excav., etc. $62,500. V. V. Long & Co., 1300 Colcord St., Oklahoma City, engrs.

Calif., Martinez—Aug. 8, by Contra Costa Co., grading and graveling 1 mi. road in Supervisor Dist. 5. R. R. Arnold, co. surv.

Calif., San Mateo—Taking bids grading, concrete curbing, laying cement sidewalks, and 323,000 sq.ft. 5 in. concrete paving, etc., on 1st, 2nd, 3rd and 4th Aves., etc. G. S. Whitehead, city engr. Noted July 19.

Que., Montreal—Aug. 8, asphalt pavements, 995 ft. Lasalle St., 30 ft., 790 ft. Lalonde St., 28 ft., 1,370 ft. Bordeaux St., 30 ft., 1,208 ft. Lajeunesse St., 32 ft., 6,326 ft. Gouin Blvd., 32 ft.; concrete sidewalks, 12,490 ft. Berri St., 5 ft., 3,000 ft. St. Gerard St., 5 ft. 750 ft. east side Benoni St., and 760 ft. west side Benoni St., 5 ft. E. Gauthier, asst. city clk.

BIDS RECEIVED

New York—F. S. Greene, comr. Highways, Albany, July 20, constructing 1.72 mi. Repair Contr. 3052, Highway 794, Suffolk Co., from R. W. S. Corp., 30 Church St., New York City, $76,169, engrs. est $83,097; 3.78 mi. Repair Contr. 3054 and 1383, Highway 5155, Albany Co., from Malloy Constr. Co., Schenectady, $236,291, $258,362; 3.38 mi. Highway 1577A, Jefferson Co., from F. Lux, Johnstown, $122,845, $133,797; 0.52 mi. Highway 1672, Herkimer Co., from Municipal Constr. Co., U. C. N. Bank Bldg., Utica, $36,823, $37,237; 1.65 mi. Repair Contr. 1379, Highway 108, Montgomery Co., from St. Lawrence Constr. Co., Albany, $74,790, $78,563; 2.75 mi. Highway 8124, Oneida Co., from A. Cosentino, West Winfield, $118,001, $128,736; 6.16 mi. Repair Contr. 3055, Highways 5558, 5521 and 564, Oneida Co., from Lane Constr. Corp., 37 Colony St., Meriden, Conn., $236,586, $260,791; 5.25 mi. Highway 8153, Sullivan Co., from Ferber-C''l Co., Hackensack, N.J., $289,255, $296,561; 2.65 mi. Repair Contr. 1370, Monroe Co., from F. W. and J. J. Crouch, Rochester, $96,785, $107,537; 0.89 mi. Highway 1622, Wyoming Co., from E. C. Jones, Great Valley, $28,171, $29,784; 2.29 mi. Highway 1606, Allegany Co., from H. W. Patterson, Hornell, $54,403, $67,804; 2.24 mi. Repair Contr. 1388, Highways 5204 and 907, Steuben Co., from W. L. Collins, Hornell, $97,203, $106,519; 2.45 mi. Repair Contr. 3051, Highway 914, Erie Co., from W. C. Pickard, Tonawanda, $81,336, $82,986. Noted July 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading etc., Queens Blvd. from Gosman Ave. to Union Turnpike, etc., from A. A. Johnson Corp., Queens Blvd., $463,029. Noted July 19.

New Jersey—State Hy. Dept., Trenton, July 23, grading and plate girder bridge encased in concrete, etc., on Route 2, Sect.

Streets and Roads (Continued)

4, in Burlington, Burlington Co., from L. J. Seiling, Broad St., Red Bank, 86.4% engrs. est. ($173,575); macadamizing roadway between Sta. 53 plus 25 and Sta. 62 plus 50, also 130 ft. steel encased bridge, on Route 20, Sect. 2, in Palisade Park, Bergen Co., from R. J. Mansfield, 53 Park Pl., New York City, $118,330. Noted July 5.

New Jersey—Pohatcong Twp. Com., at Schoolhouse, Springtown, grading, etc. Riegelsville-Warren Glen Rd., Warren Co., from O. S. Hoch, Allentown, Pa., $57,873. Noted July 5.

Pa., Ebensburg—Comrs. Cambria Co., 2 mi. Frankstown Rd., Croyle Twp., from Owen & Plummer, Otto Bldg., Johnstown, brick on concrete $137,588, Penn Constr. Co., Connellsville, rein.-con. $112,072, telford base, $113,842. Noted June 21.

Pa., New Castle—Repaving East Washington St., from Burns Bros., 525 South Mill St., $33,530.

Maryland—State Rds. Comn., Baltimore, gravel surfacing 17,700 sq.yd. road, Anne Arundel Co., Contr. AA-33, from T. Mullan, 3945 Greenmount Ave., Baltimore, $32,368; 17,500 sq.yd. in Charles Co. Contr. Ch,27, from J. A. Wilmer, La Plata, $30,211; gravel surfacing 9,300 sq.yd. and gravel resurfacing 9,700 sq.yd., St. Marys Co., Contr. SM-26, from St. Marys Constr. Co., Mechanicsville, $10,983; concrete surfacing 9,200 sq.yd. in Worcester Co., Contr. Wo-31, from J. R. Phillips, Berlin, $27,390; 4,200 sq.yd. in Alleghany Co., Contr. A-27, from Tri-State Eng. Co., Liberty Trust Bldg., Cumberland, $16,557. Noted July 12.

West Virginia—State Rd. Comn., Charleston, opened bids July 24, grading and waterbound macadam paving 5.8 mi. Project 3013, Oldfields-Hampshire Co. line Rd., Hardy Co., 18 ft., 3,833 cu.yd. excav., 9,813 cu.yd. broken stone base course, 51,878 sq.yd. waterbound macadam surface course, etc., from Chandler & Armstrong, Moorefield, $112,579. Noted June 28.

Delaware—State Hy. Dept., Dover, improving 2.2 mi. road, Contr. C N 12, from A. H. McDowell, Marshallton, $93,700; 4.518 mi. Constr. CK-14, from E. Riley Mixner Co., Goshen, N. J., $156,431; 1.56 mi. Contr. CS-23, from Webster Constr. Co., East New Market, Md., $42,770. Noted July 5.

Kentucky — State Rd. Dept., Frankfort, improving roads from E. E. Price Co., Lexington, grading and reconstructing 6.1 mi. Lancaster-Richmond Rd., State Project 25, Sect. F-1, $47,404; from J. H. Hostetter, Lexington, reconstructing 5.4 mi. Lexington-Nicholasville Rd., State Project 23, Sect. A-1, Pessamine Co., 10,950 cu.yd. crushed stone, etc., $34,044; cleaning surface and applying bituminous material and spreading covering material on 92.022 mi., from Southern Oil and Tar Co., Clay and Fulton Sts., Louisville, Boyle Co. $1,915, Madison Co. $7,861, Hardin and Jefferson Counties $3,269; R. B. Tyler Co., 114 South 4th St., Louisville, Larue and Hart Counties $6,052, Hart Co. $4,054, Scott Co., Sects. F and A-1, $5,863 and $1,973 respectively; Greenup Co. $1,223 and Fayette Co. $8,716; Eaton Oil Wks., Sterrett St. and Louisville & Nashville R.R., Cincinnati, O., Todd Co. $3,195, Nicholas Co. $1,893 and Harrison Co. $6,571; Breslin & Dunett, Louisville, Whitley Co. $2,772 and Shelby Co. $4,955. Noted July 5.

Kentucky — State Hy. Dept., Frankfort, grading and waterbound macadam surfacing 4.284 mi. Albany-Monticello Rd., State Project 27, Sect. A, Clinton Co., from Huff & Smith, Albany, using corrugated metal pipe, $51,466; river gravel surfacing 3.39 mi. La Grange-New Castle Rd., State Project 19, Sect. A, Oldham Co., from Moynanham & Turner, Lexington, using concrete pipe, $69,635, 12.14 mi. New Castle-Carrollton Rd., State Project 46-A, Sect. A, Henry, Trimble and Carroll Counties, from Ellis & Smeathers, Owensboro, using concrete pipe, $271,124. Noted July 5.

Michigan—State Hy. Dept., Lansing, improving roads, (**S. T. L. Rd. 27-4, Sect A, St. Clair means State Trunk Line Rd. 27-4, Sect. A, St. Clair Co., F. A. P. 99**, Kalamazoo means Federal Aid Project 99, Kalamazoo Co.), fine grading and surfacing 2.528 mi. **S. T. L. Rd. 27-4, Sect. A, St. Clair,** from Taylor Constr. Co., Birmingham, $47,210, **0.717 mi. S. T. L. Rd. 59-1, Sect. A, Utica,** from Meredith & McVaugh, 220 Horton Ave., Detroit, $26,003, **1.451 mi. S. T. L. Rds. 21-10 and 47-1, Owasso,** from Hudson & Coons, Owasso, $48,579, **7.569 mi. F. A. P. 99, Kalamazoo,** from The Webber Co., Ionia, $139,675, **4.43 mi. F. A. P. 116, Kent,** from New Era Road Bldg. Co., New Era, $112,958, **7,252 mi. F. A. P. 98, Kent,** from Ford Constr. Co., Michigan City, Ind., $174,714, **1.6 mi. S. T. L. Rd. 37-4, Grand Rapids,** from Vanderveen Constr. Co., 165 Lyons St. N. E., Grand Rapids, $46,310, **1.631 mi. S. T. L. Rd. 13-15, Newaygo,** from Hersey Gravel Co., Hersey, $26,918, state to furnish cement on above projects; **0.984 mi. S. T. L. Rd. 21-22, Lyons,** from Banhagel Constr. Co., Ionia, $20,795, plus cement $7,500; **5.523 mi. S. T. L. Rd. 46-21, Sanilac,** from G. W. Case, Kinde, $70,788. Noted July 5.

ROAD WORK—ARIZONA

Following are lowest three bids opened by U. S. Bureau Pub. Rds. for section of Prescott-White Spar Highway, Prescott Natl. Forest, Yavapai Co., (A) Lee Moor Constr. Co, El Paso, Tex.; (B) H. Galbraith, Jerome; (C) Cashion-Caldwell Co., Phoenix. The unit bids were as follows:

	A	B	C
Clearing and grubbing condition "A" (lump sum)	$5,500.00	$6,300.00	$10,480.00
446,170 cu.yd. excavation (unclassified) condition "A"	.77	.85	.94½
18,091 mi. finishing	100.00	500.00	500.00
1,485 cu.yd. concrete class "A"	19.50	24.00	26.95
1,630 cu.yd. concrete class "D"	17.00	20.00	21.45
194,000 lb. reinforcing steel	.06¼	.07	.08½
598 lin.ft. c.m.p. 18-in. diameter	2.07	2.50	2.08
6,322 lin.ft. c.m.p. 24-in. diameter	3.00	3.50	2.94
3,364 lin.ft. c.m.p. 30-in. diameter	3.70	4.50	3.53
2,842 lin.ft. c.m.p. 36-in. diameter	4.43	6.00	4.13
910 cu.yd. hand placed embankment	1.00	3.00	1.50
95,500 lin.ft. protection ditch	.01	.10	.20
198 lin.ft. handrail-concrete	2.00	6.00	5.50
171 lin.ft. concrete handrail for Granite Cr. Bridge	2.50	6.00	7.75
Clearing and grubbing condition "B" (lump sum)	5,000.00	3,608.50	9,170.00
446,170 cu.yd. excavation (unclassified) condition "B"	.73	.80	.89
Extended totals condition "A"	$467,582	$546,716	$598,953
Extended totals, condition "B"	$449,235	$521,716	$573,103

GRADE SEPARATION—DETROIT, MICH.

Following are lowest three bids opened C. B. Brown, Ch. Engr., Grand Trunk Ry. System, Montreal, Que., for grade separation on Dequindre St. from Orleans to Fort Sts., (A) W. E. Lennane, 2631 Woodward Ave., (awarded contract); (B) H. E. Culbertson, 872 West Milwaukee Ave.; (C) G. R. Cook Co., 1260 Penobscot Bldg. The unit bids were as follows:

	A	B	C
Common Excavation			
8,580 cu.yd. (*a*) disposed of within the limits of the work	$2.20	$1.75	$2.50
17,120 cu.yd. (*b*) disposed of beyond the limits of the work	2.50	2.00	3.00
Sub-surface Drains			
1,945 lin.ft. (*a*) 8-in. vitrified drain tile	.95	.60	1.40
260 lin.ft. (*b*) 8-in. cast iron pipe with concrete saddle	2.42	2.50	2.75
17,150 sq.ft. sodding slopes	.083	.05	.065
1,000 lin.ft. 36-in. trunk sewer	12.85	11.00	13.75
5 manholes on right of way	296.90	75.00	125.00
8 catch basins on right of way	160.40	50.00	90.00
Removing existing bridges (lump sum)	1,500.00	1,200.00	6,000.00
2,400 cu.yd. removing old masonry	4.50	5.00	4.00
Foundation excavation			
900 cu.yd. (*a*) disposed of within the limits of the work	2.70	2.00	3.00
935 cu.yd. (*b*) disposed of beyond the limits of the work	3.78	2.50	3.50
22,645 lin.ft. foundation piles	.65	.75	.70
Concrete			
175 cu.yd. (*a*) 1:1½:3 mixture (lower 4 in. of bridge decks)	17.00	19.00	20.00
1,660 cu.yd. (*b*) 1:2:4 mixture (reinforced work)	15.80	20.00	18.00
1,410 cu.yd. (*c*) 1:2½:5 mixture (footings)	11.00	15.00	12.00
3,440 cu.yd. (*d*) 1:2½:5 mixture (neat work)	15.45	16.00	15.50
92,400 lb. steel reinforcement	.045	.08	.05
5,135 lb. sheet lead (for water tight joints)	.145	.08	.12
30,000 sq.ft. rubbed finish for concrete	.055	.125	.03
3,000 sq.ft. concrete cribbing (face measurement)	3.00	2.00	3.00
Waterproofing			
21,000 sq.ft. (*a*) backs of walls and abutments (surface measurement)	.0525	.07	.085
16,300 sq.ft. (*b*) bridge decks (surface measurement)	.1525	.16	.20
16,300 sq.ft. concrete protective coating (surface measurement)	.11	.10	.10
Walls and Abutment Drains			
2,035 lin.ft. (*a*) 6-in. vitrified tile	.70	.60	.75
90 lin.ft. (*b*) 6-in. cast iron pipe	1.59	1.00	2.00
Structural steel			
40.6 ton (*a*) fabricated steel	109.00	100.00	105.00
237.1 ton (*b*) I-beams not fabricated	77.00	80.00	85.00
888 inserts for blast protective plates	.15	.14	.20
Temporary pile trestle, Jefferson Ave.			
1,600 lin.ft. (*a*) piles	.65	.90	1.30
11 M.Ft.B.M. (*b*) timber	225.00	90.00	250.00
Steel sheet piling			
40 ton (*a*) material	70.00	75.00	120.00
40 ton (*b*) driving, pulling, etc.	65.00	50.00	60.00
Timber Sheet Piling			
3,000 lin.ft. (*a*) material, first driving, etc.	1.35	1.00	1.05
500 lin.ft. (*b*) redriving	.45	.60	.75
Temporary sidewalks			
3,000 sq.ft. (*a*) using new material	.15	.18	.15
3,000 sq.ft. (*b*) using second hand material (alternate price)	.14	.14	.10
500 lin.ft. temporary fences or hand railing	.50	1.00	2.00
Street Paving			
6,345 sq.yd. (*a*) sheet asphalt on 8-in. concrete base	4.60	4.95	4.55
6,345 sq.yd. (Alt.) sheet asphalt on 6-in. concrete base	4.00	4.50	4.35
1,640 sq.yd. (*b*) brick on 8-in. concrete base	5.40	6.00	6.85
1,640 sq.yd. (Alt.) brick on 6-in. concrete base	5.15	5.70	6.55
1,400 sq.yd. (*c*) creosote wood blocks on 8-in. concrete base	6.40	6.20	7.15
1,400 sq.yd. (Alt.) creosote wood blocks on 6-in. concrete base	6.10	5.85	6.85
150 sq.yd. (*d*) granite blocks on 8-in. concrete base	7.20	9.05	8.50
150 sq.yd. (Alt.) granite blocks on 6-in. concrete base	6.90	8.75	8.15
Stone Curbing			
1,700 lin.ft. (*a*) resetting old curb (straight)	.90	1.00	.75
90 lin.ft. (*b*) resetting old curb (circle)	1.25	1.30	1.00
1,645 lin.ft. (*c*) new medina curb (straight)	1.60	1.75	1.90
90 lin.ft. (*d*) new medina curb (circle)	2.65	2.70	2.50
400 lin.ft. (*e*) concrete curb for bridges (including nosing)	1.15	1.30	1.20
28,500 sq.ft. sidewalks	.19	.25	.25
1 New sewer manholes complete (city standard)	75.00	75.00	85.00
4 sq.ft. catch basins complete (city standard)	65.00	50.00	60.00
Railing for Top of Street Walls			
90 (*a*) concrete posts	8.00	2.25	4.00
800 lin.ft. (*b*) wrought iron railing	4.62	3.30	7.50
393 lin.ft. concrete bridge railing	10.40	10.00	9.25
1,320 lin.ft. right of way fencing	2.00	2.35	2.50
200 cu.yd. cinder fill (in place)	1.70	1.75	1.90
Extended totals	$341,535	$344,603	$377,685

Michigan — State Hy. Dept., Lansing, improving roads **S. T. L. Rd. 47-10, Sect. B Saginaw means State Trunk Line Rd. 47-10, Sect. B, Saginaw Co.,** grading and

Streets and Roads (Continued)

surfacing **0.833 mi. S. T. L. Rd. 47-10 Sect. B, Saginaw**, 8,598 sq.yd. concrete from Taylor Constr. Co., Birmingham, $18,546 plus state cement, $7,000; 1.251 mi. **S. T. L. Rd. 53-6, Lapeer**, 9,646 cu.yd. excav., (a) 21,276 sq.yd. asphalt (b) 21,276 sq.yd. concrete, from Willite Road Constr. Co., 711 Union Trust Bldg., Detroit (a) $81,054, C. H. Frame & Son, Bad Axe, (b) $55,267; **4.896 mi. S. T. L. Rd. 10-30, Iosco**, 9,338 cu.yd. excav., 46,292 sq.yd. gravel, from Bennett & Crane, St. Charles, $57,566; 1.121 mi. **S. T. L. Rd. 11-16, Emmet**, 3,250 cu.yd. excav., 11,841 sq.yd. concrete, from E. Cosene, Levering, $22,251 plus state cement $8,000.

Mich., Detroit—Paving with 3 in. sheet asphalt (natural lake or oil) on 6 in. concrete (1) 2,659 sq.yd. Berkley Rd. (2) 2,600 sq.yd. Cambridge Rd. (3) 950 sq.yd. Detloff Court (4) 540 sq.yd. Lyle St. (5) 3,200 sq.yd. Petoskey Rd. (6) 340 sq.yd. Posen St. (7) 3,500 sq.yd. Roslyn Rd. (8) 5,400 sq.yd. Ralston Ave. (9) 5,100 sq.yd. Shrewsbury Rd. (10) 6,300 sq.yd. Stratford Rd.; 3½ in. sheet asphalt on 8 in. concrete (11) 3,800 sq.yd. Ohio Ave. (12) 6,400 sq.yd. Rademacher Ave., from W. C. Hartway Co., Detroit, (1) $13,254 (2) $11,731 (5) $14,491 (7) $15,269 (8) $26,044 (9) $22,193 (10) $27,939; from Detroit Asphalt Paving Co., 20 McGraw Bldg., (3) $5,867 (4) $3,092 (6) $2,023 (11) $24,464 (12) $38,678.

Minn., St. Paul—Paving with asphaltic concrete (a) oil (b) lake, 30 blocks Earl St. between Hastings Ave. and Ivy St., from Fielding & Shepley, 216 University Ave., (a) $160,654 (b) $167,407; White Constr. Co., 17 Dearborn St., Chicago, (b) $167,407; 12 blocks Phalen Parkway between Lake Dr. Junction and Ivy St., from White Constr. Co., 17 North Dearborn St., Chicago (b) $70,500, Fielding & Shepley, (a) $68,366. Noted July 19.

Tex., Center — Shelby Co., grading and gravel surfacing 3,57 mi. State Highway 35, 103.09 cu.yd. concrete, 35,480 cu.yd. roadway and 8,966 cu.yd. borrow earth excav., from Brown & Root, Georgetown, $26,525; 9,302 cu.yd. gravel to be furnished by county. $17,500. Engrs. est. $47,185.

Colorado—State Hy. Dept., Denver, concrete paving 2.537 mi. Federal Aid Project 246 A, east of Pueblo, Pueblo Co., from R. A. White, 521 Chamber of Commerce, Denver, $78,431; grading 4.58 mi. State Project 786, Echo Lake-Mt. Evans Rd., Clear Creek Co., from E. Honnen, Colorado Springs, $57,682.

Calif., El Cerrito—From Hutchinson Co., Hutchinson Bldg., Oakland, improving Potrero Ave., 14,234 ft. sidewalk $0 18, 2,982 ft. concrete curb $0.70, 7,470 ft. concrete gutter $0.25, 30,551 ft. 8 in. macadam pavement $0.15, etc. Noted May 17

Calif., Napa—Napa Co. July 23, grading 7.34 mi. Monticello-Devils Gate Rd., from A. J. and J. L. Fairbanks, 625 Market St., San Francisco, $64,083. Noted July 19.

Calif., Redwood City—Grading, concrete curbing and guttering and oil macadamizing 154,443 sq.ft. various streets in Redwood Highland Tract, from McHugh & Doyle, 3533 16th St., San Francisco, $35,492; 305,400 sq.ft. various streets in Oak Knoll Manor, from A. Teichert & Son, Ochsner Bldg., Sacramento, $91,495. Noted July 5.

Calif., San Deigo—San Diego Co. July 23, grading, paving, etc. **(1)** 158,432 sq.ft. highway from Nutmeg to Lime Sts., in Escondido, **(2)** 276,313 sq.ft. road from Buena to Vista, **(3)** 289,163 sq.ft. road from Escondido to Bernardo, **(a)** 5 in. concrete **(b)** 5 in. asphaltic concrete **(c)** willite **(d)** warrenite, from H. E. Cox, Pasadena, **(1a)** $46,604; California Constr. Co., Union Bldg., **(1b)** $41,765 **(1d)** $44,140 **(2a)** $86,150 **(2b)** $81,175 **(2d)** $85,320 **(3b)** $63,960 **(3d)** $68,295; H. G. Feraud, Baker-Detwiler Bldg, Los Angeles,. **(1c)** $37,828 **(2c)** $81,993 **(3c)** $69,004; Wells-Bresler Co, Santa Ana, **(3a)** $71,650.

Calif., Santa Ana—Curbing, laying sidewalks and paving 560,000 sq.ft. Lahabra Rd. Dist. Impvt. 22, 1½ in. warrenite on 3½ in. asphaltic concrete, from G. R. Curtis, 2440 East 26th St., Los Angeles, $205,000.

CONTRACTS AWARDED

Massachusetts—State Hy. Comn., Boston, bituminous concrete paving 7,500 ft. in Rehoboth, 18 ft., to Perini & Sons, Inc., Ashland, $83,569; 0.5 mi. in Ayer, to P. J. Keating, Fitchburg, $28,836; 2,500 ft. in Dracut, to A. Pallatto, Dracut, $25,981.

N. Y., White Plains — Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, paving Bronx River Parkway Dr. between Woodland Pl. and Main St., here, to Hastings Pavement Co., 25 Broad St., New York City, $81,688. Noted July 12.

N. J., Nutley—G. C. Bergen, purch. agt. Essex Co. (Newark), grading and paving Franklin Ave., here, 3 in. sheet asphait on 6 in. concrete, to Franklin Contg. Co., 20 Washington Pk., Newark, $106,455; draining above street, to P. Lordi, 147 Bloomfield Ave., $22,392. Noted July 26.

N. J., South Amboy—Middlesex Co. (New Brunswick) concrete paving 1 mi. Ridgway, Scott and Stevens Aves., to United Constr. & Supply Co., South Amboy, $86,995.

Pa., Central City—Paving with vitr. brick on concrete, and building sanitary and storm sewers, manholes and inlets in Sunshine and Central Aves., to F. Zipf & Son, 236 Pine St., Johnstown, $62,968. Noted July 5.

Pa., Ebensburg — Cambria Co., paving 4,650 ft., Kneppers Mill Rd., Croyle Twp., to E. A. James, Johnstown Trust Bldg., Johnstown, brick $57,142, concrete $50,663, telford base $50,663. Material to be selected later. Noted June 21.

West Virginia—State Rd. Comn., Charleston, grading and bituminous macadam paving 1.9 mi. Projects 3261 and 50, Clay Court House-Two Mile Rd., incl. additional width to be built by town of Clay together with sewers, Clay Co., 8,400 cu.yd. excav., 9,360 lin.ft. concrete curb and gutter, 5,650 cu.yd. broken stone base course, 25,350 sq. yd. bituminous macadam and 63,375 gal. bituminous material for penetration macadam, to A. Keathley, Prof. Bldg., Charleston, $116,591, (State pays for 18 ft. width); grading and bituminous macadam paving 2 mi. Projects 3151-C and 48, Madison-Danville Rd., Boone Co., 4,850 cu.yd. excav., 3,225 cu.yd. broken stone base course, 14,500 sq.yd. bituminous macadam, 36,250 gal. bituminous material for penetration macadam, etc., to Abbott Bros., 216 Dickinson St., Charleston, $55,935; grading 3.5 mi. Project 3237—Lewis Dist.—Leon Rd., Mason Co., 35,000 cu.yd. excav., etc., to Skene & Co., Point Pleasant, $45,300; grading and concrete paving 1.2 mi. Project 3252-A, St. Marys-Ellenboro Rd., Pleasants Co., 1,700 cu.yd. excav., 2,330 cu.yd. plain cement concrete, etc., to Cisler & Morse, Marietta, O., $57,589; 1.2 mi. Project 3287, Huntington-Hodges Rd., Cabell Co., 15,000 cu.yd. excav., 2,600 cu.yd. one course plain cement concrete, etc., to G. L. Pence, 1454 4th Ave., Huntington, $62,677; brick paving 3 mi. Project 3253, River Rd., Hancock Co., 18,231 cu.yd. excav., 12,240 lin.ft. 12 x 18 in. and 4,350 lin.ft. 6 x 22 in. concrete curb, 5,507 cu.yd. bank slag base course, 24,784 sq.yd. vitr. brick pavement, 12,240 lin.ft. stone shoulder, 12,240 lin.ft. stone curb, etc., and 1 mi. Project 3089, River Rd., Hancock Co., 11,490 lin.ft. concrete curb, 10,213 sq. yd. vitr. brick, 11,490 lin.ft. stone shoulder, etc., to Kane Bros., Youngstown, O., $137,962 and $51,353 respectively. Noted June 28.

W. Va., Fairmont—Marion Co., to Tri-State Constr. Co., Youngstown, O., paving with bituminous macadam on Telford, 8,342 lin.ft. Montana Rd., and 17,846 lin.ft. Winfield Rd. in Winfield Dist., $41,602 and $78,308 respectively. Noted June 21.

W. Va., Huntington — Paving portions Highlawn Court, North Cedar, Leeward and 25th Sts., to G. Hinkle, Huntington, $27,495.

N. C., Henderson—Paving, etc., various streets, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh. $200,000. Noted Apr. 12.

S. C., Edgefield—Edgefield Co. constructing 9 mi. Federal Aid Project 184, Edgefield-Johnston Highway, sand clay, to B. A. Havird & Co., Newberry, $31,981.

Fla., Sebring — Highlands Co., grading and shaping roadbed on Bassenger Rd., 85,000 cu.yd. earth excav., to H.-P. & W. Constr. Co., Okeechobee, $0.33 per cu.yd.

Fla., Stark—Bradford Co., clearing, grading and paving with clay 41.3 mi. Rds. 1, 4, 8, 9, 12 and 13, to Adams-Evans Co., Atlantic Natl. Bank Bldg., Jacksonville, $59,286.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 10.746 mi. Federal Aid Project 125, Perry Co., and 22.79 mi. Federal Aid Project 131, Walker Co., to Stanley and Singer Constr. Co., Lafayette, $157,710 and $515,983 respectively; 16.284 mi. Federal Aid Project 123, Blount Co., to W. C. Hill, Birmingham, $127,264; 2.352 mi. Guntersviile-Gadsen Rd., Marshall Co., 24,840 sq.yd. 2½ in. bituminous macadam on 8 in. chert, to Etowah County Court of Comrs., Gadsden, $62,767.

Miss., Port Gibson—Claiborne Co. improving 7.828 mi. Federal Aid Project 153 A, to Clarke & Junkins, Vicksburg, $99,951.

Tenn., Coalmont—Grundy Co. paving 5.3 mi. highway, 2 course water bound macadam, to Pitts Bros. & Co., Mt. Pleasant, $25,000.

Tenn., Elizabethton—Carter Co. paving 14 mi. various roads, 16 ft., bituminous macadam, to C. Moore, Columbia, $300,000.

Tenn., Nashville—Paving, etc., to D. Turner Constr. Co., Nashville, Jefferson St. from 12th to 18th Sts. $25,658; to Rodes-Eller Constr. Co., Chamber of Commerce Bldg., Main St. from 1st to 11th Sts. $52,293, 17th St. from Division to Belcourt Sts. $36,949, Belcourt St. from 18th to 21st Sts. $7,111, 2nd Ave. from Chestnut St. to Hills Alley $13,139; to G. B. Howard Co., foot of Shelby Ave., Gartland Ave. from 11th to 14th Sts. $7,170, Forrest Ave. from 11th to Main Sts. $1,603. Noted June 21.

O., Cleveland—Paving, curbing and guttering East 93rd St., vitr. brick, to Bentley Bros., 1836 Euclid Ave., $24,2[illegible]; Bulkley Rd., vitr. brick, to W. E. McHugh, Pavers Exch., $3,683; West 103rd St. and Revere Ave., vitr. brick, to Baldwin Bros., 450[illegible] Euclid Ave., $7,081 and $29,316 respectively; asphalt repaving 9,530 sq.yd. West 9th St., to Cleveland Trinidad Paving Co., The Arcade, $40,557. Noted July 26.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 1,706 ft. Piedmont Rd., 60 ft., and 1,497 ft. Midgard Rd., 40 ft., both asphalt, to B. F. Patterson, 1214 Neil Ave., $55,741 and $16,792 respectively; 448 ft. alley north of 10th Ave., 25 ft., 332 ft. alley north of Clark St., 21.25 ft., and 548 ft. alley west of Taylor Ave., 20 ft., concrete, to R. J. Dienst, 480 South 5th St., $3,515, $2,188 and $3,624 respectively; 320 ft. alley west of Forth St., 16 ft., concrete, to Columbus Contg. Co., 1471 West Broad St., $2,006; 350 ft. alley west of Waldeck Ave., 26 ft., concrete, to Yale Constr. Co., 146 Yale Ave., $2,183. Noted July 19.

O., Dayton—G. F. Baker, dir. Pub. Serv., paving 1,425 sq.yd. Mt. Vernon Ave., and 2,250 sq.yd. Red Haw Rd., Kentucky rock asphalt, to C. C. Adams, 224 South Morton Ave., $5,044 and $7,965 respectively; 2,300 sq.yd. Dow St., concrete, to Finke Eng. Co., 15 South St. Clair St., $13,090; 5,830 sq.yd. Fairview Ave., brick, to E. Smith, 702 Commercial Bldg., $28,856; 11,550 sq.yd. Richmond Ave., asphalt, to Republic Asphalt Paving Co., 801 Schwind Bldg., $50,636; Grafton Ave., brick on concrete, to L. A. Marshall, 302 Ludlow Bldg., $19,390; Negley Pl., rein.-con., to W. J. Kernan, 425 South Cincinnati St., $4,740. Noted June 28 and July 5.

O., Lyndhurst (Cleveland Heights P. O.)—Grading and laying concrete sidewalks on 107,500 sq.ft. Irene Ave. and Gordon Rd., to F. B. Stein, Euclid, $28,254.

O., New Philadelphia—Paving 3,830 ft. Boulevard, sheet asphalt on 7 in. concrete to L. Springer & Co., New Philadelphia, $69,508. Engrs. est. $71,000. Noted July 19.

Michigan—State Hy. Dept., Lansing, grading and surfacing, to New Era Road Building Co., New Era, State Trunk Line Rd. 54-7, Newaygo Co., 22,883 cu.yd. earth $0.60, 4,466 sq.yd. rein.-con. $1.60, 32,916 sq.yd. gravel $0.70, etc., total $49,214 plus cement furnished by state; to Wexford Co. Road Com., Cadillac, State Trunk Line Rd. 55-4, Sect. A, Cadillac Co., 13,295 sq.yd. concrete, 5,016 cu.yd. earth excav., $19,758 plus cement $8,723. Noted July 26.

Michigan — State Hy. Dept., Lansing, grading and surfacing, etc., (**S. T. L. Rd. 27-17, Sect. B, St. Clair, means State Trunk Line Rd. 27-17, Sect. B, St. Clair Co.**), to J. H. Baker, Port Huron, **S. T. L. Rd. 27-17, Sect. B, St. Clair**, 6,941 cu.yd. earth excav. $0.55, 3,522 lb. steel reinforcement $0.06, 38,215 sq.yd. 8 in. concrete pavement $1.56, etc., total $76,553, cement furnished by state; to Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, **S. T. L. Rds. 52-2 and 53-7 A, Romeo**, 14,819 sq.yd. asphalt, 5,852 cu.yd. earth excav., $39,689, cement furnished by state; to Macomb Co. Road Com., Mt. Clemens, **Federal Aid Project 121, Macomb Co.**, 53,676 sq.yd. concrete, 18,204 cu.yd. earth excav., $140,000; to J. A. McKay & Son, 403 Melbourne Ave., Detroit, **S. T. L. Rd. 10-14, Macomb**, 10,588 sq.yd. concrete, 3,869 cu.yd. earth excav., 10,588 sq.yd. concrete, $22,183, cement furnished by state; to W. B. Chalmers Co., 501 G. R. Savings Bank Bldg., Grand Rapids, **S. T. L. Rds. 11-48 and 13-45, Retoskey**, 7,688 cu.yd. earth excav. $0.80, 20,510 sq.yd. bituminous concrete on 6 and 7 in. base, $2.20 and $2.35, etc., total $55,161, cement furnished by state; to Cadwell & Sons, Boyne City, **Federal Aid Project 102, Sects. A and B, Antrim and Charlevoix Counties**, 106,445 cu.yd. earth excav. $0.35, 95,183 sq.yd. one course gravel $0.33, 505.8 cu.yd. concrete $14, etc., total $83,361. Noted June 28 and July 5.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., paving with 3 in. sheet asphalt (natural lake or oil asphalt) on 6 in. concrete, 1,200 sq.yd. E. St. $6,764, 3,000 sq.yd. Maywood Ave. $17,201, 1,010 sq.yd. Rankin Ave. $5,695, 9,700 sq.yd. Van Court Ave. $5,151; with 3½ in. sheet asphalt (natural lake or oil) on 8 in. concrete, 3,500 sq.yd. Byron Ave. $22,219, 1,400 sq.yd. Edison Ave. $9,579, 5,200 sq.yd. Elmhurst Ave. $35,097, 950 sq.yd. Gilbert Ave. $5,815, 3,800 sq.yd. Tuxedo Ave. $25,-

Streets and Roads (Continued)

699; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., 8,100 sq.yd. Cordland Ave. $48,790; 5,100 sq.yd. Monterey Ave. $34,-360; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., 3,500 sq.yd. Cedarhurst Ave. $21,370. Noted July 12.

Mich., Grosse Pointe Farms (Grosse Pointe P. O.)—Grading and paving Kerby Ave., 19,248 sq.yd. 9 in. concrete, 8,340 cu. yd. earth excav., 14,326 lin.ft. concrete curbing, to R. R. Moran, Grosse Pointe Farms, $80,000.

Mich., River Rouge—Paving 12,978 sq.yd. Walnut, Elizabeth, LeBlanc, Fairmont and Anchor Sts., rein.-con., to R. J. Powelson, 6415 Iroquois Ave., Detroit, $50,000.

Ill., Urbana—Champaign Co., to R. G. Flaugher Constr. Co., 1105 Race St., constructing 6.345 mi. Sect. 33-15D, Routes 4 and 4-A, $99,161; to Verhey Constr. Co., Lincoln Bldg., Champaign, 7.84 mi. Sect. 34-15D, Routes 4 and 15, $124,633, 8.335 mi. Sect. 35-15 D, Route 1, $139,954, and 6.802 mi. Sect. 36-15 D, Route 17, $127,770. Noted July 26.

Wis., Kenosha—Paving 9300 sq.yd. Park Ave., sheet asphalt, to White Constr. Co., 68 Wisconsin St., Milwaukee, $33,175. Noted July 5.

Wis., Milwaukee — Grading and paving, etc., to F. Blodgett, 204 Grand Ave., Adams and Quincy Ave., 6,642 sq.yd. concrete $25,-229, improving various alleys $14,160; to Dean Constr. Co., 382 East North Ave., Atkinson Ave. and Prairie St. 16,289 sq.ft. cement walks $11,081, 17th St. 1,872 sq.yd. vibrolithic concrete $9,729; to F. Hildebrand, 1040 23rd Ave., Cleveland Ave. 1,540 sq.ft. cement walks $685, improving various alleys $18,775; to Schwern Bros., 50 Lee St., Cramer St. and 17th Ave., 7,160 sq.ft. walks $2,498, improving various alleys $3,596; to Kroening Constr. Co., 39th Ave. and Mitchell St., 1st Ave., 4,909 sq.yd. concrete, $19,740; to R. H. Gumz, 831 13th Ave., 14th Ave. 3,546 sq.ft. cement walks, etc., $1,388; to Badger Constr. Co., 97 Wisconsin St., Hadley St. 828 sq.yd. sheet asphalt, etc., $9,244, 228 sq.yd. asphaltic concrete, etc., $1,728; to J. Weitzer, 97 Wisconsin St., 6th St. 2,690 lin.ft. concrete curb and gutter, 16,140 sq.ft. cement walks $9,538; to S. W. Tallmadge, 445 Milwaukee St., improving various alleys $7,625.

Ia., Atlantic—Concrete paving 25 blocks, to F. O. Aking, Atlantic, $2.44.

Ia., Iowa City—For 70,000 sq.yd. sheet asphalt resurfacing and 9,000 yd. asphalt repaving, to McCarthy Impvt. Co., Kahl Bldg., Davenport, $84,000.

Ia., Sloan—For 30,000 sq.yd. concrete paving to M. L. Flinn Constr. Co., 218 Grain Exch. Bldg., Sioux City, $2.14. Noted Jan. 4.

Minn., Duluth — Paving Railroad and Commerce Sts., 30,781 sq.yd. concrete, etc., to D. H. Clough & Co., 405 Palladio Bldg., $30,077. Noted July 19.

Minn., East Grand Forks — Rein.-con. paving (1) 43,150 sq.yd., 9,300 cu.yd. excav., 900 sq.yd. 6 in. concrete paving for alley approaches, curb, etc. (2) 10,409 sq.yd. paving, 2,106 cu.yd. excav., 430 sq.yd. 6 in. concrete for alley approaches, etc., to Johnson, Drake & Piper, Inc., 809 1st Natl.-Soo Line Bldg., Minneapolis, (1) $132,025 (2) $32,294. Noted June 23 and July 12.

Minn., St. Paul—City will pave 8 blocks Front St. between Dale and Rice Sts., vertical fibre brick and asphaltic concrete, by day labor. $40,000. Former bids rejected. H. W. Austin, city purch. agt.

Minn., St. Paul—Paving with asphaltic concrete 8 blocks Pleasant Ave. between Garfield and Osceola Aves., to Thornton Bros. Co., 306 Central Bank Bldg., $50,787. Noted July 19.

Minn., St. Paul—Ramsey Co., grading and paving North St. Paul Rd. from White Bear Rd. to east county line, Project 23-54, 16,110 cu.yd. excav., 16,588 cu.yd. overhaul, 38,240 sq.yd. one course 7½ in. concrete, etc., to McCree & Co., Merchants Natl. Bank Bldg., $98,933. Noted July 12.

S. D., Mitchell—Paving about 52,000 sq. yd. various streets, concrete, to Hanlon & Okes, 338 Lumber Exch. Bldg., Minneapolis, $2.15 per sq.yd. Noted July 12.

Missouri—State Hy. Dept., Jefferson City, constructing roads (**94-5-St. Charles means Route 94, Sect. 5, St. Charles Co.)** 2.358 mi. **94-5-St. Charles**, to J. P. Sparks, Kirkwood, $18,678; 2.472 mi. **State Project Route 63A, Ralls Co.**, and **22-18-Pike**, to F. F. O'Dell, Center, $27,066 and$25,158 respectively; 5 mi. **8-69-Marion**, to J. C. Lyle, 609 Grand Ave., Kansas City, $30,497; 2.443 mi. **25-16-Perry**, to Kiefner & Geile, Perryville, $27,-133; 4.98 mi. **14-75-Franklin**, to E. Berns & Co., Indianapolis, Ind., $225,853; 1.799 mi. **32-23-Iron**, and 1.186 mi. **32-30-St. Francois**, to M. E. Gillioz, Monett, $23,546 and $18,462; 0.453 mi. **3-36, Lafayette**, to A. J. Gosby, Leeds, $20,155; one 40 ft. and two 25 ft. rein.-con. deck girder spans, over Yellow Creek, on **6-35A-Sullivan**, to Woodsmall & Woodsmall, Marshall, $9,166.

Mo., St. Louis—For 350,000 cu.yd. grading and 12-36 in. sewers, Holly Hills subdivision, and resurfacing approximately 12,000 sq.yd. Washington Terrace, Kentucky rock asphalt, to McKelvey Constr. Co., Title Guaranty Bldg. Engrs. est. $300,-000 and $25,000 respectively.

Mo., St. Louis—Bd. Pub. Serv., concrete paving various alleys (**C. B. 847 means City Block 847**) to Eyermann Constr. Co., 1216 South Grand Ave. 720 sq.yd. **C. B. 847** $2,587, 670 sq.yd. **C. B. 1044** $2,227, 1,222 sq.yd. **C. B. 2811** $3,191, 980 sq.yd. **C. B. 2821** $2,358, 1,075 sq.yd. **C. B. 1357** $3,714, 950 sq.yd. **C. B. 2814** $2,435, 1,215 sqyd. **C. B. 2808** $3,167; to Skrainka Constr. Co., Security Bldg., 610 sq.yd. **C. B. 1525** $1,647, 1,335 sq.yd. **C. B. 5568** $3,385, 1,190 sq.yd. **C. B. 21818** $3,540, 2,755 sq.yd. **C. B. 4498** and **4499** $7,473; to W. Hoffner, 715 South Vandeventer St., 1,355 sq.yd. **C. B. 4446W** $3,673, 1,840 sq.yd. **C. B. 4448W** and **4449B** $5,236; to Blackburn-Crean, Syndicate Trust Bldg., 1,755 sq.yd. **C. B. 5164** $4,447, 1,820 sq.yd. **C. B. 5534** $4,779, 1,075 sq.yd. **C. B. 3272W** $3,003, 1,000 sq.yd. **C. B. 4071E** $2,562, 925 sq.yd. **C. B. 49248** $2,670; to J. E. Perkinson, 3237 Carter Ave., 580 sq.yd. **C. B. 2407** $1,828, 4,316 sq.yd. **C. B. 3873** $11,502. Noted July 26.

Tex., Colorado—Mitchell Co. paving 16,-129 sq.yd. 2nd and Walnut Sts., warrenite bitulithic on 5 in. concrete, to West Texas Constr. Co., 504 Cotton Exch. Bldg., Ft. Worth, $62,660. Noted July 19.

Tex., Ft. Worth — Paving Stella and Parkdale Sts., Uvalde rock asphalt on concrete, to General Constr. Co., Cotton Exch. Bldg., 6,000 sq.yd. paving $2.80, 5,000 ft. curb and gutter $1.05, 2,400 cu.yd. excav. $0.90, etc., total $25,500.

Tex., Ft. Worth—For 18,300 sq.yd. paving, 8,945 ft. curbing and guttering and 7,060 cu.yd. excavation on Ryan Pl., Bryan and Rosedale Sts. Waits, 5th and 6th Aves., 2 in. Warrenite bitulithic on 5 in. concrete, to West Texas Constr. Co., Cotton Exch. Bldg., $3.18, $1.05 and $0.90 respectively.

Tex., Jasper — Jasper Co. grading and gravel surfacing 1.29 mi. State Highway 7, east of here, and 6.06 mi. State Highway 7 from here to Newton Co. line, to J. Thompson, San Augustine, $28,665 and $92,091 respectively. Noted July 26.

Tex., Sanderson—Terrell Co. grading and gravel surfacing 13.07 mi. State Highway 12, 18 ft., to F. P. Holt, 1102 West 6th St., Austin, $94,156. Noted June 21.

Okla., Blackwell—Grading and paving 3rd St. and Lincoln Ave., to O. T. Tyler, 928 West Blackwell St., 8,600 sq.yd. vertical fibre brick $3.60 per sq.yd., 4,800 lin.ft. curb and gutter $1.15 per ft., 3,500 cu.yd. earth excav. $0.80 per cu.yd., total $42,848. Engrs. est. $46,959. Noted July 19.

Arizona—State Hy. Dept., Phoenix, asphaltic concrete paving 4 mi. Mesa-Superior Highway, Federal Aid Project 65, to Phoenix Tempe Stone Co., Home Builders Bldg., Phoenix, $145,073.

Wash., Yakima—Yakima Co., gravel surfacing 3.5 mi. Permanent Highway 30, and 10.5 mi. Naches Heights Highway, to Campbell Constr. Co., Spokane, $25,805 and $96,000 respectively.

Calif., Fairfield—Paving Texas St. and Union Ave., warrenite bitulithic on asphaltic concrete, to California Constr. Co., 58 2nd St., San Francisco, $29,850. Noted July 12.

Que., Montreal—Asphalt paving to Duranceau & Duranceau, 152 Hamilton St., 1,600 sq.yd. Caramel St. $6,910, 615 ft. Resther St. 22-27 ft., $9,686, 833 ft. Boyer St., 25-30 ft., $13,163, 1,084 ft. Adam St., 37 ft., $17,408, 2,240 ft. Orleans St., 30 ft., $45,953, 2,250 ft. Mentana St., 30 ft., $9,400, 250 ft. Lalonde St., 19 ft., $2,365, 4,125 sq.yd. Adam St., $17,408; to Quinlan Robertson & Janin, Ltd., 52 Duluth Bldg., 18,400 sq. yd. 1st Ave., $89,530, 5,650 sq.yd. Girouard Ave. $38,208; to D. Brault, Ltd., 2855 Rosemount Blvd., 10,445 sq.yd. St. Dominique St. $40,148, 1,930 sq.yd. Mousseau St. $11,-945; to Sicily Asphaltum Paving Co., 60 St. Vitteur St., 3,600 sq.yd. De Lanaudiere St. $14,498, 3,535 sq.yd. De La Roche St. $15,-528; concrete sidewalks, to Leger & Lamoureux, 294 St. Catherine St., E., 2,670 sq.yd. Orleans St. $11,347, 1,290 sq.yd. St. Zotique St., $5,522; L. Lyon, 49 Brewster St., 3,100 sq.yd. Peloquin St. $13,485; to St. George Gaubreau, Ltd., 127 Stanley St., 2,000 sq.yd. Lasalle St., $8,820.

Que., Verdun—Asphalt paving to Quinlan, Robertson & Janin, Ltd., 52 Duluth Bldg., Montreal, 1.5 mi. Verdun Ave., $80 000; 1.875 ft. Hickson Ave., $25,000; 1,125 ft. Regina Ave., $20,000. All 36 ft. wide. Noted Jan. 18.

Ont., Owen Sound—Paving 15,000 sq.yd. various streets, bituminous concrete to Warren Bituminous Paving Co., 54 University Ave., Toronto, 8,000 ft. concrete curbs to W. L. Malcolm, Stratford. Engrs. est. $75,000.

Industrial Works

PROPOSED WORK

N. H., Marlboro—Ashuelot Gas and Electric Co., Concord, plans power house and 53 x 220 ft. concrete arch dam with 40 in. penstock. $100,000.

Mass., Fitchburg—City having plans prepared by H. Foster, 72 Fox St., 2 story, 50 x 150 ft. garage and machine shop, rein.-con. and brick, plain foundation. To exceed $100,000.

Mass., Norfolk Downs (Boston P. O.)—Boston Gear Wks., 256 Franklin St., Boston, plans 2 story, 75 x 100 ft. addition to factory, concrete, here.

Mass., Pittsfield — Nesbit Bros., 20 4th St., having plans prepared by G. E. Haynes, 184 North St., 2 story, 100 x 120 ft. garage, brick, steel and timber, plain foundation. North and Wahconah Sts. $50,000.

Mass., Somerville—Sherwood Paper Co., 22 Kent St., plans 3 or 4 story plant, Kent St. To exceed $150,000.

R. I., Bristol — Natl. India Rubber Co. had plans prepared by Lockwood-Greene Co., archts. and engrs., 24 Federal St., Boston, 1 story, 60 x 175 ft. plant, rein.-con. and brick, plain foundation. To exceed $150,000.

Conn., Waterbury—General Baking Co., 1052 North Main St., soon lets contract 2 story and basement, 60 x 100 ft. addition to bakery, brick and timber, North Main St. $50,000. Francisco & Jacobus, 511 5th Ave., New York City, archts.

Conn., Meriden—Manning & Bowman Co., Pratt St., plans several factory buildings, brick, plain foundations, Pratt St. $100,000. Engineer and architect not selected.

N. C., Elizabeth City — Plans electric light plant, waterworks and street paving. J. J. Bray, city mgr. $300,000.

N. C., Haw River—Williamson Mills Co., recently incorporated, plans cotton mill. $700,000. W. T. Brooks, Haw River, J. O. Cobb, Durham and W. F. Williamson, Burlington, incorporators.

N. C., Raleigh—E. C. Hillyer, Hillsboro St., plans 4 brick warehouses, Jenkins St. $50,000.

La., Shreveport — Southwestern Gas & Electric Co. takes bids in August, 2 story, 60 x 150 ft. brick and stone warehouse, Travis and Marshall Sts. $400,000. E. F. Neild, Merchants Bldg., engr. and archt.

Tenn., Jackson — Illinois Central R.R., 135 East 11th Pl., Chicago, plans additions to locomotive and car repair shops, here. $200,000. F. L. Thompson, ch. engr.

Tenn., Lebanon—Lebanon Woolen Mills having plans prepared by D. W. Southgate, 150 4th Ave., N., Nashville, addition to plant. $100,000.

O., Cleveland—F. G. Kohn, 640 Guardian Bldg., plans 1 story, brick and steel garage and commercial building, 2027 East 105th St. $50,000. W. S. Ferguson Co., 1900 Euclid Ave., archts.

O., Cleveland — U. S. Awning Supply Co., 8712 Hough Ave., had plans prepared by Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., 1 story, 42 x 54 ft. and 50 x 118 ft. brick and timber factory additions, 10618 Cedar Ave. $50,000.

O., Columbus—Universal Body Co., 575 Cleveland Ave., having plans prepared 1 story, about 100 x 300 ft., brick and corrugated steel factory. $45,000. Private plans.

O., Massillon—Ohio Pub. Serv. Co. plans sub-station, 30,000 kw., Jarvis Ave. $150,000.

Ind., Whiting — Whiting Fdry. Equipment Co. plans 1 story addition to plant. $40,000. L. G. Hallberg, 116 South Michigan Ave., Chicago, archt.

Mich., Detroit—Hudson Motor Co., Jefferson Ave., had plans prepared by A. Kahn, 1000 Marquette Bldg., 1 story, 65 x 280 ft., steel and brick factory, plain foundation. Connors Ave.

Ill., East St. Louis—Lubrite Refining Co., Arcade Bldg., St. Louis, Mo., plans 1 and 2 story refinery addition, rein.-con. and brick, here. $500,000. Private plans.

Wis., Brownsville—Brownsville Canning Co., c/o P. H. McCarty, plans 1 and 2 story, brick and timber factory, plain foundation. $75,000. Private plans.

Wis., Centuria—Inderrieden Canning Co., 336 River St., Chicago, having plans prepared by J. P. Hoffman, c/o owner's branch plant at Barron, 2 story, brick and mill construction plant, plain foundation, here. $65,000.

Wis., Menominee—Bd. of Normal Regents, Capitol, Madison, plans power plant and switchboard, brick, rein.-con. and steel, plain foundation, at Institute, here. $74,460. W. J. Kettle, Capitol, secy. Engineer and architect not selected.

Industrial Works (Continued)

Wis., Milwaukee—Becker Motor Car Co., 372 4th St., having plans prepared by O. E. Novotny, 1418 Green Bay Ave., 1 story, 50 x 100 ft., concrete garage, plain foundation. $40,000.

Wis., Milwaukee—International Harvester Co., 217 Oregon St., had plans prepared by Owners' Architectural Dep., 606 South Michigan Ave., Chicago, 4 story, 100 x 148 ft., plant and warehouse, brick and concrete, plain foundation, Reed St.

Wis., Milwaukee—Jersey Ice Cream Co., 387 11th Ave., plans 2 story, brick and concrete factory, plain foundation, Mitchell St. $40,000. Engineer and architect not selected.

Wis., Milwaukee — Milwaukee Boiled Ham Co., 901 Holton St., having plans prepared by Leiser & Holst, 105 Wells St., 2 story, 42 x 77 ft., brick and concrete plant, plain foundation, Garfield Ave. $45,000.

Wis., Milwaukee—C. H. Thoringer, archt., 3328 State St., making plans 1 story, 60 x 100 ft. and 50 x 100 ft. rein.-con. factory. Cost to exceed $40,000. Owner's name withheld.

Wis., Portage—E. Weinke having plans prepared by L. A. Phillips, Beaver Bldg., Madison, 2 story, 50 x 70 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Silverlake—Riverview Fdry. plans to rebuild 1 story, brick and steel foundry, plain foundation, recently destroyed by fire. $50,000. R. M. Dixon, genl. mgr. Engineer and architect not selected.

Wis., Stevens Point—Stevens Point Brick Co., 426 Normal Ave., plans to rebuild 1 story, brick and timber plant, plain foundation, recently destroyed by fire. $40,000. F. Spalenpa, 426 Normal Ave., archt.

Minn., Minneapolis — Acme Transfer & Storage Co., 524 South 4th St., having plans prepared 1 story garage, and 4 or 5 story warehouse, rein.-con. and brick, 3rd St. and 10th Ave. N. $125,000. J. Juster, pres. Engineer and architect not announced.

Mo. St. Louis—Smith-Davis Mfg. Co., 20th and Locust Sts., plans 1 and 2 story factory buildings, Kingsland Ave. $300,000-$400,000. Engineer and architect not selected.

Tex., Bronte—F. E. Brown and C. C. Holder had plans prepared for light and power plant. $50,000. C. C. Holder, engr. and part owner.

Tex., Dallas—City plans garage. $40,000,-$50,000. E. A. Kingsley, city engr.

Tex., Dallas—F. H. Perkins and associates, Magnolia Bldg., had plans prepared by F. H. Perkins, Sr., archt. and engr., Magnolia Bldg., 12 story and basement, 207 x 207 ft., concrete and brick warehouse, plain foundation, Young St. near Marilla St. $500,000.

Tex., Houston — Southwestern Graphite Co., Burnett, making plans 2 story, 50 x 200 ft. warehouse and factory, here. $150,000. C. W. Wheeler, mgr. Engineer and architect not announced.

Calif., Emeryville — Standard Underground Cable Co., 1st Natl. Bank Bldg., San Francisco, having plans prepared by A. Prack, c/o Westinghouse Electric & Mfg. Co., Emeryville, 3 rein.-con. buildings, main building 100 x 300 ft., also power house and warehouse, here. $200,000.

Calif., San Francisco—Wobbers, Inc., 774 Market St., having plans prepared by A. Schroepffer, Foxcroft Bldg., 2 story and basement, 45 x 160 ft., rein.-con. printing plant, Stevenson St. near 5th St. To exceed $40,000.

Calif., Woodland—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, had plans prepared rein.-con. warehouse, shops and office building, here. $40,000. Private plans.

Que., Asbestos — Canadian Johns-Manville Co., 450 South James St., Montreal, takes bids early in August, 150 x 1000 ft. plant, here. $200,000. Private plans.

Ont., North Bay—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans to rebuild substation and distribution station recently destroyed by fire, concrete, brick and steel. $100,000 to $150,000. F. A. Gaby, ch. engr.

BIDS DESIRED

Wis., Kenosha — Kenosha Evening News, 261 Wisconsin St., taking bids 2 story, 40 x 70 ft., brick and concrete plant, plain foundation. $60,000. C. O. Augustine, 1063 Howland Ave., archt.

Wis., Madison — University Motor Co., 2201 University Ave., taking bids 2 story and basement, 50 x 100 ft. garage and repair shop, brick and rein.-con., plain foundation. $40,000. J. Fishnach, pres. Private plans.

CONTRACTS AWARDED

Mass., Lowell — Lowell Gas Light Co., School St., addition to house water gas plant, coke bin, etc., Rock St., to Bartlett Hayward Co., 101 Tremont St., Boston. $40,000.

Mass., Worcester—Amer. Steel & Wire Co., Grove St., will build 1 story, 60 x 100 ft. annealing house, brick and steel, plain foundation, by day labor. $40,000. Private plans. Noted July 19.

Conn., Hartford — Imperial Dyeing & Cleaning Co., 454 Park St., 2 story, 40 x 70 ft. factory, brick, plain foundation, Park St., to Lawrence & Coe Constr. Co., 372 Trumbull St. Archts. est. $40,000.

Conn., Hartford—Progressive Mfg. Co., 52 Norwood St., Torrington, 2 story, 60 x 100 ft. factory, Norwood St., here, to Torrington Building Co., 182 Church St., Torrington. Archts. est. $60,000.

Conn., Waterbury—Bristol Co., Platts Bridge, 1 additional story, 47 x 100 ft., brick and steel, to Clark Constr. Co., 168 Grand St. Archts. est. $40,000.

Conn., Waterville—Amer. Pin Co., 1 story, 40 x 120 ft. and 25 x 35 ft. factory, brick, plain foundation, to Immick Co., State St., Meriden. Archts. est. $70,000.

Md., Baltimore—Porcelain Enamel & Mfg. Co., 8th St., 2 story, 99 x 300 ft. plant, rein.-con. and brick, Eastern Ave., 23rd and 25th Sts., to P. C. Streett Eng. Co., 406 St. Paul St. Engrs. est. $150,00. Noted May 3.

O., Dayton—Elder & Johnson Co., 4th and Main Sts., 5 story and basement, rein.-con. and steel warehouse and shipping room plain foundation, 4th St., to H. R. El[illegible] Co., 1229 East 3rd St., $75,000.

Wis., Beloit—Lipman Refrigerator Car Co., 1 story, 80 x 260 ft., machine shop, etc., brick, rein.-con. and steel, plain foundation, to A. C. Woods & Co., Palace Theatre Bldg., Rockford, Ill. Archts. est. $100,000.

Wis., Green Bay—C. E. Wernig, 1 story and basement, 57 x 154 ft., brick and concrete bakery, plain foundation, Main St., to H. J. Selmer Co., McCartney Natl. Bank Bldg. Archts. est. $45,000.

Wis., Madison—A. J. Sweet, 639 West Wilson St., 2 story, 50 x 95 ft., cold storage plant, brick, rein.-con. and steel, plain foundation, to W. H. Deason, Washington Bldg. Archts. est. $50,000.

Wis., Milwaukee—C. Stehling, 401 4th St., 1 story, 62 x 150 ft., brick and concrete garage, plain foundation, 3rd St., to P. Hirt, 1717 Vlien St. Archts. est. $40,000.

Wis., Oshkosh—Winnebago Dairy Products Co., 332 Main St., 2 story, 48 x 82 ft. creamery, brick and tile, plain foundation, also 30 x 60 ft. stable, to Fluor Bros. Constr. Co., 48 Otter St. Archts. est. $45,000.

Wis., Racine—Belle City Malleable Iron Co., Kewaunee St., 1 story, 115 x 308 ft., brick and steel foundry, plain foundation, to Nelson & Co., Janes Blk. Archts. est. $80,000. Another unit, 230 x 362 ft., will be erected next year. Noted May 31.

Wis., Racine—Lakeside Malleable Casting Co., 23rd and Clark Sts., 1 story, 42 x 120 ft., brick and steel foundry addition, plain foundation, to Nelson & Co., Janes Blk. Archts. est. $40,000.

Minn., Moorhead — Fairmont Creamery Co., 12th and Dodge Sts., Omaha, Neb., general contract 3 story creamery building, 1 story and basement evaporation building, 1 story engine house, and 1 story boiler house, brick, here, to T. F. Powers & Co., 429 9th St. S., Fargo, N. D. Total cost $135,000.

Mo., St. Louis—Amer. Car Co., 1518 South Vandeventer St., 1 and 2 story, 38 x 80 ft., brick and timber plant addition, plain foundations, Vandeventer St., to Amber & Zimmerman, 1228 Pine St. Archts. est. $40,000.

Mo., St. Louis—Chicago, Rock Island & Pacific Ry., La Salle St. Sta., Chicago, will build 2 story, 50 x 300 ft. freight depot and office building, rein.-con. and brick, plain foundation, Bway., here, by day labor. $50,000. A. B. Hawk, Chicago, archt.

Mo., St. Louis—W. D. Kunkel, 3132 Washington Blvd., 1 story, 50 x 115 ft., rein.-con. and brick garage, plain foundation, to J. J. Clark Constr. Co., Arcade Bldg. Archts. est. $45,000.

Mo., St. Louis—N. O. Nelson Mfg. Co., 20th and Chestnut Sts., 1 story, 62 x 293 ft., rein.-con. and brick factory, Boyle St., to Widmer Eng. Co., Laclede Gas Bldg. Archts. est. $45,000.

Calif., Los Angeles—A. C. Martin, archt., Higgins Bldg., 5 story and basement, rein.-con. warehouse, San Pedro St., to Weymouth-Crowell Co., 2026 West 5th St., for Los Angeles Warehouse Co. $150,000. Noted July 12.

Calif., Los Angeles—Unger & Watson, 4 story, 90 x 275 ft., rein.-con. and brick garage and loft building, Figueroa St., to Milwaukee Building Co., Wright-Callender Bldg., to exceed $250,000.

Calif., Oakland—Field & Lee, 3865 East 14th St., 2 story, rein.-con. auto service building, East 14th St., to M. E. Hopper & Son, 1117 Webster St., $75,000.

Calif., San Francisco—L. R. Lurie Co., 315 Montgomery St., rein.-con. auto stage terminal and store building, Jessie and 5th Sts., to Vukicevich & Bagge, 180 Jessie St., $200,000. Pickwich Stages, 683 Market St., lessee.

Ont., Campbellford — See "Miscellaneous."

Ont., Hamilton—Canadian Westinghouse Co., Traders Bank Bldg., Toronto, 3 story and basement, 80 x 200 ft. rein.-con., brick, and steel plant, plain foundation, Aberdeen Ave., to W. H. Yates Constr. Co., 17 Main St. E., $200,000.

Ont., Timmins — Hollinger Consolidated Gold Mines Ltd., hydro electric power plant, rein.-con., on Abitiki River at Island Portage, concrete and earth dams, rock and earth excav., and 3½ mi. railway spur, to William Arrol & Sons Ltd., St. Catharines. Total est. cost $4,000,000-$5,000,000.

Buildings

PROPOSED WORK

Mass., Andover—School—Town having plans prepared by Ripley & LeBoutillier, 45 Bromfield St., Boston, 2 story, 124 x 178 ft., brick and steel, plain foundation. Shawsheen Village. $220,000. E. Conroy, chn. building com.

Mass., Boston—Fire Alarm Station—Fire Dept., 60 Bristol St., having plans prepared by O'Connell & Shaw, 134 Newbury St., 2 story, 100 x 125 ft., stone, steel frame. Hemenway St. $200,000. T. M. Glynn, comr.

R. I., Providence—Apartment—S. Pearlman, c/o J. F. O'Malley, archt., 285 Main St., Pawtucket, had plans prepared 3 story and basement, 36 x 145 ft., with two 46 x 56 ft. ells, brick, hollow tile and stucco, Camp and Cypress Sts., here. $150,000.

Conn., Bridgeport.— Store D. M. Read Co., 1120 Main St., plans 6 story, brick, fireproof, Broad and John Sts. $1,000,000. Engineer and architect not selected.

Conn., Bristol — Nurses' Home — Bristol Hospital Corp., c/o N. Jennings, 4 Oakland St., having plans prepared by C. S. Palmer, 114 Whitney Ave., New Haven, 3 story brick and stone, plain foundation. $150,000. Noted May 17.

Conn., Mansfield—Hospital, etc.—Mansfield Training School and Hospital having plans prepared by Cudworth & Thompson, Thayer Bldg., Norwich, nurses home, addition to hospital ward and boys dormitory, all brick, fireproof, $195,000, $140,000 and $105,000 respectively. C. T. LaMoure, supt. Noted July 12.

N. Y., Gowanda — Temple — Masonic Temple Assn., Jamestown St., having plans prepared by Johnson & Ford, Jamestown, 6 story, 65 x 90 ft., brick. $150,000.

N. J., New Brunswick—School—Bd. Educ. soon takes bids 2 story and basement, 25 x 65 ft., brick and limestone, Delevan St between Livingston and Lee Aves. $170,000. A. Merchant, 363 George St., archt.

Pa., Phila.—Hotel—L. H. Cahan, 1324 Walnut St., having plans prepared by H. E. Kennedy, 1324 Market St., 22 story, 100 x 100 ft., Spruce and Broad Sts. $4,000,000.

Pa., Sharon—Clubhouse—Sharon Lodge 292 Moose, South Main Ave., plans 2 story, 90 x 160 ft. brick, South Main Ave. $180,000.

Md., Baltimore — Store — Bernheimer-Leader Stores, Howard and Lexington Sts., plans 8 or 9 story, 122 x 156 ft., concrete and brick, Howard and Lexington Sts. $1,500,000. L. C. Coblenz, pres. Engineer and architect not selected.

N. C., Hickory—High School—City having plans prepared by C. G. Sayre, East Martin St., Raleigh, for high school. $250,000.

N. C., Newton—Court House—Comrs. Catawba Co having plans prepared by W. G. Rogers, archt., Trust Bldg., Charlotte, 3 story and basement, 60 x 140 ft. $175,000. J. D. Elliott, Hickory, chn.

Buildings (Continued)

N. C., Raleigh—College—Baptist Denomination plans Meredith College, at Method, near here. $1,000,000. C. E. Brewer, 128 North Bount St., Pres. Wilson & Berryman, Wilson, archts.

Fla., Miami Beach—Hotel—C. W. Cordeman, c/o J. Pope, archt., Miami Beach, having plans prepared 6 story, rein.-con., steel frame, Ocean Dr. $200,000.

Fla., Tampa—Auditorium—Amer. Legion Auditorium Assn., had plans prepared by F. J. Kennard, Krause Bldg., and F. O. Adams, Grand Theater Bldg., 2 story, rein.-con. and steel, Crescent Pl. (north end). $650,000. Noted Mar. 22.

Miss., Bay St. Louis—Hotel—H. S. Wetson having preliminary plans prepared by W. T. Nolan, Canal-Commercial Bldg., New Orleans, La., 2 story and basement. $150,000.

La., New Orleans—School—Orleans Parish School Bd., City Hall Annex, having plans prepared by E. A. Christy, for Lafayette School, 3 story, 189 x 244 ft., rein.-con., brick and cement, Carrollton St. between Apple and Belfast Sts. $300,000.

Tenn., Memphis — Church — St. Paul Methodist Church had plans prepared by H. T. McGee, Madison Ave. Bldg., 3 story and basement, 800 seating capacity, brick and stone, Euclid Ave. and Rozell St. $150,000.

Tenn., Memphis—Jail—Shelby Co., having plans prepared by Jones & Furbringer, Porter Bldg., brick and stone, Washington Ave. $350,000. Noted July 12.

Ky., Henderson—Temple—Masonic Lodge plans temple, $150,000. Architect not selected.

Ky., Paducah — Terminal — Nashville, Chattanooga & St. Louis Ry. Co., 1000 Bway., Nashville, Tenn., plans 2 story station and office building, 6 tracks, tobacco platforms, etc., here. $250,000. H. McDonald, ch. engr.

O., Cincinnati — Church — Holy Name Monastery, Locust and Woodburn Sts., having plans prepared by Crowe & Schulte, 914 Main St., 2 story, rein.-con. and stone addition, plain foundation. $250,000.

O., Cleveland — Commercial and Temple —Lorain Ave Masonic Temple Co., c/o J. Lyons, 321 Frankfort Ave., plans 4 story, brick, steel and concrete, West 95th St. and Lorain Ave. $300,000. R. F. Medicus, Crandall Ave., Youngstown, archt.

O., Cleveland—Church and Sunday School —Schifflein Christi Evangelical Congregation, 1645 Superior Ave., having plans prepared by Howell & Thomas, 4500 Euclid Ave., 1 and 2 story and basement, brick, steel and stone, on lot 164 x 230 ft., Thornhill Dr. and Arlington Ave. $150,000. J. C. Hansen, pastor.

O., Cleveland—Commercial and Apartment—H. G. Atwater, 13807 St. Clair Ave., having plans prepared by Steffen & Steffen, Williamson Bldg., 3 story and basement, 64 x 110 ft., brick and timber, 13809 St. Clair Ave. $150,000.

O., Cleveland — Commercial and Apartment—J. M. Sands of Sands Mfg. Co., 5407 Sweeney Ave., plans 2 story, brick and steel, St. Clair Ave. and Coit Rd. $150,000. A. F. Janowitz, 811 Prospect Ave., archt.

Mich., Detroit—Hotel—Fairbairn Hotel, 381 West Grand Blvd., having plans prepared 8 story and basement, 120 x 157 ft. rein.-con., brick and steel, plain foundation, East Columbia Ave. $1,250,000. Architect's name withheld.

Mich., Redford — School — Brightmoor School Bd. plans 2 story and basement, 10 room, rein.-con., brick and steel, plain foundation. $150,000.

Ill., Oak Park—Apartment—H. Dalsey, archt. and owner, 2321 West North Ave., plans 3 story, 140 x 150 ft., fireproof, Washington and Kenilworth Sts. $300,000.

Wis., Cedarburg — Church — Immanuel Lutheran Congregation receiving competitive sketches for brick and tile, plain foundation. $150,000. W. H. Behrens, pastor. Engineer and architect not selected.

Wis., Kenosha—School and Church—St. Marks Congregation having preliminary plans prepared by Backes & Pfaller, 216 West Water St., Milwaukee, 2 story and basement, 57 x 137 ft., brick and tile, plain foundation. $150,000.

Wis., Milwaukee — Business—Milwaukee Sales & Investment Co., 425 East Water St., having plans prepared by M. Tullgren & Sons, 425 East Water St., 6 story and basement, brick and concrete, plain foundation, Grand Ave. $400,000.

Wis., Milwaukee—Church—St. Boniface Congregation, c/o H. T. Stemper, pastor, 118 Clarke St., having plans prepared by Riesch & Hess, 128 Wisconsin St., 1 story 120 x 137 ft., brick, stone and concrete, plain foundation. $250,000.

Wis., Milwaukee—Office—Globe Investment Co., 218 3rd St., having plans prepared by Kirchhoff & Rose, 210 Sycamore St., 6 story, 44 x 100 ft., brick, concrete and steel addition, Grand Ave. $150,000.

Wis., Milwaukee—Business—P. Voland Furniture Co., 3202 North Ave., had plans prepared by H. H Bruns, archt, 845 26th St, 2 story and basement, 82 x 120 ft., brick and concrete, plain foundation. $150,000 Noted July 19.

Wis., Stoughton—High School—Bd. Educ. c/o Clerk, plans 2 story, brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Ia., Ames—Memorial—Iowa State College, Ames, plans memorial union building, on campus. $1,000,000. Pond & Pond, 64 East Van Buren St., Chicago, archts. Noted Feb. 22.

Minn., Minneapolis—Church—Beth El Congregation and A. M. Heller, Penn Ave. and 14th Ave N., having plans prepared by Liebenberg & Kaplan, 617 McKnight Bldg., 128 x 164 ft., rein.-con., brick and tile, Penn Ave. and 14th Ave. N. $150,000.

Kan., Wichita—Store and Office—Wheeler, Kelly & Hagny, 120 South Market St., plan 7 story, fire-proof, Market St. $500,000. Engineer and architect not selected.

Mo., Joplin—Memorial—Voted $250,000 bonds for memorial, convention hall, and auditorium, 5,000 seating capacity, brick, rein.-con. and stone. Engineer and architect not announced. Noted July 5.

Mo., Richmond Heights (St. Louis P. O.) —Church—Richmond Heights Presbyterian Church, Silverton and Dale Aves., plans 2 story, rein.-con. and brick, plain foundation, Pennsylvania St. $150,000 up. Engineer and architect not announced.

Mo., St. Louis—Office and Store—Southern Realty & Investment Co., Central Natl. Bank Bldg., plans 79 x 121 ft., probably 12 story, rein.-con., brick and steel, concrete pile foundation, 6th St. $1,000,000. Engineer and architect not announced.

Mo., Webster Groves—Seminary—Eden Seminary, 6700 Easton Ave., Wellston, having plans prepared by T. P. Barnett & Co., Arcade Bldg., St. Louis, and takes bids about Sept. 1, 2 story and basement, rein.-con. and brick, plain foundation, Lockwood Blvd., here. $375,000.

Tex., Texarkana—Hotel—Secretary Chamber of Commerce having plans prepared 4 story and basement, concrete and brick. $300,000. Engineer and architect not announced.

Calif., Beverly Hills—Theatre and Store —V. McCoy, c/o W. A. Hudson, archt., Wood-Beekman Bldg., had plans prepared 60 x 160 ft., brick and rein.-con.

Calif., Eureka—High School—Eureka High School Dist. plans group of rein.-con. buildings. J. J. Donovan, 1916 Bway., Oakland, archt.

Calif., Long Beach—Bank—Bank of Italy, 660 South Bway., Los Angeles, having plans prepared by Walker & Eisen, Pacific Finance Bldg., Los Angeles, 12 story, 80 x 125 ft., probably rein.-con., 3rd St. and American Ave., here. $1,000,000.

Calif., Los Angeles—Hotel and Store—McCartney Co., c/o J. H. Dunn, archt., Merchants Natl. Bank Bldg., had plans prepared 5 story (ultimate 12 story) rein.-con., Temple St. and Bway.

Calif., Oakland—Store—J. Havens, et al, c/o J. W. Plachek, archt., 2014 Shuttack Ave., Berkeley, having plans prepared 2 story and basement, 100 x 100 ft., concrete, brick and terra cotta, 11th and Clay Sts., here. $150,000.

Calif., San Jose—College—Notre Dame College plans group of rein.-con. buildings. $600,000. J. J. Donovan, 1916 Bway., Oakland, archt.

Calif., Santa Monica — Store — A. C. Blumenthal, et al, Loew State Bldg., Los Angeles, plans about 12 story, probably rein.-con., on 100 x 150 ft. site. To exceed $500,000.

Calif., Santa Monica—Apartment—Mick and Doyle having plans prepared by Walker & Eisen, 326 Pacific Finance Bldg., Los Angeles, 5 story and basement, 208 x 240 ft., rein.-con., Ocean Ave. $500,000.

Wash, Seattle—Temple—Elks Lodge 92, plans 4 story temple. $400,000. J. E. Rimbold, 220 1st St. N., exalted ruler.

Ont., Toronto—Schools—Bd. Educ., 155 College St., having sketch plans prepared by C. Dyson, 155 College St., commercial high school and new collegiate institute, each 3 story and basement, 20 rooms, rein.-con., brick and steel, plain foundation. $250,000 each.

Ont., Toronto—Y.W.C.A., 21 McGill St., having plans prepared by Molesworth, West & Secord, 43 Victoria St., 3 story and basement, rein.-con., brick and steel, plain foundation, McGill St. $300,000.

BIDS DESIRED

Conn., Hartford—Apartment—J. Frary, 679 Albany Ave., taking bids 4 story, 55 x 140 ft. with 40 x 65 ft. ell, brick and steel, plain foundation, Albany Ave. $200,000. Dunkelberger & Gilman, 721 Main St., archts. Noted July 12.

N. Y., Amsterdam—High School—Aug. 15, by Bd. Educ., 2 story, 129 x 210 ft., brick, steel and concrete. G. L. Lockhart, 1353 University Ave., St. Paul, Minn., archt. Noted May 17.

N. Y., Kew Gardens (Jamaica P. O.)—School—Aug. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 99, Kew Gardens Rd. from 82nd Rd. to 83rd Ave., here. Noted July 12.

Pa., Harrisburg—Office—Aug. 23, by B. H. Boyd, secy. Dept. Property and Supplies, Capitol Bldg., completion of new South Office Building; adv. this issue.

D. C., Wash.—School—Aug. 8 by Dist. Comrs., 509 Dist. Bldg., 8 room school on Spring and Rock Creek Church Rds.; adv. this issue.

W. Va., Pruntytown (Grafton P. O.)—School—Sept. 28 by State Bd. Control, Charleston, 3 story, 69 x 150 ft., brick, tile, concrete, steel and limestone, here. R. A. Gillis, Fairmont, archt.

Ky., Louisville—Temple—Aug 15 (change of date), by Joseph & Joseph, archts., Francis Bldg., 7 story, 155 room hotel, auditorium seating capacity 5,000, and large proscenium arch stage, 50 x 183 ft., East Bway., for Kosairs Assn. $1,600,000. Noted July 12.

O., Akron—Auditorium—Aug. 28, by Bd. Educ., 3 story in rear of Central High School, Union Ave., 15,000 seating capacity. $175,000.

O., Cincinnati—School—Aug. 13, by Clerk Bd. Educ., Denton Bldg., 3 story, 75 x 109 ft. addition to Avondale Public School, Reading Rd. $150,000. S. Hannaford & Sons, 1024 Dixie Terminal Bldg., archts. Noted June 7.

O., Norwood (Cincinnati P. O.)—Exchange—Aug. 6, by H. Hake, archt., Telephone Bldg., Cincinnati, exchange, here, for Cincinnati Suburban Bell Telephone Co., Telephone Bldg., Cincinnati. Noted March 1.

O., Piqua—Church—Green St. Methodist Episcopal Church taking bids 2 story, brick, steel and concrete. $250,000. J. Fulton, Thompson Ruby Bldg., Uniontown, Pa., archt. Noted May 24.

O., Portsmouth—Hotel—Aug. 10, by C. C. Taylor, archt., Portsmouth, constructing Hurth Hotel, 6 story and basement, 60 x 120 ft., brick and stone, for H. R. Hurth, Portsmouth. $165,000. Noted May 3.

Mich., Detroit—Schools—Aug 8, by Bd. Educ., 2 story and basement, 40 ft. high, 64 x 140 ft., rein.-con., brick and steel addition to Western High School, Scotten and Page Aves., $150,000; also 3 story and part basement, 42 ft. high, 110 x 215 ft. school, with 38 x 97 ft. heating plant, rein.-con., brick and steel, Cameron Ave. $350,000.

Ill., Chicago—Store and Office—J. J. Jensen, archt., 4815 North Lawndale Ave., receiving bids 5 story, 30 x 69 ft. rein.-con., brick and steel, 173-175 North Michigan Ave., for Frolich, McCabe & Chadwick, 551 North Michigan Ave. $200,000.

Wis., Milwaukee—Chapel, etc.—Aug. 6, by E. Brielmaier & Sons, archts., 432 Bway., 1 story and basement, 52 x 116 ft., brick and concrete, plain foundation, State St., for St. Benedict the Moor Mission, 305 9th St. $200,000.

Wis., Union Grove—Employees—Aug. 10, by State Bd. Control, Madison, 1 story, 50 x 115 ft., brick and rein.-con., at State School and Home for Feeble Minded, here. $150,000. Noted June 21.

Ia., Cedar Rapids—Court House and Jail —Aug. 22 by Auditor Linn Co., 3 story and basement, rein.-con., on Municipal Island. $750,000. J. W. Royer, Flat Iron Bldg., Urbana, Ill., archt. Noted Dec. 14.

Kan., Arkansas City—Apartment—Aug. 8, by Roseberry & Cunningham, 116 North Summit St., 3 story and basement, 132 x 132 ft., brick and concrete, plain foundation. $150,000. W. L. McAtee, Johnson Bldg., archt.

Neb., Fairbury—High School—Fiske & McGinnis, archts., 533 Bankers Life Bldg., Lincoln, opens bids about Aug. 6, 2 story

Buildings (Continued)

and basement, 90 x 160 ft., rein.-con. and brick, for Bd. Educ. $200,000. Noted Mar 8.

Mo., St. Louis—Store and Office—Aug. 15, by Wedemeyer & Nelson, archts., Wainwright Bldg., 3 story and basement, 88 x 175 ft., rein.-con. and brick, Grand Blvd., for E. Freund, 2735 Cherokee St. $150,000. Noted June 28.

Tex., Dallas—Church—Nov. 1, by First Methodist Church, c/o M. C. Cameron, 3800 Stratford St., 2 story and basement, 160 x 232 ft., stone, concrete and steel, Ross Ave. $150,000. R. H. Hunt & Co., Great Southern Life Bldg., archts.

Calif., Los Angeles—High School—Aug. 15, by Bd. Educ., building Fairfax High School, 2 story, 320 x 450 ft., rein.-con. and brick, Fairfax Ave. $600,000. J. and D. Parkinson, Title Insurance Bldg., archts. Noted July 26.

Calif., Los Angeles—Store and Loft—W. D. Lee, archt., Sun Drug Bldg., taking bids 6 story, rein.-con., San Pedro and Winston Sts., for Revolving Fund Corp., c/o architect.

Calif., Los Angeles — Store — Allison & Allison, archts., Hibernian Bldg., taking bids 4 story and basement, 100 x 150 ft., rein.-con. and brick, Hollywood Blvd. and Vine St., for E. O. Palmer, c/o architects. $250,000.

Calif., Redondo—High School—Aug. 9, by Trustees Redondo High School Dist., 2 story, 36 x 60 x 269 ft., brick. $150,000. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts. Noted March 15.

Calif., Santa Rosa—Store and Lodge—Shea & Shea, archts., Chronicle Bldg., San Francisco, taking bids 3 story, rein.-con. and steel, A St., here, for B.P.O.E., Santa Rosa Lodge. $250,000.

BIDS RECEIVED

O., Columbus — Journalism, etc. — Bd. Trustees Ohio State University, July 25, Journalism building, 2 story and basement, 80 x 117 ft., also 1 story, 105 x 220 ft. addition to chemistry building, both brick and concrete, on campus, from D. W. McGrath & Sons, 255 East Broad St., $67,500 and $141,000 respectively. Noted July 19.

O., Logan—Court House—D. M. Heft, aud. Hocking Co., 3 story and basement, 70 x 117 ft., brick concrete and stone, from E. H. Latham, 60 East Broad St., Columbus. $176,900. Noted June 28.

O., Painesville—Hospital—Lake Co. Hospital Assn., c/o L. G. Spaulding, clk., 3 story and basement, brick, steel and concrete, from J. Grant & Son, 4500 Euclid Ave., Cleveland, $129,312. Noted July 12.

Mich., Detroit—School—Bd. Educ., 1343 Bway. Ave., 2 story and basement, 84 x 278 ft. rein.-con., brick and steel, plain foundation, Wagner Ave., from W. H. Mueller, 1711 Ford Bldg., $287,400. Noted July 19.

Wis., Rice Lake — Church — Bethany Lutheran Congregation, 2 story, 70 x 100 ft., brick and tile, plain foundation, from C. W. Peterson, Milltown. Archts. est. $150,000.

Minn, St. Paul—School—Dept. Educ., City Hall, July 23, general contract 2 story and basement, brick and tile, Palace and James Sts., from P. A. Swenson & Co., 202 Bremer Arcade, $128,000.

Calif., Long Beach — Hospital — City Council, rein.-con., State St., from R. E. Campbell, Bancroft Bldg., San Diego, $233,300. Noted July 12.

CONTRACTS AWARDED

N. H., Goffstown—Chapel and Dining Hall—St. Anselms College, 2 story, 100 x 125 ft., brick and steel, to J. M. Dolan, 237 Bway., Boston. Archts. est. $300,000.

Mass., Newtonville — Church — Methodist Episcopal Church will build 52 x 106 ft., brick, by day labor under supervision of Woodbury & Stuart, archts., 581 Boylston St. $175,000.

Mass., Northampton—Gymnasium—Smith College, 2 story, 80 x 170 ft., brick and steel, plain foundation, to E. F. Miner Building Co., 25 Harvard St., Worcester. $400,000. Noted June 7.

Mass., Northampton—Music Hall—Smith College, 4 story, brick and steel, to E. F. Miner Building Co., 25 Harvard St., Worcester. Archts. est. $300,000. Noted Dec. 28.

Mass., Somerville — (Boston P. O.) — Church and School—Park Ave. Methodist Church will build brick and steel church and school, College Ave., by day labor. $200,000. Woodbury & Stuart, 581 Boylston St., Boston, archts.

R. I., Providence—Gymnasium—City, 4 story, 100 x 150 ft., rein.-con. and brick, Spring St., general contract to E. Turgeon, Weybossett St., $269,884. Noted June 28.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., P. S. 74, Crotona Ave. and East 189th St., to Rosenthal Eng. Contg. Corp., 228 Jackson St., Brooklyn, $1,196,000; P. S. 79, East 181st St. between Morris and Creston Aves., to J. T. Brady Co., 103 Park Ave., $1,109,100; addition to P. S. 30, East 141st St. and Brook Ave., to Lustig & Weil Co., 103 Park Ave., $190,000. Noted July 19.

N. J., Bloomfield—High School—Bd. Educ. general contract 4 story, 25 x 140 ft., brick and stone addition, plain concrete foundation, Broad St., to Becker Constr. Co., 125 Main St., East Orange, $162,970. Noted June 28.

N. C., Graham—Court House—Comrs. Alamance Co., 3 story and basement, rein.-con., granite, marble and terra cotta, to Northeastern Constr. Co., Commercial Bank Bldg., Charlotte, $179,770. Noted April 4.

N. C., Raleigh—Dormitory—Bd. Directors State College, 3 story, 100 room, steel and concrete, to J. W. Stout & Co, Sanford, $164,000.

Fla., Sarasota—Hotel—A. McAnsh, 208 South LaSalle St., Chicago, rein.-con. hotel, steel frame, Central Ave., here, to W. R. Carman Co., Sarasota, cost plus basis. Archts. est. $350,000. Noted Apr. 26.

Fla., Winter Haven—Hotel—Haven Hotel Co., c/o D. W. Swarts, completing 7 story, rein.-con., to Hargler & Smith, Winter Haven, cost plus basis. About $125,000. Skeleton of building erected. Noted May 3.

Miss., Aberdeen—High School—Bd. Educ., 3 story, brick and stone, general contract to D. D. Thomas & Son, 463 North Dunlap St., Memphis, Tenn. $150,000.

Wis., Fond du Lac—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, 8 story, 34 x 77 ft., brick and concrete addition, plain foundation, here, to Immel Constr. Co., 200 North Main St. $160,000.

Wis., Milwaukee—Apartment—H. F. Gray, 138 Juneau Ave., 4 story and basement, 45 x 100 ft., brick and concrete, plain foundation, Grand Ave., to Raulf Co., 428 Grand Ave. $150,000.

Wis., Oshkosh—Hospital—Mercy Hospital, 185 Hazel St., 4 story and basement, 48 x 100 ft., brick and concrete, plain foundation, to Fluor Bros. Constr. Co., 48 Otter St. Archts. est. $150,000.

Ia., Winfield—School—School Bd, general contract 2 story and basement rein.-con., brick and stone, to C. W. Getchell, 2910 High St., Des Moines, $129,920. Noted July 26.

Minn., Chisholm—Municipal—Village, 2 story and basement, 142 x 241 ft., brick and rein.-con., general contract to H. Fawcett, 31 Nesabe Blk., Duluth, $150,865. Noted July 12.

Mo., St. Louis—Theatre, Store and Office—W. Goldman, 6343 Waterman Ave., 6 story, 146 x 148 ft., rein.-con. and brick, concrete pile foundation, Grand Blvd., to P. J. Bradshaw, International Life Bldg. $600,000. Noted March 15.

Tex., Dallas—Hotel—E. D. Gonzales, 3029 Bryan St., 9 story and basement, 90 x 103 ft., concrete, brick and stone, plain foundation, Harwood and Jackson Sts., to H. O. Rourke Constr. Co., Praetorian Bldg. $311,000.

Tex., Houston—Chemistry, etc.—Rice Institute, 3 story and basement, brick, stone and concrete, to T. Telepsen Constr. Co., Prince Theater Bldg., $439,000. Noted June 14.

Tex., San Antonio — Office—Travis-St. Mary's Investment Co., 407 Navarro St, 10 story, 90 x 110 ft., rein.-con., brick and stone, concrete pile foundation, to McKenzie Constr. Co., 605 Bedell Bldg., $231,000. Noted June 21.

Wash., Seattle—Office and Store—Kress Co., 114 5th Ave., New York City, 3 story, steel and concrete, 3rd and Pike Sts., to M. Hoard & Co., Pantages Bldg., $200,000. Noted May 3.

Wash., Seattle—Medical—Medical Assn., 16 story, 100 x 140 ft. class A rein.-con., 5th and Olive Sts., to Great Northern Constr. Co., New York Blk. Archts. est. $1,800,000.

Calif., Long Beach—Apartment—R. C. Robertson, c/o H. E. Burkett, archt., Commercial Bldg., 6 story and basement, rein.-con., West 6th St., to H. E. Ketchum, 1705 East 1st St., $300,000. Noted June 21.

Calif., Los Angeles—Loft—See "Industrial Works."

Calif., Los Angeles—Office and Store—Frick-Martin Co., c/o Curlett & Beelman, archts., Union Bank Bldg., 2 story and basement, 50 x 155 ft., rein.-con. and brick, Spring St. near 7th St., to Edwards, Wildey & Dixon, Black Bldg., $150,000.

Calif., Oakland—Office—Acc[illegible] Building Co., c/o C. W. McCall, archt., Central Bank Bldg., 7 story and basement, fireproof, 14th and Franklin Sts., to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, $350,000.

Calif., San Francisco—Store—See "Industrial Works."

Ont., Port Hope—College—Trinity College 3 story and basement, rein.-con., brick and steel, plain foundation, general contract to Gladman Constr. Co., 76 Adelaide St., E. Toronto. Archts. est. $350,000.

Ont., Toronto — Restaurant — Bowles Lunch Room, Ltd., 7 King St. E., 3 story and basement, 30 x 100 ft., terra cotta, tile, marble and steel addition, to W. T. Joy, 86 High Park Ave., $175,000.

Federal Government Work

PROPOSED WORK

Ky., Louisville—Rods, Steel, etc.—U. S. Engineer, P. O. Box 72, will purchase 900 reinforcing bars, 2-30 ft. long, reinforcing steel accessories incl. 850 bar chairs for proposed power house at Dam 44, Ohio River.

BIDS DESIRED

Mass., Boston—Dredging—Aug. 30, at office U. S. Engineer, Custom House, dredging in Beverly Harbor; adv. this issue.

N. Y., New York—Dredging—Aug. 9 at office U. S. Engineer, 616 Army Bldg., dredging and rock removal in Area 2, New York and New Jersey Channels; adv. this issue. Noted Mar. 15.

Pa., Pittsburgh—Lock—Aug. 23, at office U. S. Engineer, constructing Lock 7, Monongahela River; adv. this issue.

Md., Baltimore—Riprap Stone—Aug. 15, by Superintendent of Lighthouses, furnishing and placing 2,500 tons riprap stone at Lighthouse Stations, 5th Dist.

D. C., Wash.—Fire Protection System—Aug. 7 by Treas. Dept., installing fire protection equipment in Treasury Annex 2. J. A. Wetmore, acting superv. archt.

D. C., Wash.—Shed, etc.—Aug. 20, by Treas. Dept., Wash., D. C., storage shed and repairs to present shed at central heating, light and power plant, here. J. A. Wetmore, acting superv. archt.

Mich., Harbor Beach—Stone—Aug. 16 at office U. S. Engineer, 337 Federal Bldg., Detroit, furnishing and placing 10,000 tons stone on breakwater, here. E. M. Markham, dist. engr.

Arizona — Road — Aug. 15, by E. S. Wheeler, dist. engr., Bureau of Pub. Rds., Dept. of Agriculture, 242 West Washington St., Phoenix, constructing 16.522 mi. Salt River-Pleasant Valley, Sect. 1, Forest Highway, Tonto National Forest, Gila Co., 18,917 cu.yd. rock and 80,946 cu. yd. earth excav., etc.

T. H., Pearl Harbor—Bins and Trestle—Spec. 4772—Sept. 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., 12 storage bins and 1 trestle at Naval Operating Base, here. Noted July 19.

Alaska—Bridge—Aug. 8, at office C. E. Dole, gen. purch. agt., Alaskan Eng. Comn., 422 Bell St. Terminal, Seattle, Wash., steel girder spans for Bridge 3707 over Nenana River, here.

BIDS RECEIVED

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing yellow pine No. 1 common, 1,300 pieces 6 x 8 in. x 20 ft., 250 pieces 4 x 6 in. x 20 ft., 120 pieces 2 x 4 in. x 10 ft., etc., f.o.b. Owensboro, from Marsh & Truman Lumber Co., 332 South Michigan Ave., Chicago, $32.45 per M ft. (delayed delivery); King Sparrow Lumber Co., Hattiesburg, Miss., $32 per M ft. Noted July 19.

Calif., San Diego—Road—Spec. 4844—Bureau Yards & Docks, Navy Dept., Wash. D. C., road at Training Station, Naval Base, here, from Union Constr. Co., foot of 14th St., Oakland, $5,990 (60 days). Noted July 12.

CONTRACTS AWARDED

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging 5 mi. Calcasieu-Sabine Sect., Intracostal Waterway, 998,000 cu.yd. excav., to H. Reynolds, Maison Blanche Bldg., $128,836. Noted July 26.

Ill., Great Lakes—Sewer Extension—Spec. 4851—Bureau Yards & Docks, Navy Dept., Wash., D .C., sewer outfall extension

Federal Government Work (Continued)

at Great Lakes Naval Training Station, here, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $28,400 (120 days). Noted July 5 under "Chicago."

Miscellaneous

PROPOSED WORK

Fill—Daytona, Fla.—See "Excavation, Drainage and Irrigation."

Park Improvements—Biloxi, Miss.—City making preliminary plans for park improvements. $80,000.

Extensions to Lines, etc.—Gainsboro, Tenn.—Gainsboro Telephone Co. authorized by Tennessee Pub. Utilities Com. to issue $100,000 bonds, $50,000 of which will be spent on additions, extensions and improvements to lines and service, balance refunding bonds.

Coal Elevator—Paducah, Ky.—West Kentucky Coal Co., Sturgis, plans coal elevator foot of Ohio St., here. $25,000.

Tracks, Platforms, etc.—Paducah, Ky.—See "Buildings."

Elimination of Grade Crossing—Columbus, O.—City, Cleveland, Cincinnati, Chicago & St. Louis R.R., La Salle St. Sta., Chicago, Pennsylvania R.R., Pennsylvania Sta., Pittsburgh, and Hocking Valley R.R. Spahr Bldg., Columbus plan raising railroad tracks at Dennison Ave. crossing, here, street will be depressed and widened to 80 ft. and tracks carried over by steel girders. $1,450,000. City's share of cost 35%, railroads 65%. R. H. Simpson, city engr.

Elimination of Grade Crossing—Red Bank (Cincinnati P. O.), **O.**—Pennsylvania R.R., Pennsylvania Sta., Pittsburgh, and Hamilton Co., (Cincinnati), plan elimination of grade crossing, here, $150,000. Railroad to pay 65% and county 35% of cost. W. D. Wiggins, ch. engr. of railroad. E. A. Gast, Court House, Cincinnati, engr.

Dike—Detroit, Mich.—Dept. Parks & Blvds., 600 Marquette Bldg., plans stone dike at Belle Isle Park, 25,000 tons one man size stone. $25,000. E. G. Heckel, 600 Marquette Bldg., comr.

Steam Heating Plant—Cambridge, Wis.—Bd. Educ., c/o Clerk, plans to issue $30,000 bonds steam heating plant incl. boilers in high school. Engineer not selected.

Golf Course, etc.—Fox Point (Milwaukee P. O.), **Wis.**—Michiwaukee Golf Club, 720 Cramer St., plans golf course and club house. A. Severnson, pres. $100,000. Engineer not selected.

Coaling Station—Madison, Wis.—Chicago & Northwestern Ry., c/o B. R. Kulp, div. engr., 201 South Blair St., plans 1 story, 60 x 110 ft., 200 ton mechanical coaling station, brick, rein.-con. and steel, plain foundation. $75,000. Private plans.

Steam Heating Plant—Sheboygan, Wis.—Plans steam heating plants at city almshouse. R. R. John, City Hall, engr.

Power Development—Minnesota—Phoenix Utilities Co., Lyceum Bldg., Duluth, acting for Amer. Power & Light Co., purchased several power plants and appropriated funds for new power dams at Cloquet and near Lake Vermilion, whole work with extension of feed lines to cost $7,000,000. Purchase means that present power production of St. Louis River will be developed from 80,000 to 95,000 hp. W. S. Robertson, c/o Phoenix Utilities Co., engr. in charge.

Heating Mains—Blue Earth, Minn.—Voted $75,000 bonds to extend municipal heating plant mains. J. J. Kehr, clk.

Paving Materials—St. Paul, Minn.—City rejected bids on materials for paving portions Minnehaha, West 6th St., Randolph and 6th Sts. with vertical fibre brick, Pleasant and Cleveland Aves., with asphaltic concrete, Raymond Ave. and 6th St. with creosoted wood blocks and vertical fibre brick. Noted July 19.

Park Improvements—Dallas, Tex.—City Com. making plans and takes bids October or November, park improvements in Tennison, Craddock, Randall and Exline Parks, incl. roadways, walks, playgrounds, landscape architecture, etc. $200,000. E. A. Kingsley, city engr. Myers & Noyes, Central State Bank Bldg., consult. engrs.

Underpass—Dallas, Tex.—City and Dallas Co. making plans under pass on Lemmon Ave. under Cotton Belt R.R. $25,000. E. A. Kingsley, city engr. Nagle, Witt & Rollins, Courthouse, co. engrs.

Harbor Improvements—Oshawa, Ont.—Dominion Government, Ottawa, voted $50,000 for harbor improvements here, hydraulic dredge work. K. M. Cameron, ch. engr.

BIDS DESIRED

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Aug. 10, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulating apparatus in Julia Richman High School, 2nd Ave. from East 67th to East 68th Sts., here.

Fill—Annapolis, Md.—See "Bridges."

Pier—Charleston, S. C.—Aug. 22, by Port Utilities Comn., Room 712, Peoples Bldg., constructing Union Pier. H. M. Gallagher, genl. mgr.; adv. this issue.

Levee—Clarksdale, Miss.—Aug. 14, by Bd. Levee Comrs. Yazoo Mississippi Delta, enlarging 5 mi. Ward Lake Levee containing 10,000 cu.yd. topping, 75,000 cu.yd. banquette enlargement. W. L. Head, ch. engr.

Creosoted Piling, etc.—Mayersville, Miss.—Aug. 6, by 1st and 2nd Dist., Separate Rd. Dist. Highway Comrs., 2,650 lin.ft. creosoted piling, 6,120 ft. creosoted and 50,000 ft. untreated lumber, to be delivered at Blanton Sta., Sharkey Co. Address O. H. Keep, Mayersville.

Gravel—Meridian, Miss.—See "Streets and Roads."

Portland Cement, etc.—St. Paul, Minn.—See "Waterworks."

Golf Links, etc.—Nakoma (Madison P. O.), **Wis.**—Nakoma Country Club, 1st Central Bldg., taking bids 18 hole golf course, tennis courts, etc. $50,000. F. J. Blum, secy. Private plans. Noted June 21.

Levee—Bridge Junction, Ark.—Aug. 15, by St. Francis Levee Bd., 32,000 cu.yd. excav. in ditch construction work adjacent to levee in Lee Co. H. N. Pharr, ch. engr.

Electrification—Texas—See "Railways."

Levee—Oroville, Calif.—Aug. 8, by Trustees Recl. Dist. 200, Biggs, 5 mi. levee, 114,000 cu.yd. earth work, here. W. W. Green, Biggs, engr.

Underground Conduits—Montreal, Que.—Aug. 6, by Executive Com., City Hall annex, underground conduits, manholes, etc., in St. Laurence Blvd., Craig, Bleury and Lagauchetue Sts. A. Lariviere, c/o Electrical Comn., 83 Craig St. W., ch. engr. Noted Mar. 22.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—Arverne (Far Rockaway, P. O.) N. Y.—W. H. Gompert, archt., Flatbush Ave. extention and Concord St., Brooklyn, July 27, heating, ventilating and temperature regulation apparatus, in P. S. 42, Beach 66th and Thursby Sts., here, from Raisler Heating Co., 129 Amsterdam Ave., New York, $85,200. Noted July 19.

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating, ventilating and temperature regulating apparatus, in P. S. 100, West 3rd St. 317 ft. south of Sheepshead Bay, from Gillis & Geoghegan, Inc., 537 West Bway., New York, $84,780; in P. S. 190, Sheffield Ave. 100 ft. south of Riverdale Ave., from Raisler Heating Co., Inc., 129 Amsterdam Ave., New York, $83,990. Noted July 19.

Heating and Ventilating Apparatus, etc.—New Brighton, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, July 27, heating, ventilating and temperature regulating apparatus for addition to Curtis High School, Hamilton Ave. and St. Marks Pl., here, from D. J. Rice, 405 Lexington Ave., New York, $39,770. Noted July 19.

Pier Shed—New York, N. Y.—J. H. Delaney, comr. Docks, Pier "A" North River, West 44th St. Pier Shed, North River, Contr. 1810, general contract from Triest Contg. Co., Inc., 128 East 59th St., $813,860. Noted July 19.

Gravel—Grenada, Miss.—See "Streets and Roads."

Paving Materials—St. Paul, Minn.—City, July 23, paving materials for Front St. between Dale and Rice Sts., 6,645 sq.yd. 3 in. vertical fibre brick, from Streator Clay Mfg. Co., 713 Guardian Life Bldg., $1.62 per sq.yd.; 5,340 bbl. portland cement, from Minnesota Lime & Cement Co., Marshall and Albert Sts., and Capitol City Lime & Cement Co., 28 Indiana Ave. E., each bid $2.65 per bbl. f.o.b. cars, $2.80 delivered; 4,000 cu.yd. crushed rock or gravel for concrete base, from J. L. Shiely Co., 305 Dakota Bldg., $2.60 per cu.yd.; 260 tons asphalt from Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $21.30 per ton; 80,000 lb. asphalt filler, from Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $26.60 (in drums) and DuRo Asphalt Products Co., 133 West Washington St., Chicago, $26.13 per ton. Noted July 19.

Culvert—St. Louis, Mo.—Bd. Pub. Serv., 208 City Hall, July 24, 467.5 ft. rein.-con. culvert, 32 ft. inside diameter, to carry Delmar Blvd. over River Des Peres, from Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $130,636. Noted July 5.

CONTRACTS AWARDED

Loading Platform—Hartford, Conn.—New York, New Haven & Hartford R.R., Union Sta., 18 x 500 ft. loading platform, to H. Wales Lines Co., 134 State St., Meriden. Archts. est $50,000. Noted July 19.

Gas Main—Erie, Pa.—Pennsylvania Gas Co. will construct new 10 in. low pressure gas main, by day labor. $50,000. F. Krum, mgr. Noted July 19.

Subway—Phila., Pa.—W. S. Twining, dir. Dept. City Transit, 1211 Chestnut St., 1,529 lin.ft. 2 track subway in Arch St., Contr. 202, to Keystone State Constr. Co., 210 South 13th St., $1,198,555. Noted July 5.

Sea Wall—Vicksburg, Miss.—For 4,200 lin.ft. sea wall containing 9,500 cu.yd. concrete, 450 tons reinforcing steel, 4,200 ft. interlock sheet piling 10-20 ft. long, to Jefferson Constr. Co., Q & C Bl., New Orleans, La. Engrs. est. $325,000. Noted June 7.

Stadium—Bloomington, Ind.—University of Indiana, 1 story, concrete, to Bedford Steel Constr. Co., Bedford. Archts. est. $225,000. Noted June 7.

Foundation—Milwaukee, Wis.—Kenwood Methodist Episcopal Congregation, c/o J. D. Babcock, chn. building com., 86 West Water St., plain foundation for 2 story, 70 x 150 x 165 ft., brick, concrete and stone church, to J. L. Stanage, 3216 Vliet St. Noted Apr. 26 under "Buildings."

Foundation, etc.—Racine, Wis.—Memorial Hall Com., plain foundation and excavation for 1 and 2 story, 180 x 200 ft., brick and concrete memorial auditorium, to Bondgard & Christensen, Mound Ave. and Mead St., $49,994. Noted July 19.

Steam Heating Plant—Wisconsin Rapids, Wis.—Bd. Educ. steam heating plant in Lincoln High School, to Grand Rapids Plumbing and Heating Co., Wisconsin Rapids. Noted July 5.

Foundation—Minneapolis, Minn.—H. S. Goldie, 929 Plymouth Bldg., agent for company which let contract constructing foundation for 6 story and basement, 120 x 250 ft., rein.-con., brick and tile hotel, West Lake St. and Dean Blvd., to Standard Home Building Co., Andrus Bldg. Bids on superstructure at later date. Total cost $1,300,000. This corrects report in July 12 issue under Buildings.

Transmission Line—Oxford, Kan.—General contract transmission line, to Tri State Electric Co., 1012 South West Bldg., Kansas City, Mo., $9,985; poles, to Bell Lumber Co., 528 Sec Bldg., Minneapolis, Minn. $3,319; transformers, to Western Electric Co., Telephone Bldg., Kansas City, Mo. $2,002, etc.

Tanks—Clayton (Glenrock P. O.), **Wyo.**—Sinclair Crude Oil Purchasing Co., thirty 80,000 barrel tanks, here, to Chicago Bridge & Iron Wks., 30 Church St., New York City.

Revetment—Sacramento, Calif.—City will build 4 in. concrete revetment on slope of Sacramento River, by day labor. $76,000. A. Givan, city engr. Noted July 26.

Trailers—San Jose, Calif.—Santa Clara Co., trailers, one to Benson & Weaver, 89 South Market St., $1,950; two to S. S. Smith Co., 625 Market St., San Francisco, $1,945 each; two to Pinchetti Bros., 402 South 1st St., $1,969 each; one to Ralston Iron Wks., 20th and Indiana Sts., San Francisco, $1,697. Noted Mar. 22.

Telephone Lines—Ontario—Temiskaming & Northern Ontario Ry., North Bay, will build 40 mi. telegraph and telephone lines from Cochrane to James Bay. $75,000. S. B. Clement, North Bay, ch. engr.

Wharf—Blind River, Ont.—Dept. Pub. Wks., Ottawa, reconstructing timber wharf, pile foundations, to T. P. Charleson, 179 Gilmour St., Ottawa, $25,000. Noted May 10.

Power Development—Campbellford, Ont.—Hydro Electric Power Comn., 190 University Ave., Toronto, general contract for work in connection with power development at Dam 8, Trent Valley Canal, incl. 70,000 cu.yd. rock excav. and rein.-con. power house, to Sinclair Constr. Co., Ltd., Excelsior Life Bldg., Toronto, $250,000. Noted Apr. 23.

Subway—Toronto, Ont.—Dept. Pub. Highways, 110 University Ave., subway, concrete abutments, steel top, 66 ft. wide, carrying double tracks, on Danforth Ave., east of here, to Provincial Contg. Co., 10 Adelaide St. E., about $100,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: August 14.

Approaches to Bridge

Baltimore, Md.

SEALED PROPOSALS for building one section of State Highway, as follows:

ANNE ARUNDEL COUNTY — CONT.

AB-10-E: For fill to approaches to the Severn River Bridge at Annapolis, Maryland,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 14th day of August, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form, which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 30th day of July, 1923.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: August 21.

State Highway Work

Richmond, Va.

Sealed bids will be received at the office of the State Highway Dept., 413 N. 10th St., Richmond, Va., until 10:30 a.m., August 21st, 1923, for the construction of:

1. PROJECT S-196-Rt. 22. Approaches to Craig Creek. Bridges in Craig Co. 0.56 mi. grading. Approx. 6,506 cu.yds., Exc., 6,220 cu.yds. Borrow.
2. PROJECT S-248B-Rt. 18. Bridge over Piney River near Canody in Amherst and Nelson Co. One 100-ft. steel truss conc. floor Roadway 19 ft. Approx. 66.0 cu.yds. "A" conc. 457 cu.yds. Rubble Masonry, 5,940 Lbs. reinf. steel, 87,200 Lbs. Structural steel, 207 lin.ft. pipe Gd. fence.
3. PROJECT S-248C-Rt. 18. Bridge over Allens Creek near Rose Mill in Nelson County. Two 30-ft. reinforced conc. beam spans. Roadway 24 ft. Approx. 83.3 cu.yds. "A" conc., 175.1 cu.yds. "B" conc., 16.450 Lbs. reinf. steel.
4. PROJECT S-263-Rt. 114. Hasi-Moss in Dickenson Co., 8.7 mi. of grading and drainage. Approx. 30 Ac. clearing, 324,380 cu.yds. Exc., 4.482 lin.ft. Pipe, 117 cu.yds. "A" conc., 31,352 lin.ft. Wd. GD Rail, 2,324 lin.ft. Wd. GD. Rail with steel posts, 6,842 cu.yds. retaining wall.
5. PROJECT F-276-Rt. 39. 6.27 Mi. W. Louisa—1.07 Mi. W. Cobham, Louisa and Albemarle Cos. 9.9 mi. 18 ft. 8 in. Bi. Mac. Approx. 17 Ac. Clearing. 77,113 cu.yds. Exc. 1,726 lin.ft. Pipe, 181.0 cu.yds. "A" conc., 59 cu.yds. "B" conc., 5,397 Lbs. reinf. steel, 2,696 lin.ft. Wd. GD Rail.
6. PROJECT F-276B-Rt. 39. Bridge over South Anna River near Green Springs in Louisa Co. Three 40 reinforced concrete beam spans. Approx. 174.0 cu.yds. "A" conc., 405 cu.yds. "B" conc., 38,235 lbs. Reinforcing steel.
7. PROJECT S-328-Rt. 39. Pheobus-Buckroe. Elizabeth City Co. 1.8 mi. 18 ft.-8-6-8 conc. Approx. 3,750 cu.yds. Exc., 250 cu.yds. Borrow, 454 lin.ft. Pipe, 25 cu.yds. "A" Conc., 28 cu.yds. "B" Conc., 1,380 lbs. reinforcing steel. State will furnish cement.

Proposal guaranty to be as specified Par. 1, page 4 of proposal.

OFFICIAL PROPOSALS

Plans and specifications are on file at the office of the State Highway Dept., and the following Dist. Engrs.: Proc. 276 Rd. and Br. Culpeper, Proj. 263 Bristol, Proj. 328 Suffolk, Proj. 196 Salem, Proj. 248 B & C Lynchburg.

Additional plans for bidders for the above project can be obtained upon application to the State Highway Dept. upon receipt of $5.00, payable to H. G. Shirley, $2.50 of which will be refunded if plans are returned within two weeks after bids are opened. Bridge plans can be obtained from W. F. Hobart, 805½ E. Franklin St., Richmond, Va., at the following prices: Proj. 248—54c.; Proj. 278—54c.; Proj. 248 B & C—54c. If desired sent by Special Delivery add 10c. to cover cost of postage.

Engineers will be at the following places to show prospective bidders over projects as follows:

PROJ. 196—Newcastle, 10:30 a.m., Wed., Aug. 15th; PROJ. 248B & C—Rose Mill, 10:30 a.m., Tues., Aug. 7; PROJ. S-263—9 a.m., CC & O Sta., Fremont, Thurs., Aug. 16; PROJ. 276 Rd. & Br. Cobham, 12:00 noon, Thurs., Aug. 9; PROJ. 328, Pheobus, 11:00 a.m., Tues., Aug. 14.

The State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY, Chairman.
C. S. MULLEN, Acting Commissioner.

Bids: August 20.

Waterworks Improvements

Palmyra, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Palmyra, N. Y., until 8 o'clock p.m., on the 20th day of August, 1923, for the construction of improvements to its water works system, consisting in general of a distributing reservoir, a storage reservoir, filter, pump well, pump house and connecting piping.

Plans and specifications may be seen at the office of the Board at Palmyra, N. Y., or at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y. Plans will be sent by the engineers upon a deposit of ten dollars.

Bids will be received and considered for the entire work as a whole. Also, bids will be received and considered separately:

(a) For construction of the storage reservoir and pipe laying;

(b) For the filter, pump well, and pump house;

(c) For the distributing reservoir.

The Board reserves and has the right to reject any or all bids or to accept those that in its judgment will be for the best interests of the village.

A bond satisfactory to the Board in amount and surety will be required of any one to whom a contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Palmyra, N. Y., to the amount of $1,000, must be deposited by each bidder and accompany his bid as a guarantee, that, in case a contract is awarded him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Palmyra, N. Y., and marked on the outside of the envelopes, "Proposal for Water Works Improvements."

VILLAGE OF PALMYRA, N. Y.
By LOUIS C. ZIEGLER,
President.
RALPH H. MORHOUS,
CLARENCE C. NESBITT,
CHARLES LEBRECHT,
ANDREW Y. EARL,
Trustees.

SANFORD M. YOUNG, Clerk.
Dated, July 27, 1923.

OFFICIAL PROPOSALS

Bids: August 8.

Electric Elevator and Shaft

MIDDLETOWN STATE HOSPITAL
Albany, N. Y.

Sealed proposals for New Electric Elevator for Storehouse; and for New Elevator Shaft for Storehouse, at the Middletown State Homeopathic Hospital, Middletown, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y. until 2 o'clock p.m. (Standard Time), Wednesday, August 8, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 1165 and 4166. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Middletown State Hospital, Middletown, N. Y.; at the New York Office of the Department of Architecture, 18th Floor, Fuller Building, Broadway & 23rd St.; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect. Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: July 23, 1923.

Bids: Aug. 7.

Paving

Baton Rouge, La.

Sealed bids will be received by the Commission Council of Baton Rouge, La., at the office of the Mayor, City Hall, until 11 o'clock a.m., Tuesday, August 7, 1923, for paving St. Louis Street from Government to Louisiana Avenue. Bids will be received upon brick, bitulithic, sheet asphalt, asphaltic concrete, reinforced concrete paving.

Approximate quantities:
1,600 square yards of pavement.
600 cubic yards excavation.

Plans and specifications are on file in the office of the Consulting Engineer, City Hall Copies of same may be obtained upon payment of $5.00. A certified check for five hundred dollars, payable to the Commissioner of Finance, Baton Rouge, shall accompany each bid.

The right is reserved to reject any or all bids.

J. W. BILLINGSLEY,
Consulting Engineer.

Bids: August 22.

Water Works System

Joy, Ill.

Sealed bids will be received by the Village of Joy, Mercer County, Illinois, up to the hour of 10 o'clock A.M. of Aug. 22, 1923, for the construction of a complete water distribution system including trenching, cast iron pipe, valves, hydrants and specials. It is estimated that there will be approximately 1,327 ft. of 8 in. Class B pipe, 2,885 ft. of 6 in. Class B pipe, 11,558 ft. of 4 in. Class B pipe. Bids will be received on the job laid complete. The estimated cost is $25,000.00. Plans and specifications may be secured from the engineers for the sum of $5.00.

CALDWELL ENGINEERING CO.,
Engineers,
Jacksonville, Illinois

CONSTRUCTION NEWS

Engineering News-Record, August 9, 1923

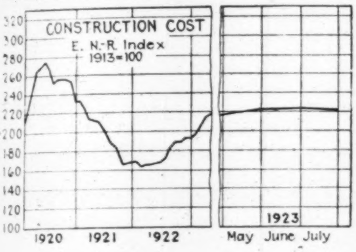
The Construction Barometer

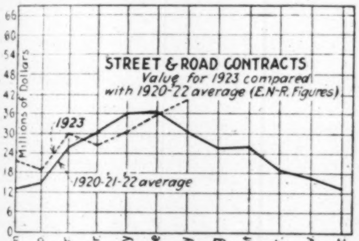
Drop in Volume of Construction—Cost Lower—Fewer Building Awards

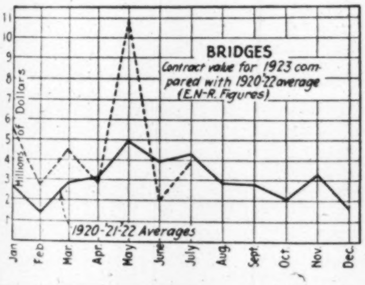
THE increase in money value of contracts awarded on bridges, streets and roads, during July, was offset by the slump in industrial and commercial building to the extent of causing a drop in the volume of construction, as shown by the charts.

Seasonal dullness, over-production of certain commodities, and a falling off in demand combine to form the present "slowing down" influence so noticeable in general trade activities.

The slight downward trend in construction cost, as indicated by the *E. N.-R.* Index Number, has not served to stem the weekly falling off in contracts awarded, neither has it induced the buyer to relinquish his present hand-to-mouth policy in the purchasing of basic materials.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
July 19	$14,514,000	$18,552,000	$33,066,000
July 26	23,772,000	13,340,000	37,112,000
Aug 2	17,362,000	8 888,000	26,250,000
3 Weeks	$55,648,000	$40,780,000	$96,428,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

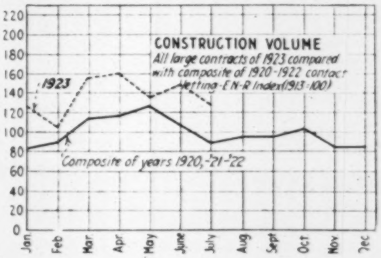
Week Ended	No.	Public Work	No.	Private Work
July 19	12	$4,681,000	34	$13,523,000
July 26	13	3,808,000	18	8,285,000
Aug. 2	10	3,703,000	19	6,691,000
3 weeks	35	$12,192,000	71	$28,499,000

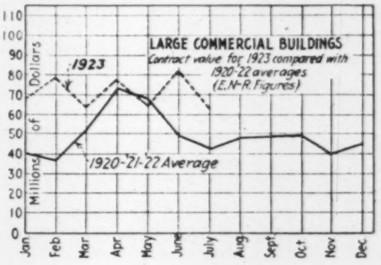
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

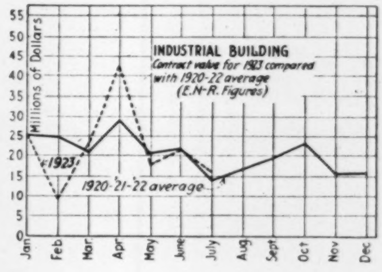
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
July 19	30	223	86	37	42
July 26	33	261	95	50	41
Aug. 2	26	255	99	53	48

BASE PRICES UNCHANGED IN FIVE WEEKS

	Quoted On Aug. 9, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 14	Douglas, Wyo.	July 26
Aug. 14	Maple Shade, N. J.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 14	New York, N. Y.	Aug. 2
Aug. 14	Emporia, Kan.	Aug. 9
Aug. 15	Jennings Lodge, Ore	July 26
Aug. 15	Memphis, Tenn.	July 26
Aug. 15	Wellsburg, W. Va.	July 26
Aug. 16	Evanston, Ill.	July 19
Aug. 17	Cleveland, O.	Aug. 9
	Adv. Aug. 9.	
Aug. 17	Waupun, Wis.	Aug. 9
Aug. 17	Trenton, N. J.	Aug. 9
Aug. 20	Palmyra, N. Y.	Aug. 9
	Adv. Aug. 2 and 9.	
Aug. 21	Detroit, Mich.	July 26
Aug. 22	Andrews, S. C.	July 26
Aug. 22	Joy, Ill.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 22	Central Islip, N. Y.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 24	Bartlett, Ill.	Aug. 9
Aug. 26	Pennington, N. J.	July 26
Aug. 27	San Diego, Calif.	July 26
Aug. 28	Black River Falls, Wis.	Aug. 9
Aug. 29	Watertown, S. D.	July 26
	Adv. July 26 to Aug. 9.	
Sept. 11	Hoboken, N. J.	Aug. 9
	Adv. Aug. 9.	

SEWERS

Bids Close		See Eng. News-Record
Aug. 10	Roselle, N. J.	Aug. 9
Aug. 13	Arvada, Colo.	July 12
Aug. 13	Pensauken (Camden P. O.), N. J.	July 19
Aug. 13	Leonia, N. J.	Aug. 2
Aug. 14	Phila., Pa.	Aug. 9
Aug. 14	Akron, O.	Aug. 9
Aug. 14	Miami, Fla.	Aug. 9
Aug. 15	Lyons, Kan.	Aug. 9
Aug. 15	Baltimore, Md.	Aug. 9
Aug. 15	New York, N. Y.	Aug. 9
Aug. 16	Haddonfield, N. J.	July 26
Aug. 16	Hollandale, Miss.	Aug. 9
Aug. 16	Akron, O.	Aug. 9
Aug. 19	Alliance, O.	Aug. 2
Aug. 21	Toronto, Ont.	Aug. 2
Aug. 21	Nashville, Tenn.	Aug. 9
	Adv. Aug. 9.	
Aug. 22	Andrews, S. C.	July 26
Aug. 22	High Point, N. C.	Aug. 2
Aug. 24	Spencer, W. Va.	July 26

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Aug. 28	St. Louis, Mo.	Aug. 2

BRIDGES

Bids Close		See Eng. News-Record
Aug. 11	Lonoke, Ark.	Aug. 9
Aug. 13	New Jersey	July 26
	Adv. Aug. 2 and 9.	
Aug. 14	Charleston, S. C.	July 5
Aug. 14	Baton Rouge, La.	July 26
Aug. 14	Annapolis, Md.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 15	Phila., Pa.	July 5
	Adv. July 19 to Aug. 9.	
Aug. 15	San Francisco, Calif.	Aug. 9

Bids Close		See Eng. News-Record
Aug. 16	Effingham, S. C.	Aug. 2
Aug. 16	Jacksonville, Fla.	Aug. 9
Aug. 17	Allenhurst, Fla.	July 26
Aug. 17	Clendenin, W. Va.	July 26
Aug. 17	Marion, S. C.	Aug. 2
Aug. 20	Minneapolis, Minn.	Aug. 2
Aug. 20	Illinois	Aug. 9
Aug. 23	Clearwater, Fla.	July 26
Aug. 27	Keyport, N. J.	Aug. 9
	Adv. Aug. 9.	
Aug. 29	Illinois	Aug. 9
Sept. 11	New Jersey	July 26
	Adv. July 26 to Aug. 9.	
Nov. 30	Sydney, Australia	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

Aug. 15	Minneapolis, Minn.	Aug. 2
Aug. 15	New Jersey	Aug. 2
Aug. 30	New Iberia, La.	Aug. 9

STREETS AND ROADS

Aug. 10	New York	July 26
	Adv. July 26 to Aug. 9.	
Aug. 10	Indiana	Aug. 9
Aug. 11	Winchester, Ind.	Aug. 9
Aug. 11	Whitewater, Wis.	Aug. 9
Aug. 13	Hattiesburg, Miss.	Aug. 9
Aug. 13	Akron, O.	July 26
Aug. 13	California	July 26
Aug. 13	White Bear (White Bear Lake P. O.). Minn.	July 26
Aug. 13	Kansas City, Kan.	July 26
Aug. 13	Forest, Miss.	Aug. 2
Aug. 13	Lakewood (Cleveland P. O.). O.	Aug. 9
Aug. 13	Latrobe, Pa.	Aug. 9
Aug. 14	St. Louis, Mo.	July 19
Aug. 14	Fayetteville, W. Va.	July 19
	Adv. July 19 to Aug. 9.	
Aug. 14	Louisiana	July 26
Aug. 14	Bluefield, W. Va	July 26
Aug. 14	Clarksburg, W. Va.	July 26
Aug. 14	Meridian, Miss.	Aug. 2
Aug. 14	Maryland	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 14	Fairfax, Okla.	Aug. 9
Aug. 14	Phoenix, Ariz.	Aug. 9
Aug. 14	Wilmington, Del.	Aug. 9
Aug. 14	Tampa, Fla.	Aug. 9
Aug. 14	Newport, R. I.	Aug. 9
Aug. 14	Massachusetts	Aug. 9
Aug. 14	Long Island City, N. Y.	Aug. 9
Aug. 15	Ripley, W. Va.	Aug. 2
Aug. 15	Birmingham, Ala.	Aug. 2
Aug. 15	Chicago, Ill.	Aug. 9
	Adv. Aug. 9.	
Aug. 15	Baltimore, Md.	Aug. 9
Aug. 15	Michigan	Aug. 9
Aug. 15	Urbana, Ill.	Aug. 9
	Adv. Aug. 9.	
Aug. 15	Brooklyn, N. Y.	Aug. 9
Aug. 16	New York, N. Y.	Aug. 9
Aug. 16	Ft. Smith, Ark.	Aug. 9
Aug. 16	Michigan	Aug. 9
Aug. 17	Le Sueur Center, Minn.	Aug. 9
Aug. 17	Fresno, Calif.	Aug. 9
Aug. 17	New Jersey	Aug. 9
Aug. 18	Abbeville, La.	Aug. 2
Aug. 18	Huntington, W. Va.	Aug. 9
Aug. 20	New Jersey	Aug. 9
	Adv. Aug. 9.	
Aug. 20	San Diego, Calif.	Aug. 9
Aug. 20	Utah	Aug. 9
Aug. 20	Illinois	Aug. 9
Aug. 21	Virginia	Aug. 2
Aug. 21	New Kensington, Pa.	Aug. 9
Aug. 21	Maryland	Aug. 9
	Adv. Aug. 9.	
Aug. 21	Virginia	Aug. 9
	Adv. Aug. 9.	
Aug. 21	Michigan	Aug. 9
Aug. 21	Wilmington, Del.	Aug. 9
Aug. 21	Utah	Aug. 9
Aug. 21	Laurel, Md.	Aug. 9
Aug. 22	Rhode Island	Aug. 9
	Adv. Aug. 9.	
Aug. 23	Clearwater, Fla.	July 26
Aug. 23	Yakima, Wash.	July 26
Aug. 23	Dallas, Tex.	Aug. 9
Aug. 27	Sheridan, Wyo.	Aug. 9
Aug. 27	Bessemer, Ala.	July 26
Aug. 27	Iola, Kan.	Aug. 2
Aug. 27	San Diego, Calif.	Aug. 9
Aug. 27	New Jersey	Aug. 9
	Adv. Aug. 9.	
Aug. 27	San Diego, Calif.	Aug. 9
Aug. 28	St. Louis, Mo.	Aug. 2
Aug. 28	Louisiana	Aug. 9
Aug. 28	Eastland, Tex.	Aug. 9
Aug. 29	Kentucky	Aug. 9
Aug. 29	Kentucky	Aug. 2
Aug. 29	Delaware	Aug. 9
Aug. 29	Illinois	Aug. 9
Aug. 30	Pittsburgh, Tex.	Aug. 9
Sept. 4	San Jose, Calif.	Aug. 9

INDUSTRIAL WORK

Aug. 13	Hartford, Conn.	Aug. 9
Aug. 14	Hartford, Conn.	Aug. 9
Aug. 16	Toledo, O.	Aug. 9
Aug. 22	Phila., Pa.	Aug. 9

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 11	Glenwood, Ia.	Aug. 9
Aug. 13	Boone, Ia.	Aug. 9
Aug. 13	Zanesville, O.	July 19
Aug. 13	Cincinnati, O.	Aug. 2
Aug. 14	Lima, O.	Aug. 9
Aug. 14	Nashville, Tenn.	July 19
Aug. 14	Brooklyn, N. Y.	July 26
Aug. 15	Eagle Lake, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	July 19
Aug. 15	Dallas, Tex.	July 12
Aug. 15	Dallas, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	Aug. 2
Aug. 15	Los Angeles, Calif.	Aug. 2
Aug. 15	Louisville, Ky.	Aug. 2
Aug. 15	St. Louis, Mo.	Aug. 2
Aug. 15	Marion, S. C.	Aug. 9
Aug. 15	Milwaukee, Wis.	Aug. 9
Aug. 15	Wauwatosa, Wis.	Aug. 9
Aug. 16	Nashville, Tenn.	July 19
Aug. 16	Milwaukee, Wis.	Aug. 9
Aug. 18	Groesbeck, Tex.	Aug. 9
Aug. 18	New Orleans, La.	Aug. 9
Aug. 20	Williamstown, Mass.	July 26
Aug. 20	Ft. Worth, Tex.	July 26
Aug. 21	Hartford, Conn.	July 19
Aug. 21	Dayton, O.	Aug. 9
Aug. 22	Cedar Rapids, Ia.	Aug. 2
Aug. 23	Harrisburg, Pa.	Aug. 2
	Adv. July 26 to Aug. 9.	
Aug. 25	Ridgway, Pa.	Aug. 9
Aug. 28	Akron, O.	Aug. 2
Aug. 28	Salisbury, Md.	Aug. 9
Aug. 28	New York, N. Y.	Aug. 9
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 5	Thiells, N. Y.	Aug. 9
	Adv. Aug. 9.	
Sept. 15	Dallas, Tex.	July 26
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Aug. 10	Removal of Pile Protection—Chicago, Ill.	July 19
	Adv. July 19 to Aug. 9.	
Aug. 13	Dredging—Baltimore, Md.	July 12
	Adv. July 19 to Aug. 9.	
Aug. 13	Stamp Cages—New Orleans, La.	July 19
Aug. 14	Road—Zion National Park (Springdale P. O.), Utah.	July 19
Aug. 14	Buildings—Knoxville, Ia.	July 19
Aug. 14	Hose—Memphis, Tenn.	Aug. 9
	Adv. Aug. 2 and 9.	
Aug. 15	Water Supply — Chelsea, N. Y.	July 26
Aug. 15	Barracks, etc.—San Diego, Calif.	July 26
Aug. 15	Road—Arizona	Aug. 2
Aug. 15	Riprap Stone—Baltimore, Md.	Aug. 2
Aug. 16	Extension—Evanston, Ill.	July 26
Aug. 16	Stone — Harbor Beach, Mich.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 17	Dredging—Massachusetts	July 26
	Adv. July 19 to Aug. 9.	
Aug. 20	Shed, etc.—Wash., D. C.	Aug. 2
Aug. 22	Dredging—Norwalk, Conn.	July 26
	Adv. July 26 to Aug. 9.	
Aug. 22	Sub Post Office—Memphis, Tenn.	July 26
	Adv. Aug. 2 and 9.	
Aug. 23	Lock—Pittsburgh, Pa.	Aug. 2
	Adv. July 26 to Aug. 9.	
Aug. 28	Superstructure—Ludington, Mich.	July 26
	Adv. July 19 to Aug. 9.	
Aug. 28	Repairs—Phila., Pa.	Aug. 9
Aug. 30	Pipe—Mobile, Ala.	Aug. 9
	Adv. Aug. 9.	
Aug. 30	Dredging—Boston, Mass.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 30	Dredging—Petaluma, Calif.	Aug. 9
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
	Adv. Aug. 9.	
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
	Adv. Aug. 9.	
Sept. 12	Pistons, etc. — Denver, Colo.	Aug. 9
	Adv. Aug. 9.	
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 14	Levee—Clarksdale, Miss.	Aug. 2
Aug. 14	Underground Fire Alarm System—St. George, N. Y.	Aug. 9
Aug. 15	Levee—Bridge Junction, Ark.	Aug. 2
Aug. 15	Levee—Oroville, Calif.	Aug. 9
Aug. 15	Ties—Montreal, Que.	Aug. 9
Aug. 17	Foundation Wall, etc. — New York, N. Y.	Aug. 9
Aug. 21	Gravel—Baton Rouge, La.	Aug. [illegible]
Aug. 22	Pier—Charleston, S. C.	Aug. 2
	Adv. Aug. 2 and 9.	
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24
Aug. 28	Underpass—Alabama	Aug. 9
Sept. 12	Tunnel—Colorado	Aug. 9
	Adv. Aug. 9.	

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Fredonia — Making plans new reservoir near Shumla on east bank of Canadaway Creek, also new dam, and 16 in. mains, $185,000, if 12 in. main is used cost will be $148,000. W. Shelto, City Hall, engr.

Md., Baltimore—Mayor and City Council preparing plans mains in various sections of city. $630,000. W. A. Megraw, water engr.

N. C., Blowing Rock—Having preliminary surveys made of sources available for water supply. $25,000. E. C. Robbins, mayor.

Miss., Booneville — Making preliminary survey pumping plant, settling basin and reservoir, 6-8 in. distribution mains, fire hydrants, etc. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

La., Shreveport—See "Sewers."

O., Elyria—Plans laying about 1 mi. of 36 in. steel mains. To exceed $25,000. M. Knowles, Hanna Bldg., Cleveland, engr.

Ill., McLeansboro — Aug. 20 to vote on $24,000 bonds, $18,000 of which will be used for 400,000 gal. filtration plant and 3,000 ft. 4 in. pipe, etc., $6,000 for engine generator set (additional $7,500 available for latter). Total $31,500. W. A. Fuller Co., 1917 Ry. Exch. Bldg., St. Louis, Mo., engrs. Noted Jan. 25.

Wis., Milwaukee—Plans 13,000 ft. 54 in. c.i. pressure main in Chambers St. from end of present main to beyond city limits. $300,000. J. Schwada, City Hall, engr.

Minn., Caledonia—See "Miscellaneous."

Minn., Chisholm—Plans waterworks improvements, incl. installation water softening plant. $50,000. E. Drew, city clk.

Minn., St. Cloud—Plans waterworks improvements, artesian well system as supply source, or filtration plant for river water. $50,000. M. B. Lang, city engr.

Minn., Virginia—Water and Light Dept. plans installing water softening plant. $50,000. A. F. Benson, city engr.

Mo., Canton—Plans election to vote on $60,000 bonds improving waterworks and installing complete sanitary sewerage system. W. B. Rollins & Co., Ry. Exch. Bldg., Kansas City, engrs. Noted July 26 under "Sewers."

Mo., Edina—Voted $75,000 bonds waterworks improvements. Rollins & Co., Ry. Exch. Bldg., Kansas City, engrs.

Mo., New London—Making preliminary surveys for water works and distribution system. $35,000 or more. W. B. Rollins & Co., Ry. Exch. Bldg., Kansas City, will probably be engineers.

Mo., Piedmont—Plans election in September to vote on $40,000 bonds for water plant and distribution system. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, engrs. Noted July 12.

Mo., Stockton—Soon takes bids rebuilding dam, installing pumping equipment, distribution mains, etc. $60,000.

Mo., Thayer—Making preliminary surveys waterworks plant, incl. distribution system. $25,000-$30,000. R. B. Alexander, 535 Benton St., Kansas City, engr.

Mo., Tipton—Defeated $96,000 bonds for waterworks and distribution, also sanitary sewerage system. Issue will probably be resubmitted.

Ark., Van Buren—Voted $210,000 bonds for waterworks improvements, incl. pumps, tanks, c.i. pipe, filtration plant, etc. W. L. Winters, 700 South 20th St., Ft. Smith, engr.

Tex., Edgewood — Making plans mains, etc. $40,000 bonds voted. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Tex., Greenville — Sept. 4, to vote on $325,000 bond issue for reservoir, 1,250,000 gal. capacity, filtration plant, new mains, etc. A. D. Duck, Greenville, engr.

Tex., Kennedy—Sept. 3, to vote on $30,000 bonds for main extensions. J. W. Thames, mayor.

Waterworks (Continued)

Idaho—State plans reservoir embracing 500,000 acres, includes removal of present town of American Falls, together with railroads, dam 75 ft. Work in hands of U. S. Government with assistance of state engineers. $12,000,000.

Ariz., Williams—Making surveys waterworks improvements. $100,000. Burns & McDonnell, 400 Interstate Bldg., Kansas City, Mo., engrs.

BIDS DESIRED

N. Y., Palmyra—Aug. 20, by Bd. Village Trustees, distributing reservoir, storage reservoir, filter, pump well, pumphouse and connecting piping. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs. Noted July 26.

N. J., Hoboken—Sept. 11, by Bd. City Comrs., water supply; adv. E.N.-R. Aug. 9.

N. J., Trenton—Aug. 17, complete unit for Water Dept., incl. Allis Chalmers centrifugal pump, 1,000 gal. capacity per minute under 40 ft. head, etc. A. Bugbee, City Hall, engr.

Ill., Bartlett—Aug. 24, by Village Clerk, furnishing machinery, labor, etc., to drill deep well. $30,000. Former bids rejected. Suhr & Berryman, 105 North Clark St., Chicago, engrs. Noted July 26.

Wis., Black River Falls—Aug. 28, by H. Boyer, city clk., 150,000 gal. steel water tank on 50 ft. steel tower. W. G. Kirchoffer, Vroman Blk., Madison, engr.

Wis., Waupun—Aug. 17 (change of date) by Water & Light Com., 200,000 gal. rein.-con. reservoir. Kaudy & Dick Eng. Co., Ripon, engrs. Noted Aug. 2.

Kan., Emporia—Aug. 14, by City Com., c.i. pipe, valves and fire hydrants, part of proposed $65,000 waterworks plant and distribution system. R. J. Paulett, city engr. Noted July 26.

BIDS RECEIVED

Md., Baltimore—Bd. Awards, furnishing and delivering galvanized pipe, couplings and malleable iron fittings to Water Dept., from Crane Co., 624 West Pratt St., $12,811. Noted July 26.

O., Westerville—R. Biehl, city mgr., Aug. 3, constructing filter bed, 2 contact beds and 2 units to sledge beds, 17,000 lb. reinforcing, 18 tons c.i. pipe and specials, 4,600 lin.ft. 4-30 in. pipe, etc., from R. O. Cart, Westerville, $33,605. Noted July 26.

CONTRACTS AWARDED

Md., Baltimore—Valves for Water Dept., to A. P. Smith, Norman St., East Orange, N. J., $64,000.

N. C., Wadesboro—Wade Mfg. Co. 15,000 ft. 1-6 in. water and 14,000 ft. 8-12 in. sewer pipe, septic tank, to Boyd, Higgins & Goforth, Realty Bldg., Charlotte, $27,000.

O., Cleveland—Cuyahoga Co., 4,800 ft. 12 in. c.i. pipe, Sect. B, Impvt. 20 of Co. Sewer Dist., to Langahan Constr. Co., Marshall Bldg., $30,250. Noted Aug. 2.

O., Cleveland—For 2,390 tons c.i. mains, 11,500 cu.yd. excav., on West Side, Sect. 1, to D. Lowensohn, 10823 Fairchild Ave., $123,000. Noted Aug. 2.

O., Columbus—See "Streets and Roads."

Ill., Aurora—Furnishing material and labor for drilling deep well, to S. B. Geiger, Old Colony Bldg., Chicago, $31,120. Noted July 12.

Ill., Elmwood Park (Chicago P. O.)—Mains in South Side Dist., to M. McElligott, Evanston. Engrs. est. $25,000.

Ill., Gridley—Bd. Local Impvts., furnishing and laying c.i. mains, valves, etc., to T. H. Iglehart Co., 166 West Jackson Blvd., Chicago, $38,872. Noted June 14.

Ill., West Chicago—Mains to P. P. Kuehn, Aurora, $36,200. Noted July 26.

Minn., Willmar—Waterworks improvements, 500,000 gal. concrete reservoir and pumping equipment, to J. H. Olsen & Co., and B. Benson, both of Willmar, $14,494 and $21,370 respectively. Noted July 12.

Wyo., Rawlins—For 40 mi. 16 in. gravity line creosoted Continental wood pipe, to Continental Pipe Mfg. Co., 4519 14th St., N. W., Seattle, Wash. Total estimated cost $600,000. Noted Feb. 1.

Mo., Chamois—Waterworks and sewers, to Carrothers Co., 310 Walsix Bldg., Kansas City, $19,400. Noted July 5.

Mo., St. Louis—Water Dept. 130 tons 6 in. Class "D" bell and spigot pipe, to U. S. Cast Iron Pipe & Fdry. Co., 520 Merchants Laclede Bldg., $5,933.

Tex., Ft. Worth—Labor for mains in Hemphill Dist, Texas Christian University and Baptist Seminary, to Tarrant Constr. Co., Box 1025, $62,326. Engrs. est. $65,000. Noted July 12.

Que., Montreal—For 6,500 ft. 48 in. c.i. force main in Atwater Ave. and St. Patrick St., to Laurin & Leitch, 590 Union Ave., $157,725. Noted July 26.

Ont., Seaforth—J. Wilson, city clk., 3½ mi. of 6 and 8 in. c.i. mains, to Day Bros., Guelph. Engrs. est. $40,000. Noted May 10.

Sewers

PROPOSED WORK

Mass., Boston—Had plans prepared and soon takes bids drains in Colonial and Blanford Rds., Union and Shepard Sts., 1,050 ft. 10, 18 and 24 in. concrete surface drains with catch basins. E. F. Murphy, City Hall, div. engr.

N. Y., Rochester—Plans sewers in 6,700 ft. Highland Ave., $87,000; 5,800 ft. Rand St. and Steko Ave., stormwater outlet, $47,000. C. A. Poole, city engr.

Pa., Sharon—Plans election to vote $200,000 bonds for sewage disposal plant.

Fla., Ocala—Voted $25,000 bonds for sewage disposal plant and extending sewerage system 2.5 mi. J. R. Brumby, Jr., city mgr. Engineer not selected.

Ala., Opelika—Plans complete sewerage system. $50,000-$75,000.

La., Baton Rouge—Plans election to vote on $525,000 bonds for sewerage system. J. W. Bellingsley, Interstate Bldg., New Orleans, consult. engr.

La., Shreveport—Election Oct. 2 to vote on $1,000,000 bonds for sewer and water improvements.

Ky., Louisville—See "Streets and Roads."

O., Berea—Had plans prepared about 12,000 ft. 6-18 in. vitr. tile intercepting sewer. To exceed $25,000. M. Knowles, Hanna Bldg., Cleveland, engr.

O., Marion—Plans election to vote on $190,000 bonds storm water sewers in East and West Dists. T. Scathers, City Bldg., engr.

Mich., Detroit—Plans prepared vitr. sewers in Lateral 3940, 3,264 ft. 12-24 in.; Lateral 3982, 6,039 ft. 12-20 in.; Lateral 3985, 2,720 ft. 12-24 in.; Lateral 3986, 1,311 ft. 12-20 in.; Lateral 3989, 456 ft. 3 ft. 6 in., 1,456 ft. 24 in., 1,074 ft. 18 in., 2,455 ft. 15 in. and 4,157 ft. 12 in.; Lateral 3990, 3,026 ft. 12-24 in.; Lateral 3992, 2,040 ft. 12-24 in. J. W. Reid, city engr.

Wis., Madison—Plans new sewerage system and disposal plant in South Madison Dist. H. C. Buser, city clk. Engineer not selected.

Kan., Coffeyville—Takes bids in August or September 6,858 ft. 24 in. to 2½ ft. vitr. clay pipe in section of Center, Pacific, Delaware, 14th and 16th Sts., 15,000 cu.yd. earth and 6,000 cu.yd. rock trenching. $50,000. T. R. Marshall, City Hall, engr.

Kan., Great Bend—Making preliminary plans rebuilding sanitary sewerage system. $80,000. Ruckel Eng. Co., Hutchinson, engrs.

Mo., Carthage—Making preliminary surveys installing septic tanks, 6 and 8 in. sewers, etc. $30,000-$35,000. E. S. Glenn, city engr.

Mo., Carrollton—Soon takes bids several miles 6-21 in. vitr. clay sewers in residential districts and repairing outlet sewer. $50,000. Private plans. Noted July 12.

Mo., Canton—See "Waterworks."

Mo., Edina—Voted $45,000 bonds for sewers. Rollins & Co., Ry. Exch. Bldg., Kansas City, engrs.

Mo., Tipton—See "Waterworks."

Tex., Clarksville—Making plans complete sewage disposal plant. $30,000. P. Y. Creager, city engr.

Tex., McAllen—See "Streets and Roads."

BIDS DESIRED

N. Y., New York—Aug. 16, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in West 262nd St., Bradford, Waterbury, Holland, Adee, Randall and Thierot Aves., Mayflower Ave. between Middletown Rd. and Roebling Ave., Mayflower Ave. between Waterbury Ave. and north line of former Walsh estate, also 5 x 5 ft. rein.-con. culvert across Ludlow Ave. at Taylor Ave.

N. J., Roselle—Aug. 10, by Boro Council, 16,377 lin.ft. 8-15 in lateral sewers, Sect. 2. Former bids rejected.

Pa., Phila.—Aug. 14, substructure and superstructure of south west sewage pumping station in 40th Ward, $239,545, also underground structures for north east sewage treatment works on Wheatsheaf Lane, east of Richmond St. J. A. Vogelson, city engr.

Md., Baltimore—Aug. 15, by Bd. Awards, constructing 6,000 ft. sewers and drains in vicinity of Municipal Hospital, Montebello, up to 20 in. diam., 32 manholes, etc., Storm Water Contr. 60. $55,000.

Fla., Miami—Aug. 14, by City Comn., storm sewer, Contr. 31, 1,932 ft. 10 in., 558 ft. 15 in., 438 ft. 18 in. and 1,032 ft. 24 in. terra cotta pipe, 5,685 ft. 24 x 15 to 42 x 36 in. concrete pipe. F. H. Wharton, city mgr.

Miss., Hollandale—Aug. 16, by C. Hollingsworth, mayor, and Bd. Aldermen, sanitary sewer system, 15,600 ft. 8-10 in. vitr. sewer, 47 manholes, 3 flush tanks, rein.-con. pumphouse, centrifugal pump and electric motor. Bobo & Collier, Clarksdale, engrs.

Tenn., Nashville—Aug. 21, at office of S. H. McKay, city clk., Sect. 5 Browns Creek Intercepter Sewer. H. E. Howse, mayor; adv. E. N.-R. Aug. 9.

O., Akron—Aug. 14, by W. F. Peters, dir. Pub. Serv., 9,650 lin.ft. 8-24 in. vitr. and 1,880 lin.ft. 42-51 ft. segmental block or brick sewer in Avon and Berwin Sts., $110,650; 550 lin.ft. 10-24 in. vitr. and 4,640 lin.ft. 30-54 in. brick or segmental block sewer in Forest Hill, $94,300; 5,660 lin.ft. 8-24 in. vitr. clay and 780 lin.ft. 30 in. brick or segmental block sewers in Brittain Rd., East North and Ruby Sts., $33,100. J. E. Root, Delaware Bldg., engr.

O, Akron—Aug. 16, by W. F. Peters, dir. Pub. Serv., 330 ft. 12 in. vitr. clay and 1,025 ft. 48 in. segmental block or brick sewer in Palisade Ave., $22,031; 1,595 ft. 8-24 in., vitr. clay, 2,115 ft. 30-54 in. segmental block or brick sewer in West Market St., $59,936. Former bids rejected. J. E. Root, Delaware Bldg., engr. Noted June 21.

O., Cleveland—Aug. 17, at office Commissioner Purchases and Supplies, City Hall, constructing Magnolia Dr. main for Baldwin-Fairmount Project, Contr. 29. A. V. Ruggles, comr. water; adv. E. N. R. Aug. 9.

Kan., Lyons—Aug. 15, by City Council, 10½ mi. 6-27 in. sewers and laterals in various streets. $90,000. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted July 5.

Mo., St. Louis—See "Streets and Roads."

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Aug. 1, sewers in (1) East 3rd St., engrs. est. $8,433 (2) Mansfield Pl. $5,601 (3) Lenox Rd. $5,301 (4) 73rd St. $4,429 (5) East 52nd St. $4,395 (6) 81st St. $3,971 (7) Ocean Ave. $3,226 (8) 7th Ave. $2,998 (9) 20th Ave., $2,894 (10) 82nd St. $2,339 (11) Ft. Hamilton Parkway $1,313 (12) Ft. Hamilton Parkway $895 (13) 79th St. $28,134 (14) Ave. T $14,178 (15) Ave. L $12,469 (16) 58th St. $3,808 (17) Lott Ave. $1,644 (18) Sheffield Ave. $4,400, from J. J. Guinan Contg. Co., 2314 Gravesend Ave., (1) 96% engrs. est.; Tomassetti & Co., Inc., 1133 60th St., (2) 82.95% (4) 92.92% (5) 88.88% (7) 94% (13) 94.94% (16) 98.98%; B. Peconi & Sons, (3) 90%; Nazzaro & Querriero (6) 99.96% (14) 101% (15) 86%; S. Ambrosio, 1016 60th St., (8) 98%; Manmill Constr. Co., 2035 Douglas St., (9) 110% (10) 98% (12) 119%; (17) 93.5%; C. F. Vacharas, 645 40th St., (11) 111%; (8) F. Meridino, 540 17th St., (18) 125%. Noted July 26.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 31, sewer in 25th St., from Awixa Corp., Mt. Vernon, $652,121. Noted July 26.

Md., Baltimore—Constructing Gwynn Falls intercepting sewer, Sect. 3, from Ryan Constr. Co., Real Estate Trust Bldg., Phila., Pa., $92,336. Noted July 26.

Ind., Huntington—Bd. Pub. Wks., July 30, sewers and disposal plant, from Brinneman & Davenport, Ft. Wayne, $182,642 and $110,000 respectively. Noted July 19.

Ill., Chicago—Sanitary Dist. of Chicago, 910 South Michigan Ave., constructing North Side Sewage Treatment Works, Division A, aeration tanks, settling tanks and operating galleries, from John Griffiths & Son Co., 112 West Adams St., $5,602,636; White Constr. Co., 130 North Wells St., $5,886,639; W. J. Newman Co., 21 North Curtis St., $6,200,140. Noted July 5.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 25th and 27th Sts., to F. J. Kelly Co., Inc., 186 Joralemon St., Brooklyn, $368,581. Noted July 26.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., to McDonald & Wilson, sewers in Matthews Ave., etc. $12,431, Randall Ave. $6,848, Pelham Parkway $14,560; to F. Henretti, excavating and removing existing sewer in Exterior St. $7,200. Noted July 26.

N. J., Roselle—Boro Council, constructing Aldene sub-trunk sewer, 7,107 ft. 15 and 18 in. pipe, to Spiniello Constr. Co., 185 Market St., Newark, $42,318. Noted July 19.

Md., Baltimore—Bd. Award, sewers and appurtenances in Dist. 25, 14,795 lin.ft. vitr. pipe sewer, 250 lin.ft. 5 in. vitr. pipe house connections and 480 lin.ft. c.i. pipe connections, to Marrocco & Martell, 609 South Decker Ave., Baltimore, $48,768. Noted Aug. 2.

Sewers (Continued)

N. C., Wadesboro—See "Waterworks."

Fla., Vero—Vitr. clay and segmental block storm sewers, inlets, manholes and bulkheads, to J. C. Mishler, 105 Spruce St., Chattanooga, Tenn., $38,927.

Tenn., Milan—Sewers in General Dist., to F. D. Harvey & Co., Milan, $33,269. Noted May 24.

Ky., Louisville — Napoleon Blvd. sewers and Speed Ave. laterals, to H. Bickel Co., 443 Garden St., $110,953. Noted July 26.

O., Columbus—See "Streets and Roads."

O., Columbus — W. H. Duffy, dir. Pub. Serv., 29,693 ft. 6-24 in. vitr. sewer extending over several streets and alleys from Wilson to Ohio Aves., to E. C. Bartling, 734 Champion Ave., $73,629. Noted July 26.

O., Delaware — W. H. Duffy, dir. Pub. Serv., Columbus, sewerage disposal plant, at Girls' Industrial Home, here, to Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa., $129,110. Noted July 26.

Ill., Shermerville—Storm sewerage system to H. D. Hallett, 132 Downer Pl., Aurora, $60,000; sanitary sewerage system to Monaco & Christofono, Chicago, $50,000. Engrs. est. $130,000. Noted June 28.

Wis., Janesville—Vitr. clay sewers in various streets, to G. T. Thorne, 219 Mason St., Milwaukee, $25,009. Noted July 19.

Wis., Kenosha — Vitr. clay sewers in 6 streets, 1 section to M. Thomsen, 1020 Salem Ave., $20,100; another section, to P. Frandsen, 1315 Salem Ave., $9,000.

Wis., Milwaukee—Rein-con. sewer tunnel in Schiller and Jordan Sts. Howell and Oklahoma Aves., to H. Hohensee, Ludington Ave., Wauwatosa, $227,492. Noted July 26.

Mo., Chamois—See "Sewers."

Mo., Maplewood (St. Louis P. O.)—For 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block, sanitary and storm water sewers in Manchester Sewer Dist. 2, to Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, $97,264. Engrs. est. $97,996.

Mo., St. Louis—Shaws Garden Bd. to McKelvey Constr. Co., 911 Title Guaranty Bldg., 2,310 ft. 45-66 in. and 9,910 ft. 8-30 in. sewers in Shaws Garden subdivision from Vendeventer to Shaw Aves. and from Shenandoah to Alco Aves., 15,315 cu.yd earth trenching, 29,000 lb. c.i. and 2,860 lb. w.i., etc., $60,000, 55,000 cu.yd. grading, $12,000.

Tex., Ft. Worth..Storm sewer, etc. in West Rosedale St., 3,976 ft. 15-48 in. sewer, 38 concrete inlets, 605 sq.yd. paving, 3,200 cu.yd. excav., etc., to H. W. Greenway, 214 Hemphill St., $37,131. Engrs. est. $35,000.

Calif., Anaheim—Outfall sewer, Sect. 2, to C. E. Green, Los Angeles, concrete pipe $143,751; Sect. 3, to Cox & Teget, Alhambra, concrete pipe, $68,519; Sect. 4, to Downer & Mero, 2234 Macdonald Ave., Richmond, vitr. pipe, $25,676. Noted June 28.

Calif., Redwood City—Sewers in Johnson and Hudson Sts., etc., 25,502 lin.ft. 4-8 in. vitr. and 125 lin.ft. 6 in. w.i. pipe, to Chambers & De Golyer, Bacon Bldg., Oakland, $19,890. Noted Aug. 2.

Calif., Sacramento — Sewers in 7th St. from alley between D and E Sts. to U St., vitr. and concrete pipe, to Frederickson & Shannon, Cory Bldg., Fresno, $50,001. Noted Aug. 2.

Waste Disposal

CONTRACTS AWARDED

Pa., Phila.—F. H. Caven, dir. Pub. Wks., general contract for Harrowgate incinerator at C and Ramona Sts., to Murphy-Quigley Co., 1524 Chestnut St., $172,500. Noted June 14.

Bridges

PROPOSED WORK

N. J., Metuchen—State Hy. Dept., Trenton, plans rebuilding steel bridge over tracks of Pennsylvania R.R., here. $33,000. W. G. Sloan, state highway engr.

North Carolina—State Hy. Comn., Raleigh, had plans prepared rein.-con. bridges and culverts on **(S. P. 857, Mitchell, which means State Project 857, Mitchell Co.)**, $38,220, S. P. 134, Gates, $37,430, S. P. 144, Halifax, $49,750, S. P. 156, Martin, $87,390, S. P. 302, Bladen $300,000, S. P. 537, Guilford, $53,490, S. P. 495, Warren, $40,225, S. P. 422, Franklin, $42,400, S. P. 580, Randolph, $42,100, S. P. 641, Iredell, $72,390, S. P. 721, Caldwell, $40,300. C. M. Upham, Raleigh, engr.

North Carolina—See "Streets and Roads."

Tenn., Union City—Obion Co. election Sept. 15, to vote on $100,000 bonds for bridges and culverts, mostly concrete.

Kentucky — State Hy. Dept., Frankfort, plans 460 ft. steel and concrete bridge over Salt River, on Jackson Highway, Bullitt Co., one 260 ft. steel span and four 50 ft. concrete spans. J. S. Boggs, state highway engr.

Ky., Sample — Louisville, Henderson & St. Louis R.R. Co., 2nd and Main Sts., Louisville, plans 300 ft. trestle bridge, single track, concrete piers, over Sugar Creek, near here. $50,000. W. S. Moore, engr. M. W.

Minn., Austin—City and Mower Co., plan 180 ft. concrete arch bridge, 3 spans, 30 ft. roadway and two 5 ft. sidewalks, over Cedar River on Water St. $35,000. C. M. Hubbard, co. aud. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., Stillwater—City and Washington Co. plan 1,200 ft. steel bridge over St. Croix River. $90,000. J. F. Kilty, co. aud.

Tex., Houston—Harris Co. election soon to vote on $500,000 bonds for rebuilding miscellaneous bridges. Howe & Wise, co. engrs.

Tex., San Angelo—Tom Green Co. having plans prepared 306 ft. bridge over Concho River, with one 20 ft. steel and six 31 ft. concrete girders. $28,385. G. Gilchrist, co. engr.

BIDS DESIRED

N. J., Keyport—Aug. 27, by State Hy. Comn., Trenton, new abutments and approaches for Bridge 43, over Luppatcong Creek, on State Highway Route 4, here. A. L. Grover, ch. clk.; adv. E. N.-R. Aug. 9.

Delaware—See "Streets and Roads."

Fla., Jacksonville—Aug. 15, by H. N. Rodenbough, genl. mgr. Florida East Coast Ry., St. Augustine, 2,480 ft. double track steel bridge, concrete piers, 5 truss spans and 23 girder spans, over St. Johns River, here. $1,800,000. Noted July 12.

Illinois—Aug. 20 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 2 rein.-con. slab bridges 12 and 18 ft. spans, 4 deck girders, 40-60 ft. spans, substructure and superstructure for 1 steel. C. H. Older, ch. highway engr.

Illinois—Aug. 29 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 2 slab bridges 26-28 ft. span; 11 girders 26-40 ft. spans, and 2 concrete culverts 10-12 ft., 3,316 cu.yd. concrete, etc. C. H. Older, ch. highway engr.

Ill., Urbana—See "Streets and Roads."

Ark., Lonoke — Aug. 11, by Lonoke Co. Court, 4 bridges over Wabbaseeka Bayou near England, 44,100 lb. steel, 120.3 cu.yd. concrete, 882,000 ft. wood; three 30 ft. I beam spans, concrete and steel, 18 ft. roadway, concrete foundation and abutments, near Carlisle.

Calif., San Francisco—Aug. 15, by Bd. Pub. Wks., steel bridge superstructure to carry Bay Crossing Pipe Line of Hetch Hetchy project at Dumbarton Point, 36 spans, each 105 ft. long, 2,800,000 lb. metal, 326,000 sq.ft. protective coating, 58,500 ft. O. P. walkways, etc., for city and San Francisco Co. $250,000. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

Conn., Bridgeport—Pub. Wks. Dept., July 25, steel and concrete bridge on East Washington Ave., from Bridgeport Dredge & Dock Co., 1024 Main St., $326,575. Engrs. est. $300,000. Noted June 20.

New Jersey—See "Streets and Roads."

N. J., Independence—State Hy. Dept., Trenton, Aug. 2, 3 span steel encased bridge and fill approaches with gravel surface, over tracks of Lehigh & Hudson River Ry., here, Warren Co., from Salmon Bros., Netcong, 87.2% engrs. est. Noted July 19 under "New Jersey."

Maryland—State Rds. Comn., Baltimore, bridge over Toms Creek on road from Frederick to Emmitsburg, Frederick Co., Contr. F-65, from R. B. Poffenberger, Myersville, $16,720; double span rein.-con. arch bridge over Youghiogheny River on road from Oakland to Hutton, Garrett Co., Contr. G-26, from Monongahela Constr. Co., Fairmount, W. Va., $19,615. Noted July 26.

Virginia—State Hy. Comn., Richmond, bridges on Route 39, Project F 157 B, James City and New Kent Counties, from Baker-Royer Co., Richmond, $14,088, Route 10, Project S 329, Montgomery and Roanoke Counties and Route 33, Project F 192 B, Augusta Co., from Atlantic Bridge Co., Box 871, Roanoke, $28,857 and $7,160 respectively. Noted July 12.

Alabama—State Hy. Dept., Montgomery, July 31, bridges on Dublin-Orion Rd., Montgomery Co., Federal Aid Project 74, treated timber, from J. R. and J. B. Miller, Baconton, Ga., $40,152; rein.-con., from W. C. McCoy, Lafayette, $87,186. Noted July 12.

Ohio—Dept. Highways and Pub. Wks., Columbus, concrete arch bridge on Sect. "B-2" Mt. Vernon-Newark Rd., Knox Co., from Noble Bridge Co., Columbus, $27,167. Noted July 26.

CONTRACTS AWARDED

Rhode Island — State Bd. Pub. Rds., Providence, bridge at West Warwick, 950 cu.yd. concrete to Milliken & Armstrong, Providence, $44,560. Noted July 26.

N. Y., Binghamton—Bd. Contr. & Supply, Municipal Bldg., 5 span rein.-con. arch bridge, to B. L. Gabriel, 145 Leroy St., $363,000. Noted June 28.

O., Cleveland—Cuyahoga Co., bridge on Hillside Rd., 1,119 cu.yd. concrete, 87,800 lb. reinforcing, to Nelson & Kelly, 3391 West 126th St., $61,747.

Ill., Chicago—South Park Comrs., 57th St. and Cottage Grove Ave., main substructure of South Park Ave. and 23rd St. viaduct, to E. L. Scheidenhelm Co., 111 West Monroe St., $332,000 (5 months.) Noted Apr. 5.

Tex., Crockett—Hurricane Shoals Bridge Co., c/o M. Bromberg, Crockett, 440 ft. steel bridge, with 3 spans, over Trinity River at Hurricane Shoals, to Austin Bros. Bridge Co., 1813 Clarence St., Dallas, $25,000. Noted July 5.

Tex., Edinburg—Hidalgo Co.—3 timber pile trestles on State Highway 12, 240,810 ft. treated timber, 14,924 ft. untreated timber, 13,200 lin.ft. treated wooden piling, to Doods & Wedegartner, San Benito, $50,020. Engrs. est. $55,022 incl. 10% for engineering and contingencies.

Tex., Edinburg—See "Streets and Roads."

Calif., Napa—Napa Co., rein.-con. bridge over Napa River on Oak Knoll Ave., 850 cu.yd. concrete, 161,000 lb. reinforcing, 1,525 cu.yd. dry excav., etc., to J. H. May, Napa, $29,977. Noted Aug. 2.

Dams

PROPOSED WORK

Pa., Sulphur Springs—Johnstown Water Co., 332 Locust St., Johnstown, plans to build North Fork Dam on Benscreek near here. $40,000. Gray & Claflin, Johnstown, engrs.

CONTRACTS AWARDED

Wis., Peshtigo—See "Miscellaneous."

Railways

PROPOSED WORK

California—Atchison, Topeka & Santa Fe R.R., 6th and Main Sts., Los Angeles, making surveys for new line through Tehachapi Mountains between Los Angeles and Bakersfield. R. B. Ball, ch. engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Miss., Yazoo City—Yazoo Delta D. D. having surveys made of large district of delta, preliminary to drainage of more than 40,000 acres, in Yazoo, Holmes and Humphreys Counties. Elliott-Harman Eng. Co., Bank of Commerce Bldg., Memphis, Tenn., engrs.

La., Baton Rouge—Plans election to vote on $325,000 bonds for drainage work. J. W. Bellingsley, Interstate Bldg., New Orleans, consult. engr.

La., New Iberia—Petite Anse Coteau D.D. voted $75,000 bonds and takes bids in about 60 days for drainage work. N. Delcombre, Natl. Bank of New Iberia, secy.

La., Rayville—Tensas Basin Levee Assn. plans to build 75 mi. drainage canals, levees, etc., to protect 1,250,000 acres in northeastern section of state. $3,500,000. Engineer not selected.

Minn., Caledonia—See "Miscellaneous."

N. D., Minot—Having plans prepared 4,700 lin.ft. canals to take care of flood waters of Mouse River. $266,250. W. W. Peterson, city engr.

Ont., Saulte Ste. Marie—Dept. Pub. Wks., Parliament Bldgs., Ottawa, plans hydraulic dredge work in harbor here. $60,000 bonds voted. K. M. Cameron, ch. engr.

BIDS DESIRED

La., New Iberia—Aug. 30, by C. Girard, pres. Police Jury News, Iberia Parish, 4½ mi. canal from Lake Fausse Point to Bayou Teche, 710,000 yd. excav. J. F. Kemper, 310 Audubon St., New Orleans, engr. in charge.

Ia., Ft. Dodge—Aug. 8 at office C. A. Snook, aud. Webster Co., reconstructing Joint Drain 16, Webster Co., and 31, Calhoun Co., 127,100 cu.yd. excav., etc. J. L. Parsons, Ft. Dodge, engr.

Ia., Nevada—Aug. 10 at office M. R. Purkhiser, aud. Story Co., Boone-Story D.D. 10, Story and Boone Counties 41,603 lin.ft. 6-36 in. tile, etc. W. A. Olson, Nevada, engr.

Excavation, Drainage and Irrigation (Continued)

BIDS RECEIVED

N. Y., New York—J. H. Delaney, comr. Docks. Pier "A," North River, dredging slip between Piers 61 and 62, North River, Contr. 1812, from Columbia Dredging Corp., 30 Church St., $24,565. Noted Aug. 2.

Calif., Los Angeles—Bd. Harbor Comrs., 2,900,000 cu.yd. dredging and 12,000 lin.ft. discharge pipe in West Basin, from Pan-Pacific Constr. Co., Citizens Natl. Bank Bldg., dredging $0.1575 per cu.yd., total $441,000. Noted July 19.

CONTRACTS AWARDED

Miss., Senatobia—Strahorn Creek D. D. Tate Co. 12½ mi. drainage canals, incl. 410,680 cu.yd. main canal and 110,000 cu.yd. laterals, to Canal Constr. Co., McCall St., Memphis, $0.975 per cu.yd. Noted July 19.

Wis., Marinette—See "Miscellaneous."

Ill., Savanna—Carroll Co. Drainage and Levee Dist. 1, to Farrar Pump and Mchy. Co., Granite Bldg., St. Louis, Mo., oil engine driven pumping plant, etc., $23,185; F. Mutchmore, Savanna, building and foundations for above, $13,253. Noted July 5.

Minn., Crookston—Polk and Clearwater Counties, Judicial Ditch 72, 356,537 cu.yd. excav., 28.5 mi. level road, 1,060 lin.ft. 15 in. culvert pipe, 244 lin.ft. 60 in. pipe, 400 lin.ft. 12 in. drain tile, fourteen 16 ft. span timber bridges, one 24 ft. span timber bridge, to Red Lake Drainage Co. (E. Norden and E. Spooner), Fosston, $37,533 for excav.; Union Drainage Co., Crookston, $7,662 for bridges and culverts. Noted July 5.

Streets and Roads

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., received no bids July 23, repaving Sheridan Ave. Will readvertise. Noted July 19.

N. Y., Rochester — Plans curbing and paving 800 ft. Court St., 50 ft., willite, $29,200; 1,800 ft. Elmwood Ave. from Mt. Hope to South Aves., 36 ft., willite, $29,000; 3,100 ft. Elmwood Ave. from South Ave. to East City line, 36 ft., asphalt, $110,000. C. A. Poole, city engr.

N. J., Asbury Park—State Hy. Dept., Trenton, plans paving 1.7 mi. Main St., here, Monmouth Co. $110,000. W. G. Sloan, state highway engr.

N. J., Boonton—State Hy. Dept., Trenton, rejected bids July 25, paving ½ mi. East Main St., here, Morris Co., bituminous concrete on concrete. $50,000. Will readvertise. Noted July 5.

N. J., Newark—Essex Co. plans grading (rock excav.) 3,700 ft. Mt. Pleasant Ave., 30-40 ft. $100,000. W. A. Stickel, Court House, engr.

N. J., Newark—Essex Co. plans grading and paving 16,000 ft. Campbell Ave., Caldwell, 33 ft., 2 in. asphaltic concrete on 6 in. concrete, etc., $26,000; 3¼ mi. Prospect Ave., 24 ft. and 1¼ mi. Grandview Ave., 20 ft., both bituminous concrete on 6 in. concrete or 8 in. rein.-con., $200,000, and $90 respectively; improving 21,000 ft. Mt. Pleasant Ave., 2½ ft. of 7 in. penetration macadam shoulder adjacent to existing pavement, $25,000. W. A. Stickel, Court House, engr.

North Carolina—State Hy. Comn., Raleigh, had plans prepared improving roads **(S. P. 102, Beaufort, means State Project 102, Beaufort Co.)**, grading, topsoiling and bridging 8.62 mi. S. P. 102, Beaufort, $52,880, 7.71 mi. S. P. 126, $260,500, 17.34 mi. S. P. 128, $92,920 and 11.98 mi. S. P. 127, $67,160, all three projects in Edgecombe, 15.31 mi. S. P. 136, $97,660 and 5.99 mi. S. P. 142, $43,100, both Halifax, 6.52 mi. S. P. 161, Nash, $36,930, 5.42 mi. S. P. 491, Warren, $29,640, 12.71 mi. S. P. 458, Person, $82,200, 8.05 mi. S. P. 393, Robeson, $54,275, 5.03 mi. S. P. 648, Lincoln, $53,320; grading and topsoiling 1.25 mi. S. P. 302, Bladen, $38,968, 8.6 mi. S. P. 418, Franklin, $52,530, 4.39 mi. S. P. 762, Surry, $61,948, 5.74 mi. S. P. 857, Mitchell, $86,500, 12.15 mi. S. P. 162, Nash, $49,500, 17.43 mi. S. P. 156, Martin, $104,350, 16.32 mi. S. P. 144, Halifax, $84,500, 16.65 mi. S. P. 134, Gates, $61,090, 7.94 mi. S. P. 495, Warren, $40,280, 13.74 mi. S. P. 721, Caldwell, $135,900; concrete or asphalt paving and bridging 9.1 mi. S. P. 474, $358,580 and 5.95 mi. S. P. 472, $41,800, both Vance, 9.96 mi. S. P. 180, Perquimans, $227,840, 4.42 mi. S. P. 187, Pitt, $152,950, 4.94 mi. S. P. 902, $234,910 and 10.63 mi. S. P. 900, $252,000, both Buncombe, 2.04 mi. S. P. 890, Yance, $47,180, 1.46 mi. S. P. 944, Haywood, $55,100, 4.64 mi. S. P. 666, Richmond, $171,080, 9.88 mi. S. P. 646, Lincoln, $325,480, 8.21 mi. S. P. 592, Rockingham, $299,110, 12.23 mi. S. P. 609, Anson, $464,000, 8.23 mi. S. P. 421, Franklin, $324,400, 10 mi. S. P. 292, Wilson, $365,550, 5.04 mi. S. P. 229, $171,100 and 4.96 mi. S. P. 228, $165,350, both Greene; grading, asphalt or concrete paving 13.8 mi. S. P. 275, Sampson, $206,400, 10.97 mi. S. P. 537, Guilford, $402,320, 6.74 mi. S. P. 580, Randolph, $236,580, 4.29 mi. S. P. 422, Franklin, $158,070, 8.03 mi. S. P. 641, Iredell, $290,000, 3.53 mi. S. P. 723, Caldwell, $133,900. C. M. Upham, Raleigh, engr.

Maryland—State Rds. Comn., Baltimore, rejected bids gravel surfacing 17,700 sq.yd. highway in Anne Arundel Co., Contr. AA-33. Noted Aug. 2.

Fla., Lake Worth—Plans paving and sidewalks on various streets. $50,000. W. Randolph, Lake Worth, engr.

Fla., Melbourne Beach—Plans to open, widen and pave streets. $30,000. Engineer not selected.

Fla., Ocala—Voted $75,000 bonds paving and curbing 118,000 sq.yd. road. Estimated cost $225,000. J. R. Brumby, Jr., city mgr. Engineer not selected.

Fla., Panama City—Bay Co. election Aug. 14, to vote on $140,000 bonds hard-surfacing various roads. W. H. Marshall, co. clk.

Fla., Rockledge—Election Aug. 13 to vote on $50,000 bonds paving and repaving streets. A. J. Beardsley, town clk.

La., Baton Rouge—Plans election to vote on $600,000 bonds for paving work. J. W. Bellingsley, Interstate Bldg., New Orleans, consult. engr.

La., New Orleans—Opens bids between Sept. 20th and 24th, for 1924 paving program. A. Klorer, city engr.

Tenn., Greenville—Plans paving 32,000 sq.yd. various streets.

Tenn., Nashville—Rejected bids paving with asphalt 15th Ave. from Buchanan to Clay St. and from Eastland to Ordway St., also Capers St. from 21st to 24th Sts. W. W. Southgate, city engr. Noted Aug. 2.

Kentucky — State Rd. Dept., Frankfort, plans grading State Project 29 from Irvine to Lee Co. line, Estill Co., State Project 32, Frenchburg-Mt. Sterling Rd., Montgomery and Menifee Counties, 9.318 mi. Louisville-Paducah Highway from Brandenburg to Breckenridge Co. Line, Meade Co., 24 and 28 ft., Federal Aid Project 6, Jenkins-Pound Cap Rd., Fletcher Co., 2.6 mi. Owensboro-Hartford Highway, Hoover's Hill to Beda, Ohio Co., 24 and 28 ft.; reconstructing State Project 49, Georgetown-Frankfort Rd., Scott Co., 18 ft., 5 mi. State Project 47, Lexington-Harroddsburg Rd., Jessamine Co., 18 ft., 9.3 mi. State Project 47, Springfield to Nelson Co. line, Washington Co., 18 ft.; resurfacing 7 mi. State Project 20, Sect. J, Lexington-Maysville Rd., Nicholas Co., 18 ft., 6 mi. State Project 23, Nicholasville to Fayette Co. line, Jessamine Co., 18 ft.; bituminous macadam resurfacing 7 mi. Lexington-Maysville Highway, Maysville to Licking River, Mason Co., 18 ft., 7.2 mi. Danville-Lebanon Highway, Perryville to Marion Co. line, Boyle Co., 18 ft. J. S. Boggs, state highway engr.

Kentucky—State Rd. Dept., Frankfort, having plans prepared constructing and surfacing 11.36 mi. Glasgow-Burkesville Highway, State Project 40, Metcalfe Co., 2.54 mi. Glasgow-Burkesville Highway, State Project 40, Cumberland Co.; constructing and surfacing with waterbound macadam 8.57 mi. Louisville-Paducah Rd., Federal Aid Project 108, Daviess Co., all 18 ft. J. S. Boggs, state highway engr.

Ky., Louisville—Gardiner Realty Co., 422 West Liberty St., plans 30,000 sq.ft. concrete sidewalks, 0.5 mi. road and sewerage system, in Garland Sub-division, West End, here. $100,000.

Ky., Paducah — McCracken Co. plans gravel surfacing Lovelaceville and Benton Rds. $30,000. B. Weille, comr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids July 31, grading, bridging and paving 2.002 mi. Sect. "P" Akron-Wooster Rd., Wayne Co. $58,307. Noted July 26.

O., Cleveland—Plans widening Carnegie Ave. from East 22nd to East 55th Sts., also extending Chester Ave. from East 30th to East 40th Sts., East 35th St. from Perkins to Euclid Aves., and East 36th St. from Prospect to Euclid Aves. $5,000,000. R. Hoffman, City Hall, engr.

O., Lisbon—Columbiana Co. plans repaving Dixonville Rd., Liverpool Twp. $28,000. E. C. Kirk, Courthouse, engr.

O., Lisbon—Columbiana Co. soon takes bids resurfacing and improving Goshen Rd., macadam. $83,000. E. C. Kirk, Courthouse, engr.

Indiana—State Hy. Dept. plans reconstructing and resurfacing 20 mi. highway from New Albany to Corydon, Floyd Co. $200,000. C. Gray, state highway engr.

Ind., Ft. Wawne—Allen Co. plans paving 2.51 mi. Moore Rd. 24 ft., crushed stone. $37,239. O. M. Darling, Ft. Wayne, engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 3½ mi. State Trunk Line Rd. 43-3, Ionia Co., also 5½ mi. State Trunk Line Rd. 43-4, Montcalm Co. F. F. Rogers, state comr.

Illinois—State election Nov. 4 to vote on $100,000,000 bond issue for durable hard surfaced road work.

Minnesota—State Hy. Dept., 1246 University Ave., St. Paul, preparing plans grading, etc., 6 mi. State Highway 2 between Motley and Staples, Todd Co. $37,000. State Highway Dept., engrs.

Minn., Mantorville—Dodge Co. rejected bids on Job 2303, State Aid Rd. 1, 85,452 cu.yd. earth and 100 cu.yd. loose rock excav., 273,965 cu.yd. overhaul, 1,635 lin. ft. concrete culverts, 2,506 lin.ft. 6 in. tile. Noted July 19.

Kan., Kansas City—Wyandotte Co. making plans concrete paving 2.675 mi. Johnson-Wyandotte Co. Line Rd., 16 ft. O. K. Williams, co. engr.

Kan., Wichita—Soon lets contract paving with sheet asphalt 2 4,700 ft. drives in Central and North Riverside Parks and road from Greiffenstein Bridge to Bittingwell. $40,000-$45,000. P. L. Brockway, city engr.

South Dakota—State Hy. Comn., Pierre, plans to surface 13.5 mi. Federal Aid Project 154, Hughes Co., 20,250 cu.yd. gravel, $42,089.

North Dakota — State Hy. Dept., Bismarck, plans grading road through Berthold Reservation west of Sanish, etc. $80,000. W. G. Black, ch. engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 4.827 mi. Federal Aid Project 230 A, Cooper Co., 46,333 cu.yd. earth excav., and 4.943 mi. Federal Aid Project 229 B, Boone Co., 30,303 cu.yd. earth excav.; concrete paving 26,526 sq.yd. Federal Aid Project 205A, Buchanan Co. B. H. Piepmeier, state highway engr.

Tex., Center—Making plans paving various streets, 40,000 sq.yd. 6 in. concrete and 10,000 sq.yd. iron ore gravel with bituminous surface. $125,000. I. R. Titus, Center, engr.

Tex., Corsicana — Plans paving 200,000 sq.yd. streets, various types. W. W. McClendon, Corsicana, engr.

Tex., Georgetown—Williamson Co. making plans grading, gravel or shale surfacing, etc., Georgetown-Florence Rd. $55,000 bonds voted. R. A. Nichols, co. engr.

Tex., Laredo—Voted $200,000 bonds for additional street paving, bituminous concrete or asphalt. S. F. Crecilius, Ping Bldg., engr. Noted July 12.

Tex., Liberty—Liberty Co. making plans grading and bridging 4.6 mi. State Highway 35, 24 ft. $28,200. W. C. Youngs, Dayton, co. engr.

Tex., McAllen—Election soon to vote on $30,000 bonds for street paving and $20,000 bonds for sewers. E. M. Card, city engr.

Tex., Menard—Menard Co. election Sept. 1, to vote on $60,000 bonds for constructing various roads. J. D. Scruggs, co. judge.

Tex., Paris — Lamar Co. making plans grading and concrete surfacing 3 mi. State Highway 5, 18 ft. $60,000. W. M. Fooshee, co. engr.

Tex., Uvalde—Uvalde Co. making plans grading and gravel surfacing 9 mi. Uvalde-La Pryor Rd., 18 ft. $50,000. M. B. Hodges, co. engr.

Tex., Vernon—Wilbarger Co. soon takes bids paving State Highway 5, Bates Sect. 24,175 sq.yd. rein.-con. $75,000. J. B. Banors, Wichita Falls, co. engr.

Tex., Waxahachie—Ellis Co. plans new election to vote on $750,000 bonds to construct 30 mi. State Highway and improve 75 mi. lateral roads. W. A. Spaulding, Waxahachie, engr. Noted July 19.

Ark., Paragould — Making preliminary surveys grading and paving various streets in Dist. 4, between Court and Junction Sts. west of 7th St. $42,000-$45,000.

Calif., Glendale—Opens bids about Sept. 13, improving 1¼ mi. Sycamore Canyon Rd., 56 ft., 1½ in. national wearing surface on 4 in. asphaltic concrete. $175,000. B. F. Dupuy, city engr.

Que., Montreal—Plans asphalt pavements on Decarie Blvd., $19,000, 1,900 ft. Dorchester St., 38-42 ft., $38,312, 1,600 ft. Ontario St., 35-40 ft., $21,606, 242 ft. Paterson St., 14 ft., $1,773, 753 ft. Burnett St., 17-19 ft., $7,185, 338 ft. Island St., 45 ft., $5,357, 3,150 ft. Alma St., 30 ft., $68,800; macadam on 1,290 ft. Bourget St., 30-32 ft., $16,128, 1,153 ft. St. Augustine St., $12,369, 700 ft. St. Emelie St., 27 ft., $7,119, 900 ft. Palm St., 34 ft., $10,752; concrete sidewalks on 1,850 ft. Orleans St., 5 ft., $6,675; 2,770 ft. cement slab sidewalks in Beaubien, Le Pailleur and Belanger Sts., $1,672. H. Terreault, dir. Pub. Wks.

Ont., Dunnville—Plans 13,000 sq.yd. concrete pavement and 6,000 lin.ft. concrete

Streets and Roads (Continued)

curbing and guttering on Broad St. $40,000. F. Barber and associates, 45 Jarvis St., Toronto, engrs.

BIDS DESIRED

Massachusetts—Aug. 14, by W. F. Williams, state highway engr., Boston, 22,000 lin.ft. gravel road, 18 ft., through Worthington. $35,000.

Rhode Island—Aug. 22, by State Bd. Pub. Rds., Providence, 2.65 mi. rein.-con. paving, Federal Aid Project 19, Contr. 2308; 2.65 mi. bituminous macadam, Contr. 2309; adv. E.N.-R. Aug. 9.

R. I., Newport—Aug. 14, by Bd. Aldermen, at office of F. N. Fullerton, clk., City Hall, grading and paving Bway. from Lakes Corner to One Mile Corner, 14,250 sq.yd. concrete, 9,500 sq.yd. stone block surface.

N. Y., Brooklyn—Aug. 15, by E. Riegelmann, boro pres., Boro Hall, paving Chester, Douglass and 15th Sts., repaving Hancock St. and Meserole Ave., curbing and paving Westminster Rd., all foregoing permanent asphalt; grading, curbing and flagging Kings-highway and Lenox Rd.

N. Y., Long Island City—Aug. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Park Lane S., 12th Ave. from Graham to Pierce Aves., 89th and 127th Sts.; grading, curbing, laying sidewalks and paving Van Alst Ave., granite block, 87th St. from Park Lane S. to Jamaica Ave. north of 85th Rd. pavement shall be asphalt block and south of 85th Rd. sheet asphalt, Beach 92nd St., sheet asphalt; paving 12th Ave. from Bway. to Pierce Ave., 45th, 89th and 127th Sts., repaving Metropolitan Ave. and Sheridan Blvd., all sheet asphalt; grading for width of 34 ft. centrally located and paving for width of 20 ft. centrally located 29th (Bradish) Ave., etc., sheet asphalt, grading for width of 50 ft. centrally located, curbing and laying sidewalks, etc., on 45th St.

N. Y., New York—Aug. 16, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading for width of 30 ft. centrally located, etc., in Magenta and Knapp Sts., Lurting, Hone and Yates Aves., unnamed street west of Eastchester Rd.; grading, curbing and laying sidewalks, etc., on West 171st St., Muliner Ave., Montgomery and Wythe Places; grading Delafield Ave.; repaving Park Ave., Fordham and Gun Hill Rds., granite block; sheet asphalt paving Mosholu Parkway, River Ave., East 157th and Doughty Sts.

New Jersey—Aug. 17, by Princeton Twp. Com., Branch Bldg., Princeton, surfacing 14,489 sq.yd. Cedar Grove Rd., bituminous concrete. Sincerbeauz & Moore, Mechanic Bldg., Trenton, engrs.

New Jersey — Aug. 20, by State Hy. Comn., Trenton, paving Route 8, Sect. 4A, Charlottesburg-Newfoundland Rd., Passaic and Morris Counties, rein.-con.; paving and 2 small bridges, etc., on Route 14, Sect. 9, Oceanview-Seaville Rd., Cape May Co., rein.-con.; paving, 3 small bridges and 5 small culverts on Route 16, Sect. 5, South Somerville-Woods Tavern Rd., Somerset Co., rein.-con. A. L. Grover, ch. clk.; adv. E. N. R., Aug. 9.

New Jersey—Aug. 27, by State Hy. Dept., Trenton, paving Route 4, Sect. 20, Manasquan River-Sea Girt, Monmouth Co., rein.-con.; curbing and paving Route 13, Sect. 5, Trenton-Lawrenceville, Mercer Co., concrete and sheet asphalt. A. L. Grover, ch. clk.; adv. E.N.-R. Aug. 9.

Pa., Latrobe—Aug. 13, by Boro. Council, 3,000 ft. Weldon St., 25 ft. willite, warrenite, bitulithic or Trinidad Lake asphalt, on broken stone and screenings, hard crushed slag and blue rock screenings or 5 in. concrete. $30,000.

Pa., New Kensington—Aug. 21, by Boro. Council, improving Freeport Rd., 3,500 cu.-yd. grading, 5,400 sq.yd. paving, etc.

Delaware—Aug. 29, by C. D. Buck, engr. State Hy. Dept., Dover, grading and paving 4.22 mi. Contr. CS 26, from Clarksville to Bethany Beach, 11,500 cu.yd. excav., 6,100 cu.yd. cement concrete pavement or slag cement concrete, etc.; 0.508 mi. Contr. CK 17, through Frederica, 1,200 cu.yd. excav., 50 tons broken stone base course, 890 cu.yd. cement concrete pavement; highway, Contr. M 8; 120 ft. temporary timber bridge 10 ft. wide, at Seaford, Contr. 42 A.

Del., Wilmington—Aug. 14, by Newcastle Co., reconstructing 1 mi. River Rd. from Lore Ave. to Bellevue Rd., 1 mi. Miller Rd. from Overly brick yard to Weldin Rd., 600 ft. Lore Ave. from Philadelphia Pike toward trolley, 1,000 ft. Ferris School Rd. from Faulkland Rd. towards Prices Corner, 2,000 ft. Lancaster Pike from Section between Ferris School Rd. and Oak Hill School, 4,000 ft. New Castle Rd. from Eden Park to Rogers Rd., 1 mi. Greenbank Rd. from Prices Corner to Newport. C. E. Grubb, Public Bldg., co. engr.

Del., Wilmington — Aug. 21, by C. E. Grubb, engr. New Castle Co., reconstructing 2.4 mi. Lancaster Pike from Loveville to Hockessin in Mill Creek Hundred, 0.91 mi. Lancaster Pike from Hockessin and extending to Pennsylvania state line, 1,100 ft. road through village of Stanton in Mill Creek Hundred.

Maryland—Aug. 21, by State Rds. Comn., Baltimore, gravel surfacing 2 mi. state highway in St. Marys Co., Contr. SM-25, J. N. Mackall, chn.; adv. E. N. R., Aug. 9.

Md., Baltimore—Aug. 15, by Bd. Awards, paving with sheet asphalt Orleans St. from Wolfe to Patterson Park Ave., Lexington St., both sides of market from Eutaw to Pearl Sts. $85,000. B. L. Crozier, City Hall, engr.

Md., Laurel—Aug. 21, by Comrs. Anne Arundel Co. (Annapolis), paving roads along southerly side of Laurel Race Track property, near here, 3,865 ft. gravel shoulders, 915 ft. macadam, 1,400 ft. reconstructed macadam and 1,550 lin.ft. resurfacing. $35,000.

Virginia — Aug. 21, by State Hy. Dept., 413 North 10th St., Richmond, improving Project F 222, Route 18, Campbell Co., 51,206 cu.yd. excav. H. G. Shirley, chn.; adv. E. N. R., Aug. 9.

W. Va., Huntington—Aug. 18 by City Comrs., grading, curbing and paving, 3rd, 11th, Stewart, Marshall, Underwood and 11th Aves., West 21st, 24th, 14th and Miller Sts., Alleys 9½ and 13½. A. B. Maupin, city engr.

Fla., Tampa—Aug. 14, by City Comn., paving and curbing Lake and Tampania Aves., Nordica and Branch Sts., 8,750 sq. yd. 2½ in. asphalt blocks, 7,400 lin.ft. granite curbing; Campbello Ave., 20 ft., 7,850 lin.ft. granite curbing, 12,000 sq.yd. 2½ in. asphalt block, $30,000. R. D. Martin, city engr.

Louisiana—Aug. 28, by State Hy. Comn., Reymond Bldg., Baton Rouge, furnishing and laying gravel on 5.539 mi. Project 100 A, Natchitoches-Mansfield Highway, Natchitoches Parish, 4.2 mi. Project 101 A, Sabine Parish, 9.262 mi. Project 101 B, Sabine Parish, J. M. Fourmy, ch. engr.

Kentucky—Aug. 29, by State Rd. Dept., Frankfort, reconstructing 7 mi. Falmouth-Covington Rd., State Project 62-C and 21-C, Pendleton Co., 14 ft.; 485 ft. Midland Trail, State Project 17, Sect. C, Shelby Co., 18 ft. Former bids rejected. J. S. Boggs, state highway engr. Noted July 5.

O., Lakewood (Cleveland, P. O.)—Aug. 13, grading, curbing and paving 6 streets, vitr. brick or asphalt. $100,000. E. A. Fischer, City Hall, engr.

Indiana — Aug. 10, by C. Gray, state highway engr., Indianapolis, repairing 5.875 mi. Federal Aid Rd. 22, Franklin Co., 6.551 mi. Federal Aid Rd. 50-B, Orange Co., 5.054 mi. Federal Aid Rd. 58-A, Crawford Co., 6.214 mi. Federal Aid Rd. 58-C, and 5.743 mi. Federal Aid Rd. 58-D, Orange Co., 2,131 cu.yd. concrete and 73,693 lb. steel for bridges, 357,957 cu.yd. earth excav., 9,934 lb. reinforcing, 11,050 ft. concrete side ditch.

Ind., Winchester—Aug. 11, by Comrs. Randolph Co., grading and paving with crushed stone 10,583 ft. road between Greensfork and Wayne Twps., $14,700; 10,698 ft. in Washington Twp., $15,900; 5,257 ft. in Washington Twp., $7,596. R. A. Tucker, co. aud.

Michigan—Aug. 10, by State Hy. Dept., Lansing, grading and surfacing 4.83 mi. Federal Aid Project 119, Ottawa Co., 50,863 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Michigan—Aug. 15, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 11-24, Sects. A and B, Oceana Co., 12,819 cu.yd. excav., 64,104 sq.yd. concrete. F. F. Rogers, state comr.

Michigan—Aug. 16, by State Hy. Dept., Lansing, grading and surfacing 5.977 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co., 56,036 sq.yd. waterbound macadam. F. F. Rogers, state comr.

Michigan—Aug. 21, by State Hy. Dept., Lansing, grading and surfacing, State Trunk Line Rd. 43-4, Montcalm Co., 32,652 cu.yd. excav., 51,923 sq.yd. gravel, also State Trunk Line Rd. 43-3, Ionia Co., 65,112 cu.yd. excav., 31,675 sq.yd. gravel. F. F. Rogers, state comr.

Illinois—Aug. 20, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 29.9 mi. road, 18 ft., either concrete, 4 in. monolithic or 4 in. bituminous filled brick, bituminous concreet with and without binder course Cement will be furnished. C. H. Older, ch. highway engr.

Illinois—Aug. 29, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 58.01 mi. road, 18 ft., either concrete, 4 in. monolithic or 4 in. bituminous filled brick, bituminous concrete with and without binder course. Cement will be furnished. 7.5 mi. grading involving 245,464 cu.yd. excav. and 602 cu.yd. concrete. C. H. Older, ch. highway engr.

Ill., Chicago — Aug. 15 by South Park Comrs., 57th St. and Cottage Grove Ave., grading portion of Marquette Park. J. F. Neil, secy. Adv. E. N. R., Aug. 9.

Ill., Urbana—Aug. 15, at office F. Hess, clk. Champaign Co., paving 6.653 mi. Sect. 37-15D, State Aid Route 10, portland cement concrete, 9 ft.; 24 ft. rein.-con. slab on Sect. 42B-15D, State Aid Route 10. R. F. Fischer, co. supt. highways; adv. E.N.-R. Aug. 9.

Wis., Whitewater — Aug. 11 (change of date) paving, etc., Wisconsin and Milwaukee Sts., 4,160 sq.yd. concrete, 1,250 cu.yd. earth excav. Private plans. Noted July 12.

Minn., Le Sueur Center—Aug. 17, by S. McMillen, aud. Le Sueur Co. Job 2302-B, State Rd. 14, 79,401 cu.yd. earth, 842 cu. yd. loose rock and 2,488 cu.yd. solid rock excav., 45,787 cu.yd. overhaul, 1,782 lin. ft. 12-36 in. corrugated metal culverts, 119 cu.yd. concrete culverts, 8,006 lb. steel. $25,000; Job 2303, State Rd. 5, 80,105 cu. yd. excav., 2,348 cu.yd. solid and 1,857 cu.yd. loose rock excav., 194,978 cu.yd. overhaul, 562 lin.ft. 12-36 in. corrugated metal culverts, 245 cu.yd. concrete culverts, 14,786 lb. steel, $27,000. R. F. Nichols, Le Sueur Center, engr.

Wyo., Sheridan — Aug. 27, grading sewers, and paving with Warrenite bitulithic on concrete or bituminous cement, portland cement concrete or sheet asphalt, in Dist. 22. To exceed $25,000. A. L. Helf, clk.

Mo., St. Louis—Pitzman Eng. & Survey Co., engrs., 619 Chestnut St., taking informal bids 60,000 cu.yd. grading, average haul 400 ft., in Hampton Terrace, for Community Estate. Will take bids later on about $100,000 worth street and sewer work.

Ark., Ft. Smith—Aug. 16, by Bd. Impvts., grading and paving 17,160 sq.yd. Dist. 23, 6 in. concrete, rein.-con., vibrolithic pavement or 2 in. asphaltic on 4 in. concrete; 10,670 sq.yd. Paving Dist. 23, 6 in. rein.-con., vibrolithic concrete with integral curb. W. L. Winters, Ft. Smith, engr.

Tex., Dallas — Aug. 23, by Dallas Co., bituminous surfacing 55,500 sq.yd. Garland-Sachse Rd., ½ in. surface. $35,000-$40,000. Nagle, Witt & Rollins, Court House, engrs.

Tex., Pittsburgh—Aug. 30, by J. A. Efrud, judge Camp Co., grading, surfacing, crushed iron ore rock base, bituminous topping and bridging 6.19 mi. State Highway 11, 1,280 cu.yd. Class A concrete, 68,776 cu.yd. roadway and 21,552 cu.yd. borrow excav., 71,940 gal. asphaltic oil, 18,168 cu.yd. iron ore, etc. $159,475. Noted Aug. 2.

Tex., Eastland—Aug. 28, by E. L. Pritchard, judge Eastland Co., surfacing with waterbound macadam base and bituminous top 10.04 mi. State Highway 22, 19.14 mi. State Highway 23 A and 18.67 mi. State Highway 18, all 18 ft. $65,000, $125,000 and $120,000 respectively. C. S. Henning, Jr., engr. in charge. Noted July 26.

Okla., Fairfax—Aug. 14, by J. N. Fly, city clk., improving 14 blocks, Main, Elm and Mulberry Sts., 29,110 sq.yd. vertical fibre brick, 7,000 lin.ft. curbing, 11,000 lin.ft. gutter and 12,000 cu.yd. excav. $160,408. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs. Noted July 12.

Colorado—Aug. 7, by State Hy. Comn., Denver, grading, etc., 3.342 mi. State Project 713, Pitkin Co., 8,800 cu.yd. common excav., etc., $9,916; grading and gravel surfacing 2.911 mi. Federal Aid Project 71 C, La Plata Co., 13,700 cu.yd. common and 1,000 cu.yd. rock excav., 27,400 sq.yd. gravel surfacing, etc., $35,740. L. D. Blauvelt, State Office Bldg., Denver, engr.

Utah—Aug. 20, by State Rd. Comn., Salt Lake City grading and paving 1.77 mi. main street of Nephi City, Federal Aid Project 53, 2,200 cu.yd. common and 1,600 cu.yd. borrow excav., 18,800 sq.yd. concrete; improving 5.2 mi. road between Ft. Duchesne and Vernal, Federal Aid Project 10 B, Uintah Co., will be divided into three schedules as follows (1) grading entire project, 7,700 cu.yd. common and 12,300 cu. yd. borrow excav., gravel surfacing 4.5 mi with 6 in. gravel strip, 18 ft. wide, (2) 4 timber bridges, incl. one 10 ft., one 15 ft. and two 20 ft. spans, cement rubble masonry abutments, (3) surfacing 0.7 mi. in Vernal with native asphalt, 7,520 sq.yd. asphaltic pavement, penetration type, with alternate for furnishing aggregate only for pavement in stock piles at Vernal. Bids for any or all of above schedules. H. C. Means, state road engr.

Streets and Roads (Continued)

Utah—Aug. 21, by State Rd. Comn., Salt Lake City, grading and surfacing 7.08 mi. road between Scipio and Juab Co. line, Federal Aid Project 17 A, 9,600 sq.yd. common and 4,400 cu.yd. borrow excav., 14,000 cu.yd. gravel surfacing. H. C. Means, state road engr.

Ariz., Phoenix—Aug. 14, by H. Ringer, city engr., paving portions 7th and 9th Aves., Roosevelt, Portland, Latham, West Moreland, Culver, Wiletta and Lynwood Sts., 21,418 sq.yd. 5 in. concrete, bitulithic on asphalt, or asphaltic concrete top and base, 10,950 sq.yd. 5 in. concrete or asphaltic, 18,670 ft. combined curb and gutter, 32,576 sq.yd. grading, etc. Noted Apr. 5.

Calif., Fresno — Aug. 17, by Supervs. Fresno Co., paving with 4 in. asphaltic concrete 6.7 mi. Route 2, Sect. A, 4.4 mi. Route 5, Sect. B; 5 in. asphaltic concrete 2 mi. Route 27, Sect. A, 0.6 mi. Route 28, Sect. A; asphaltic concrete paving 4 mi. Route 16, Sect. B, all 16 ft. C. P. Jensen, co. surv.

Calif., San Diego — Aug. 20, by A. H. Wright, city clk., improving Imperial Ave. through Encanto Dist.; grading, concrete curbing and sidewalks on Redwood, Palm, Bancroft, 33rd and Felton Sts. F. A. Rhodes, city engr. Noted July 26.

Calif., San Diego — Aug. 27, by A. H. Wright, city clk., improving Imperial Ave. between 32nd and 40th Sts. Noted July 26.

Calif., San Diego — Aug. 27, by Bd. Supervs. San Diego Co., grading and paving 12 mi. road from Buena to Bonsal; 1.64 mi. from Nutmeg to Lime Sts., Escondido; 3.04 mi. from Bernardo to Escondido. Former bids rejected. Noted Aug. 2.

Calif., San Jose—Sept. 4, by Supervs. Santa Clara Co., paving Lawrence Rd., 194,800 sq.ft. oil macadam. R. B Chandler, co. surv.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Aug. 1, paving (1) Dumont Ave. (2) East New York Ave. (3) East 36th St. (4) East 37th St. (5) Ave. I (6) Rutland Rd. (7) 53rd St., paving and repaving (8) Troutman St., repaving (9) Atlantic Ave. (10) Miller Ave. (11) Franklin Ave. (12) Ocean Ave. (13) 41st St., resurfacing (14) Clermont Ave., curbing and paving (15) East 26th St. (16) Ave. I, recurbing and paving (17) Lincoln Ave., all foregoing asphalt, grading, curbing and flagging (18) East 36th St. (19) East 37th St. (20) East 27th St. (21) Lenox Rd., from Borough Asphalt Co., 1301 Metropolitan Ave., (1) $2,875 (12) $41,722 (17) $9,927; Cleveland Trinidad Co., Flushing, (2) $46,768 (5) $37,873; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (3) $8,773 (4) $6,569 (7) $7,536 (11) $34,975 (15) $4,506 (16) $17,493; Uvalde Asphalt Paving Co., 1 Bway., New York, (6) $7,734 (8) $19,525 (10) $26,979; Sicilian Asphalt Paving Co., 41 Park Row, New York, (9) $32,835; M. J. O'Hara, Contg. Co., 717 65th St., (13) $12,480; Cranford Co., 52 9th St., (14) $60,628; Galecor Contg. Co., 507 Greenwich St., New York, (18) $4,562 (19) $2,463; F. Persicano, 350 Fulton St., (20) $7,900; J. M. Fox, 270 Herkimer St., (21) $4,229. Noted July 26.

New York—Bd. Water Supply, Municipal Bldg., New York City, July 31, clearing and grubbing Schoharie Reservoir and constructing diverting dam down-stream from intake at Shandaken tunnel in towns of Gilboa and Conesville, Schoharie Co., Prattsville, Greene Co., and Roxbury, Delaware Co., Contr. 205, from Rice & Ganey, Inc., 2786 Bainbridge Ave., New York City, $290,800. Noted July 19.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 31, grading sidewalk space and laying sidewalks on Clermont Ave., from J. J. O'Brien, Jr., William St., Jamaica, $1,346; curbing, laying sidewalks, etc., on Forest Ave. and recurbing, etc., George St. from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $5,105 and $6,665 respectively; repaving with improved granite blocks Grand St., from Kennedy & Smith, Inc., 93 Amity St., Flushing, $95,867; grading, curbing and laying sidewalks on Provoost St., from Welsh Bros. Contg. Co., 32 Queens St., Astoria. $10,549; curbing and laying sidewalks on Graham Ave., from W. J. Fitzgerald, 547 West 45th St., New York City, $26,507. Noted July 26.

New Jersey—State Hy. Dept., Trenton, Aug. 6, concrete paving and reconstructing 4 concrete bridges on 38,043 sq.yd. Route 8, Sect. 4, Smiths Mills-Charlottesburg, from Weldon Constr. Co., Broad St., Westfield, 102.8% engrs. est. ($340,075); concrete paving Route 14, Sect. A, Swainton-Ocean View, Cape May Co., from Pub. Serv. Production Co., 80 Park Pl., Newark, 103.7% ($207,350). Noted July 26.

New Jersey—State Hy. Dept., Trenton, grading and 2 small bridges on Route 5, Sect. 13, Budd Lake to Netcong, Morris Co., 15,402 cu.yd. earth excav., etc., from Salmon Bros., Main St., Netcong, 85.8% engrs. est. ($61,610). Noted July 19.

New Jersey—State Hy. Dept., Trenton, Aug. 2, concrete curbing, grading, and paving Route 13, Sect. 6, Lawrenceville to Princeton, Mercer Co., 69,702 sq.yd. concrete and 4,533 sq.yd. asphalt, from Utility Constr. Co., 5 Spring St., New Brunswick, 97.75% engrs. est. Noted July 19.

Pa., Harrisburg — Paving Cameron St. from Calder to Maclay Sts., from Central Constr. Corp., 7th and Emerald Sts., 13,800 sq.yd. Bermudas asphalt, $3.75, oil residuum $3 52, 5,600 lin.ft. curb granite $1.88, granolithic $1, reset $0.50; Stucker Constr. Co., Russ Bldg., 13,800 sq.yd. Atlantic asphalt, Mexican oil asphalt $3.67. 5,600 ft. curb; granite $1.98, granolithic $1, reset $0.50.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 2.41 mi. highway, 15 ft., from Crellin to West Virginia state line, Garrett Co., Contr. G-16, from T. B. Claiborne Co., Garrett Bldg., Baltimore, $86,940. Noted July 19.

Md., Baltimore—Bd. Awards, 2,100 sq.yd. granite block repaving and 17,615 sq.yd. asphalt, Contr. 241-OONA, from Amer. Paving Co., Montebello, $81,131. Noted July 26.

Virginia — State Hy. Comn., Richmond, improving roads Route 32, Project F 184 C, Culpeper Co., from Lynchburg Constr. Co., R. F. D. 4, Warrenton, $55,491, Route 39, Project F 257, New Kent Co., from Van Doren Bros., Richmond, $126,006, Route 111, Project F 265 B, Buchanan Co., from Waugh & Longley, Bluefield, W. Va., $154,962, Route 30, Project S 318 B, King William Co., from C. H. Oliver Co., Doswell, $56,078, Route 11, Project S 131, Wise Co., from R. H. Bolling, Norton, $81,279, Route 116, Project S 223, Scott Co. from V. E. Cornett & Co., Independence, $73,523, Route 21, Project S-314, Arlington Co., from Cranford Co., 2620 East St., N. W., Wash., D. C., $51,994. Noted July 12.

Alabama—State Hy. Dept., Montgomery, July 31, improving 11.32 mi. Federal Aid Project 74, Dublin-Orion Rd., Montgomery Co., alternate bids on (1) gravel (2) sand-clay surfacing, from J. R. and J. B. Miller, Baconton, Ga., (1) $131,797; J. F. Giddens, Troy, (2) $80,991. Noted July 12.

O., Akron—Summit Co. improving 5 mi. Hudson-Richfield Rd., 20 ft., from P. T. McCourt, 369 South Main St., penetration macadam $126,867, texaco macadam $143,955.

O., Ravenna—Paving (1) Clinton St., resurfacing (2) Main St. (a) concrete (b) brick (c) oil asphalt (d) lake asphalt, from H. W. Cowles, Ravenna, (1a) $26,138 (1b) $27,080 (2c) $29,015 (2d) $29,685; J. L. McCormick, Ravenna, (1c) $25,683; Federal Asphalt Paving Co., Main and D Sts., Hamilton, (1d) $28,232.

Michigan—State Hy. Dept, Lansing, grading and surfacing 1.084 mi. State Trunk Line Rd. 17-13, Calhoun Co., 4,872 cu.yd. excav., 12,720 sq.yd. concrete, from W. H. Ryan, Jackson, $24,725; 2.456 mi. Federal Aid Project 89, Sects. A, B and C, Calhoun Co., from Rockford Constr. Co., Tecumseh, $57,670. Noted July 19.

Michigan — Improving 1.769 mi. State Trunk Line Rd. 11-22, Berrien Co., asphaltic concrete, from Northern Constr. Co., Ft. Wayne, Ind., $44,650, plus State cement; Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $49,932.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways Springfield, July 31, concrete paving 0.89 mi. **11-9-C1 Madison means (Route 11, Federal Aid Project 9, Sect. C1, Madison Co.)** 0.84 mi. 11-9-38 and 0.23 mi. 11-9-39X, also Madison Co., from W. C. Johnson, 512 South High St., Belleville, $22,102, $38,499 and $6,968 respectively; 2.96 mi. 31-31-8X Brown, from E. J. Eiff, Quincy, $58,708; 4.08 mi. **3-55 Greene means (State Route 3, Sect. 55, Greene Co.)** and 4.35 mi. 3-58 Jersey, from Nelson Bros. & Co., Jerseyville; $82,831 (less ½% if personal bond is accepted) and $91,400 respectively, 5.48 mi. 13-7 Williamson and Saline from C. E. Hamilton, Carbondale, $116,850, 2.71 mi. 14-6 and 4.43 mi. 14-6X Franklin, from J. Webb Jones, Benton, $61,680 and $98,444 respectively, 3.1 mi. 15-23 and 3.14 mi. 15-24 Wayne, from O. Arnold, Casey, $56,499 and $57,973 respectively, 3.75 mi. 18-15 De Kalb-Kendall Co., from Trompeter & Son, Peru, $80,185, 1.52 mi. 22-13B, Will, from Hoffman Bros. Constr. Co., Hebron, $19,557, 9.27 mi. 26-4 Ogle, from C. E. Carson & Co., 601 St. Clair Ave., Chicago, $181,361 (minus 1%), 5.08 mi. 31-11 Schuyler, from List & Gifford Constr. Co., 415 Ry. Exch. Bldg., St. Louis, Mo., $117,206; grading 53,590 cu.yd. 1-2A and 37,140 cu.yd. 1-3A, White Co., from Keating Bros., Auburn, $28,663 and $16,516 respectively, 152,230 cu.yd. 1-28A White, 107,720 cu.yd. 34-1A and 69,130 cu.yd. 34-2A, Saline from Cameron & Joyce Co., Keokuk, Ia., $66,263, $50,323 and $59,907 respectively, 42,760 cu.yd. 14-6A Franklin from G. C. Paine, $28,150, 87,560 cu.yd. 1-38A, Johnson, 65,858 cu.yd. 34-4A and 279,085 cu.yd. 34-5A Hardin from H. Schweitzer, Marion, $43,956, $53,469 and $130,242 respectively, 198,990 cu.yd. 1-39A and 89,165 cu.yd. 1-40A Massac, from Cache Valley Dredging Co., Carnak, $78,536 and $42,749 respectively (minus 1% dragline), 30,950 cu.yd. 2-63A Woodford-McLean Co., from I. D. Lain, Bloomington, $21,290 (minus ½%) 132,361 cu.yd. 3-59A Jersey-Madison and 41,790 cu. yd. 3-60A Madison Co. from D. C. Condon, Omaha, Neb., $78,510 and $21,487 respectively, 18,954 cu.yd 3-67A Monroe from Tritt Bros., Belleville, $18,854; 275,612 cu. yd. **7 and 29-7-R Bureau means (Routes 7 and 29, Federal Aid Project 7 Sect. R, Bureau Co.,** from Byers-Wilson Constr. Co., Manchester, Ia., $175,073, 27,920 cu.yd. 7-55-R-1 and 7-55-14A Bureau from Finley Bros., Janesville, Wis., $14,543 and $7,695. Noted July 19.

Ind., New Albany—Bd. Pub. Wks., Aug. 3, concrete paving Charlestown Ave. from Vincennes St. to North Y, from Goulding Bros., 316 West Main St., $4.93 per lin.ft. Engrs. est. $25,000.

Tex., Johnson City—Blanco Co. grading and gravel surfacing 7.19 mi. State Highway 20 A, from Hays Co. line west, 16 ft., from H. J. Evans, 500 West 15th St., Austin, $53,357. Noted July 12.

Calif., Glendale—Paving Glendale Ave., etc., 463,160 sq.ft. 5 in. macadam, from Ducey & Breitenstein, 151 South Hill St., Pasadena, $101,171. Noted Aug. 2.

Calif., Huntington Beach — Improving Ocean Ave., 711,300 sq.ft. 2 in. willite on 4 in. asphalt concrete, culverts, manholes, etc., from G. H. Oswald, 366 East 58th St., Los Angeles, $216,000. Noted July 19.

Calif., Oakland—Alameda Co., grading and paving Livermore-Pleasanton Rd., from Kaiser Paving Co., 1st Savings Bank Bldg., $175,006. Noted July 12.

Calif., Richmond — Concrete curbing, guttering, sidewalks and paving portions Stege Ave., etc., from Hutchinson Co., Hutchinson Bldg., Oakland, $37,724. Noted July 12.

Calif., Santa Paula — Improving Santa Barbara St., etc., from Southwest Paving Co., Washington Bldg., Los Angeles, 753,000 sq.ft. 4 in. asphalt at $0.155, 82,760 sq.ft. 4 in. concrete $0.165, 16,000 sq.ft. 4 in. walks $0.15, 7,200 lin.ft. 15 in. curb $0.75, etc.; Pleasant St., etc., from J. T. Cornwall, Santa Barbara, 398,180 sq.ft. 4 in. concrete pavement $0.1575, 9,620 sq.ft. 4 in. concrete walks $0.165, 2,760 lin.ft. 15 in. concrete curb $0.18, etc., total $65,723.

CONTRACTS AWARDED

Mass., Boston—Paving 1,000 lin.ft. Harrison Ave., Essex and Chancey Sts., 20-30 ft., granite and wood block, to B. E. Grant Co., 100 Floyd St., Brookline (Boston P. O.), $35,284.

Mass., Boston—City, grading Eagle Hill for new high school, 120,000 cu.yd. earth excav., to J. C. Coleman & Sons Co., 1620 Tremont St., $97,000.

Conn., Hartford — Paving 7,000 sq.yd. Preston St., 7 in. concrete to O'Neil Bros., 983 Main St., $28,260. Noted July 26.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Cranford Co., 52 9th St., asphalt paving Bay 31st St. $6,309, Gelstone Ave. $6,788, 18th Ave. 66th St. $8,085, 70th St. $8,534, 90th St. $7,949, recurbing and asphalt paving 6th Ave. $10,774, sheet asphalt paving Dumont Ave. $7,163, 15th Ave. $8,151, 4th St. $10,741; to Cleveland Trinidad Paving Co., Flushing, Delamere Pl. $8,872, East 40th St. $18,866; to W. J. McHale Contg. Co., 1250 Jefferson St., grading, curbing and flagging Delamere Pl. $4,336; to Sicilian Asphalt Paving Co., 41 Park Row, New York, asphalt repaving Tompkins Ave. $37,585, South 5th St. $17,942; to T. B. Scott, 671 Halsey St., grading, curbing and flagging Dumont Ave. $2,443, grading sidewalk space and flagging Highlawn Ave. $932; to C. Bennett Contg. Co., 414 Rutland Rd., grading, curbing and flagging 48th St. $11,119; to Borough Asphalt Co., 1301 Metropolitan Ave., sheet asphalt paving Greene Ave. $63,999, Hegeman Ave. $3,118; to R. Lynster, 1364 Sterling Pl., grading, recurbing and reflagging Hegeman Ave. $1,775; to Galecor Contg. Co., 507 Greenwich St., New York, resurfacing Oriental Blvd. $19,389, West End Ave. $10,057, both bituminous macadam; to F. J. Gallagher, 490 Park Pl., repaving Bway. $5,304, Gold St. $23,926, both grade 1 granite. Noted July 19 and 26.

Streets and Roads (Continued)

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Cleveland Trinidad Paving Co., Flushing, repaving Corona Ave., asphalt, $8,398, grading, curbing, laying sidewalks, etc. on Roosevelt Ave. $7,452, 2nd Ave. $75,296; to Welsh Bros. Contg. Co., 32 Queens St., Astoria, paving Greenpoint Ave., asphalt block $58,983; to Necaro Co., Inc., 97 Court St., Brooklyn, Metropolitan Ave., improved granite block $85,086; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, grading and paving 101st St., sheet asphalt $47,484; grading, curbing, laying sidewalks etc. on Liberty Ave. $220,335, Hillside Ave. $40,080; to W. P. McDonald Constr. Co., 17 West 42nd St., New York, Woodhaven Ave. $328,987. Noted July 26.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, etc., Queens Blvd. from Gosman Ave. to Union Turnpike, to A. A. Johnson Corp., Queens Blvd., $463,029. Noted Aug. 2.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving East 90th St., to C. D. Beckwith, Inc., 2875 Bway., $15,495; 104th St., to Brusstar Constr. Co., Harlem River and 150th St., $21,301; 131st St., to Sicilian Asphalt Paving Co., 41 Park Row, $57,023; Amsterdam Ave., to Asphalt Constr. Co., 208 Bway., $161,700; repairing sheet asphalt pavements in railroad area, to Cleveland Trinidad Paving Co., Flushing, $76,800; repairing wood block and granite block pavements in railroad area, to Casper Helbock Co., Harlem River and 150th St., $49,680. Noted July 26.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves. grading etc. **Balcom Ave.** and grading, curbing, laying sidewalks on **Bronxwood Ave.**, to P. J. Donovan, 30 Church St., $24,060 and $42,296; **Walton, Thierot and Mace aves.**, to I. F. Cavaluzzo, 1538 Walton Ave., $24,673, $12,536 and $26,900 respectively; **Paulding Ave.** and repaving **Jerome Ave.**, granite block, to P. J. Kearns Contg. Co., 2306 Creston Ave., $12,122 and $73,344 respectively; grading, curbing and laying sidewalks on **Grand Ave.**, to C. D. Beckwith, 2875 Bway., $66,136; paving **Morris Park Ave.**, bituminous concrete, to Interboro Asphalt Co., 2306 Creston Ave., $43,917; **East 172nd St.**, bituminous concrete and **Rogers Pl.**, sheet asphalt, to J. E. Gaffney, 438 East 91st St., $4,667 and $7,912 respectively; **West 192nd St.**, sheet asphalt, to Asphalt Constr. Co., 208 Bway., $19,029; repaving **West Tremont Ave.**, granite block, to Astoria Contg. Co., 169 Hunter Ave., Long Island City, $83,524, **Burnside Ave.**, granite block, to Burnside Contg. Co., 270 Burnside Ave., $35,765; **Crotona Ave.**, asphalt block, also grading, regrading etc. **Exterior St.**, to Regan Towers, Inc., 124 West 121st St., $78,031 and $39,118 respectively. Noted July 26.

N. Y., Niagara Falls—Curbing, guttering and paving 29th St., warrenite bitulithic, to Read-Coddington Eng. Co., Niagara Falls, $26,880, engrs. est. $27,700; **La Salle Ave.**, 3 in. vertical fibre brick, to J. F. McKinney Corp., Gluck Bldg., $38,544, engrs. est. $40,700.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro Hall, repaving Post Ave., granite block, to M. I. Sachs, 246 South 9th St., Brooklyn, $49,831. Noted July 19.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, grading Van Buren St., to J. Johnson Sons, West New Brighton, $1,050; repaving Jewett Ave., Broad, Boyd and Bay Sts., granite block, to M. I. Sachs, 246 South 9th St., Brooklyn, $91,714. Noted July 12.

N. J., Roselle — Boro Council, curbing and paving 7,300 lin.ft. Linden Rd., Locust St., 3rd, Harrison, Chandler and 9th Aves., asphaltic concrete on concrete, to J. B. Gilligan-Casey Co., 919 Broad St., Newark, $92,756.. Noted July 19.

Pa., Phila.—Repaving Chelten Ave. from Morton to Musgrave Sts., redressed granite block on concrete, Brown St. from 10th to Broad Sts., sheet asphalt and vitr. block gutters with redressed granite block at intersections, 13th St. from Spring Garden to Girard Aves., redressed granite block on concrete, to Eastern Paving Co., 401 Colonial Trust Bldg., $24,441, $37,523 and $38,863 respectively.

Pa., Pittsburgh—Allegheny Co., 5,550 ft. Beaver Rd., 20 ft., in Glen Osborne Boro., asphaltic concrete, to M. O'Herron Co., South 1st and McKean Sts.

Maryland—State Rds. Comn., Baltimore, gravel surfacing 17,500 sq.yd. in Charles Co., **Contr. Ch-27**, to J. A. Wilmer, La Plata, $30,211; 2.43 mi. **Contr. C-16**, to T. Mullan, 3945 Greenmount Ave., Baltimore, $22,488; 9,700 sq.yd. gravel resurfacing in St. Marys Co., **Contr. SM-26**, to St. Marys Constr. Co., Mechanicsville, $10,983; concrete surfacing **1.14 mi. from Cambridge to Finksburg**, to Thomas, Bennett & Hunter, Westminster, $45,062; 9,200 sq.yd. in Worcester Co., **Contr. Wo-31**, to J. R. Phillips, Berlin, $27,390; concrete shoulders, 2 mi. York R, in Govans, Baltimore Co., **Contr. B-28**, to F. B. Carozza, Govans, $20,416; macadam resurfacing, 18,300 tons rein.-con. base course stone, 14,100 tons bituminous macadam, Washington Co., **Contr. W-27**, to Development & Constr. Co., American Bldg., Baltimore, $74,401; 1,900 tons macadam, Baltimore Co., **Contr. B-57**, to T. P. Murray, Towson, $15,003. Noted June 14, July 5 and 19.

Maryland—State Rds. Comn., Baltimore, concrete paving 4.51 mi. Southern Maryland Blvd., Anne Arundel Co., Contr. AA-28, to Christhilf & Ensey Co., 1625 Ridgely St., Baltimore, $155,906; grading and draining 0.86 mi. Philadelphia Rd., Harford Co., Contr. H-31, to Development & Constr. Co., Amer. Bldg., Baltimore, $9,049.

Fla., Vero—Paving 101,000 sq.yd. road, waterbound macadam with surface treatment of asphalt binder, 19,000 cu.yd. grading, to H. L. Clark & Sons, Lemon City, $148,848.

Miss., Pascagoula—Jackson Co. grading, paving and bridging Old Spanish Trail, Federal Aid Project 120, to S. A. Gano, Maison Blanche Bldg., New Orleans, La., 147,529 sq.yd. concrete $2.34, etc., total $414,355. Noted July 12.

Ky., Henderson—Paving 33 blocks Green, Elm and Main Sts., sheet asphalt and warrenite, on 6 in. concrete, to Asphalt Paving Co., Hamilton, O., $174,500. Noted July 5.

O., Akron—W. F. Peters, dir. Pub. Serv., paving and laying sidewalks on 4,420 sq.yd. Mt. Vernon Ave. and 4,730 sq.yd. Murray Ave., both standard brick, asphalt filler, 6 in. base, to McAlonan Bros., 197 West Buchtel Ave., $31,794 and $34,567 respectively; grading and laying sidewalks on 6,500 cu.yd. East South St., cinders, to J. Angelo, $12,471; resurfacing 2,875 sq.yd. Campbell St., sheet asphalt, plan B, Texaco, to T. E. McShaffrey Constr. Co., 171 South Forge St., $15,601; paving 575 sq.yd. Maiden Lane, standard brick, asphalt filler, to E. H. Rawle, 329 Walsh Bldg., $3,561. Noted July 26.

O., Bellaire—G. T. Kreglow, dir. Pub. Serv. City Bldg., to McClain Constr. Co., Bellaire, paving Colerain Lane, $5,697, Guernsey St. $13,665, Atchison Rd. $13,504. Work involves 5,033 sq.yd. concrete and 1,488 sq.yd rein.-con. Noted July 26.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., grading at Sunbeam School, to A. Lang, Detroit and Lakewood Sts., Cleveland, $15,050; masonry work, to C. A. Carson Co., 7016 Euclid Ave., $23,800; landscaping, to Independence Nurseries Co., Independence, $20,268. Noted July 26.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to B. F. Patterson, 1214 Neil Ave., grading, laying necessary water services and sewer connections and paving 2,092 ft. Montrose Ave., 24 ft., asphalt, $28,476; to Franklin Asphalt Paving Co., 209 South High St., 719 ft. Park St. S., 24 ft., asphalt, $9,885, 469 ft. 8th St., 26 ft., asphalt, $6,662; to R. J. Dienst, 480 South 5th St., 1,890 ft. alley north of Norwich Ave., 20 ft., concrete $11,019, 927 ft. alley north of Fulton St., 20 ft., concrete $5,441, 409 ft. alley north of Fulton St., 20 ft., concrete $2,491; to Columbus Contg. Co., 1471 West Broad St., 501 ft. alley north of Blake Ave., 15 ft., concrete $2,475, 762 ft. alley north of Hanford St., 16 ft., concrete $4,211; to A. G. Pugh, 401 Commerce Bldg., 552 ft. alley west of 20th St., 17 ft., concrete $2,848. Noted July 26.

O, Youngstown — Paving St. Louis Ave., asphalt, to Kelly & Meyer, Youngstown, $30,522 engrs. est. $32,500; Sycamore St. to Ross & Colucci, Youngstown, $26,375, $27,500; Hazlewood Ave., to V. Olson Co., 506 Mahoning Bank Bldg., $28,389, $30,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 53-6, Lapeer Co., to Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, 9,646 cu.yd. excav. $0.90, 21,276 sq.yd. sheet asphalt on 6 in. base $2.38, total $71,055.

Michigan—State Hy. Dept., Lansing, improving roads, **(F. A. P. 99, Kalamazoo means Federal Aid Project 99, Kalamazoo Co.)**, grading and surfacing **7.369 mi. F. A. P. 99, Kalamazoo**, to Webber Co., Ionia, 27,314 cu.yd. excav. $0.55, 161.7 cu.yd. 1:2:4 concrete and 185.5 cu.yd. 1:3:6 concrete $17, 77,837 sq.yd. 8 in. concrete pavement $1.47, total $139,675; **4.43 mi. F. A. P. 116, Kent**, to New Era Road Building Co., New Era, 48,154 cu.yd. excav. $0.55, 201.2 cu.yd 1:2:4 concrete and 285.2 cu.yd. 1:3:6 concrete $16, 1,140 sq.yd. Class B gravel $0.85, 50,057 sq.yd. 7 in. rein.-con. pavement $1.30, total $110,038; **7.252 F. A. P. 98, Kent**, to Ford Constr. Co., Michigan City, Ind., 54,038 cu.yd. excav. $0.65, 382.7 cu.yd. 1:2:4 concrete and 280.7 cu.yd. 1:3:6 concrete $15, 85,097 sq.yd. 8 in. rein.-con. pavement $1.46, total $174,714; **0.568 mi. F. A. P. 35, Sect. F, Jackson**, to W. H. Ryan, 401 Van Buren St., Jackson, 4,380 sq.yd. asphalt, 837 sq.yd. concrete, $20,351; **6.428 mi. F. A. P. 70, Sect. D, Oakland**, will be done by day labor; **(S. T. L. Rd. 46-21, Sanilac, means State Trunk Line Rd. 46-21, Sanilac Co.)**. **5.523 mi. S. T. L. Rd. 46-21, Sanilac**, to G. W. Case, Kinde, 22,731 cu.yd. excav. $0.50, 138.8 cu.yd. 1:2:4 concrete $18, 233.2 cu.yd. 1:3:6 concrete $17.50, 51,845 sq.yd. gravel $0.98, total $70,711; **1.6 mi. S. T. L. Rd. 37-4, Kent**, to Vander Veen Constr. Co., 165 Lyons St. N. E., Grand Rapids, 12,344 cu.yd excav. $0.60, 18,389 sq.yd. 3 in. sheet asphalt $1.50, total $46,310; **0.717 mi. S. T. L. Rd. 59-1, Sect. A, Macomb**, to Meredith & McVaugh, 220 Horton Ave., Detroit, 5,007 cu.yd. excav., 10,061 sq.yd. concrete, $26,003; **2.528 mi. S. T. L. Rd. 21-4, Sect. A, St. Clair**, to J. H. Baker & Son, Port Huron, 26,682 sq.yd. concrete, $47,336; **0.984 mi. S. T. L. Rd. 21-22, Ionia**, to Banhagel Constr. Co., Ionia, 6,593 cu.yd. excav., 11,592 sq.yd. concrete, $29,795.

Ill., La Grange—For 14,000 sq.yd. concrete paving to Foley & Riley, 1st Natl. Bank Bldg., Chicago, $54,000. Noted June 28.

Ill., Mascoutah—Concrete paving Railway Ave. and Market St., to F. C. Dieckman, East St. Louis, $29,500. Engrs. est. $30,000. Noted June 28.

Ill., Olney—For 50,000 sq.yd. paving, 31,000 ft. concrete curb, 14,000 cu.yd. excav., etc., to Wabash Constr. Co., Vincennes, Ind., $160,000. Noted July 12.

Ill., Western Springs—For 160,000 sq.yd. concrete sidewalks, to W. T. Ryan, Lyons, $50,000. Noted June 28.

Minnesota — State Hy. Dept., St. Paul, paving 10.7 mi. State Project 45-21, Federal Aid Project 12 and 326, between St Paul and Stillwater, 95,000 cu.yd. excav., 114,000 sq.yd. concrete, to Grant Smith & Co., 1505 Pioneer Bldg., St. Paul, $388,893. Noted July 12.

Minn., Grand Rapids—Concrete paving 1,600 ft. various streets, 30 ft., to L. Lafberg, Grand Rapids, $25,000.

Mo., St. Louis—See "Sewers."

Kan., Kansas City—Wyandotte Co. concrete road from N. E. corner Sect. 27 Twp. 11 to Wyandotte Co. line, 16 ft., to Cook & O'Brien Constr. Co., 305 Railway Exch. Bldg., Kansas City, Mo. $184,462.

Kan., Leavenworth — Paving various streets, vitr. brick with asphalt filler, to J. Stanton & Son Constr. Co., Leavenworth, $68,090.

N. D., Grafton—Walsh Co. grading Project 184, west of Adams, 65,082 cu.yd. excav., etc. to Hohman-Webster & Son, Turtle Lake, $28,741, culverts, $5,345.

South Dakota—State Hy. Comn., Pierre, improving road **(F. A. P. 51, Gregory means Federal Aid Project 51, Gregory Co.)**, to Tobin & Maloney, Madison, sand clay surface on **13.65 mi. F. A. P. 51, Gregory**, and graveling **16.79 mi. F. A. P. 152A, Codington**, $20,943 and $23,918 respectively; to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, graveling **8.67 mi. F. A. P. 85, Clark**, $13,974, **14.18 mi. F. A. P. 96, Roberts**, $13,661, **6.11 mi. F. A. P. 124, Codington**, $7,655, **6.81 mi. F. A. P. 139, Roberts**, $7,218, **11.02 mi. F. A. P. 152B, Grant**, $13,515; to Sheehan & Bjerknes, Sioux Falls, **8.52 mi. F. A. P. 152C, Roberts**, $9,128; also one 8 x 10 ft. concrete box culvert on **F. A. P. 152 B. Grant**, to Prendergast Bridge Co., Milbank, $2,543.

Wyo., Casper—Curbing, building sewers and paving New Paving Dist. 34, 6 in. bituminous concrete to Warren Constr. Co., Casper, $77,991. Noted July 12.

Tex., Abilene—Paving with 2 in. bitulithic on black base, 40,000 sq.yd. Victoria St., etc., to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $2.52 per sq.yd. Noted July 26.

Tex., Edinburg—Hidalgo Co., to W. L. Pearson & Co., 827 First Natl. Bank Bldg., Houston, grading, surfacing with concrete base and asphalt topping 9.65 mi. State Highway 12, Federal Aid Project 375, $240,233, engrs. est. $264,256; grading, surfacing with concrete base, asphalt topping and bridging 13.74 mi. State Highway 12, Federal Aid Project 374, $379,127, engrs. est. $417,039; grading and gravel surfacing

Streets and Roads (Continued)

14.81 mi. State Highway 12, Federal Aid Project 376, $102,409, engrs. est. $118,150; surfacing with 1 in. cold mix rock asphalt topping 134,489 sq.yd. State Highway 12, Federal Aid Project 374, $75,536, engrs. est. $83,089, incl. 10% for engineering and contingencies. 97,048 sq.yd. State Highway 12, Federal Aid Project 375, $53,862, engrs. est. $59,248 incl. 10% for engineering and contingencies. Noted July 26.

Tex., Falfurrias — Brooks Co. grading, gravel and caliche surfacing 10.08 mi. State Highway 12, 790 cu.yd. concrete, 60,187 cu.yd. roadway and 20,406 cu.yd. borrow excav., etc., to W. W. Vann, Mercedes, $70,614; 18,126 cu.yd. gravel and 18,126 cu.yd. caliche to be furnished by county $35,000. Engrs. est. $115,681 incl. 10% for engineering and contingencies. Noted July 26.

Tex., Ft. Davis—Jeff Davis Co. grading, etc., 6.07 mi. State Highway 12, to J. C. Bean, Marfa, $25,627. Noted July 26.

Tex., Ft. Worth—Paving, etc. East Rosedale St., 7,400 sq.yd. 1½ in. Uvalde rock asphalt on 5 in. concrete, 2,800 ft. curbing and guttering and 2,660 cu.yd. excav., to General Constr. Co., Cotton Exch. Bldg.

Tex., Ft. Worth—Paving Jones St. from 7th to Bluff Sts., 3 in. vertical fibre brick on 5 in. concrete, to McCullum Constr. Co., F & M Bldg., $34,643. Engrs. est. $35,000.

Utah—State Rd. Comn., Salt Lake City, grading, gravel surfacing and bridging 11.5 mi. Federal Aid Projects 4-F and 4-H, Castle Dale-Ferron Rd., to J. T. Raleigh Co., 154 North 3rd St., W., Salt Lake City. Noted July 12.

Okla., Barnsdale—J. C. Blankenship, city clk., grading, curbing and paving 4,600 sq.yd. Cedar St., to M. R. Amerman, 246 Market St., Wichita, Kan., 7 in. concrete $3.15 per sq.yd., total $29,481. Noted July 19.

Calif., East San Diego (branch of San Diego)—Paving 197,193 sq.ft. Mentone, Menlo and Sierra Sts., 1½ in. willite on 2½ in. concrete, to H. G. Feraud, Baker-Detwiler Bldg., Los Angeles, $79,738.

Calif., Fullerton—Improving West Santa Fe Ave., etc., to Los Angeles Paving Co., 2900 Santa Fe Ave., 95,309 sq.ft. 5 in. warrenite at $0.235, 764,380 sq.ft. 4 in. warrenite $0.219, 2,900 lin.ft. curb $0.60, etc.

Calif., Hanford—Improving Kaweah and Ford Sts., etc., to California Constr. Co., 58 2nd St., San Francisco, 112,056 sq.ft. grading $0.035; 98,638 sq.ft. 1½ in. warrenite on 4 in. bituminous $0.234; 4,904 sq.ft. concrete curb $0.70; 6,831 ft. 5 in. concrete gutter $0.35; 2,884 sq.ft. 8 in. concrete gutter $0.54, etc.

Calif., Oroville—Butte Co. will surface 9 mi. Humboldt Rd., 7,158 yd. broken stone; Boucher and Cleveland Aves., 47,520 sq.ft. asphalt macadam, 793 tons broken stone. Work will be done by force account under supervision of H. H. Hume, co. road engr. Noted July 19.

Calif., Napa—Napa Co., grading 7.34 mi. Monticello Rd. to A. J. and J. L. Fairbanks, 625 Market St., San Francisco, $64,083. Noted Aug. 2.

Calif., Redwood City—Grading, concrete curbing, guttering and oil macadamizing 154,443 sq.ft. various streets in Redwood Highlands Tract, to McHugh & Doyle, 3533 16th St., San Francisco, $35,492; 305,400 sq.ft. various streets in Oak Knoll Manor, to A. Teichert & Son, Ochsner Bldg., Sacramento, $91,495. Noted Aug. 2.

Ont., Kitchener—For 10,000 sq.yd. asphalt on concrete, 2,000 sq.yd. concrete, 8,100 ft. concrete curb and gutter, to Standard Paving Co., Central Chambers, Ottawa. Engrs. est. $50,000.

Industrial Works

PROPOSED WORK

Mass., Wakefield—Bd. Light Comrs. having plans prepared by Lockwood, Greene & Co., engrs., 24 Federal St., Boston, substation.

R. I., Providence — Textile Finishing Mchy. Co., 171 Westminster St., having plans prepared by Lockwood, Greene & Co., engrs., 24 Federal St., Boston, cotton storehouse, blacksmith shop and extensions to shipping building.

Conn., Hartford—F. D'Esopo, 647 Main St., had plans prepared by H. B. Sumner, 45 Gold St., 1 story and basement, 50 x 70 ft. garage, brick, plain foundation, 161 State St. $40,000.

Pa., Phila.—Budd Mfg. Co., 25th and Hunting Park Aves., soon lets contract 6 story, 100 x 325 ft. factory, with 1 story, 75 x 325 ft. annex, rein.-con., Hunting Park Ave. West of Wissahickon Rd. $350,000. Ballinger Co., 12th and Chestnut Sts., archts. and engrs.

Pa., Pittsburgh—See "Miscellaneous."

N. C., Rocky Mount—Rocky Mount Mills Co. plans 3 story, 80 x 80 ft. extension to mill. $120,000.

La., Baton Rouge—City plans election to vote on $45,000 bonds for abattoir. J. W. Bellingsley, Interstate Bldg., New Orleans, consult. engr.

Tenn., Hohenwahl — Making surveys municipal hydro electric plant. A. J. Petway, mayor.

Ky., Louisville — Dosch Chemical Co., Bernheim Lane, plans rebuilding plant, recently destroyed by fire, 7th St. and Bernheim Lane. $200,000.

Ky., Owensboro — G. W. Robinson and J. W. Boyle, plan 1 story, 100 x 500 ft. warehouse, brick. $80,000.

Ky., Paducah—M. Ferguson Hardware Co., having plans prepared by H. Jameson, Paducah, 3 story, 115 x 150 ft., warehouse and hardware store. $150,000.

O., Cleveland—Jordan Ohio Co., 4400 Euclid Ave., had plans prepared by Hubbell & Benes, 4500 Euclid Ave., 1 story, 50 x 103 ft., brick, steel and concrete garage. $40,000.

O., Cleveland—Globe Brass & Mfg. Co., 5532 Perkins Ave., having preliminary plans prepared by A. C. Wolf and F. M. Griffith, Truman Bldg., 1 story machine shop and 1 story foundry, brick and steel, East 55th St. near Bower Ave. $60,000.

O., Cleveland—Van Gastel Cleaning Co., 2420 Cedar Ave., having plans prepared by W. H. Hatch, 1114 Guardian Bldg., 3 story and basement, 34 x 77 ft. dry cleaning plant, $40,000. H. Van Gastel, mgr. Noted Oct. 5.

Ind., Jeffersonville—Interstate Pub. Serv. Co., 510 Bd. of Trade, Indianapolis, plans steam power plant on bank of Ohio River, east of here, probably 30,000 kw. capacity. $2,000,000. H. Reid, pres.

Mich., Iron River—Peninsular Power Co., 102 North Carroll St., Madison, Wis., plans 44 x 60 ft. rein.-con., brick and steel power plant, plain foundation. $250,000. Engineer and architect not selected.

Ill., Decatur—Illinois Light & Power Co., 1547 Illinois Merchants Bank Bldg., Chicago, plans power plant on Lake Decatur, here. $5,000,000. A. Lucas, ch. engr.

Wis., Cambridge — A. Krovich having plans prepared by E. A. Tough, Conklin Bldg., Madison, 1 story, 50 x 83 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Milwaukee—Milwaukee Coke & Gas Co., 187 Greenfield Ave., plans to rebuild 3 story, brick and steel plant, recently destroyed by fire. $100,000. Engineer and architect not selected.

Wis., Milwaukee—Milwaukee Steel Fdry. Co., 127 South Water St., having plans prepared by A. Seidenschwartz, 290 3rd St., 1 story, 50 x 77 ft. addition, steel frame, plain foundation, South Water St. $45,000.

Wis., Milwaukee — Milwaukee Electric Railway & Light Co., 2nd and Sycamore Sts., making plans 50 x 70 ft. addition to boiler house, Edison Ave. $65,000. J. Anderson, ch. engr.

Wis., Shawano—Schweers Hardware Co. had plans prepared by H. Wildhagen, College Ave., Appleton, 2 story, brick and concrete garage, plain foundation. $40,000.

Mo., Mt. Vernon—Carnation Milk Product Co., Ocononowoc, Wis., plans 2 and 3 story, brick condensery plant, Main St., here. $200,000. Private plans.

Ark., Brinkley—W. F. Brown having preliminary plans prepared by E. W. Mann, Madison Ave. Bldg., Memphis, Tenn., 1 story, 60 x 80 ft., brick and stone garage. $45,000.

Tex., Corsicana—Navarro Ice Co. making plans ice plant, concrete and brick, South 12th St. along tracks Cotton Belt R.R. $100,000. Private plans.

Tex., Mercedes—Aug. 4, to vote on $150,000 bonds constructing municipal electric light, power, and water plant. J. E. Haynes, mayor.

Calif., San Francisco—See "Buildings."

Calif., Santa Monica — C. C. Haworth having plans prepared by A. G. Bailey, Junior Orpheum Bldg., Los Angeles, 1 story and mezzanine, 100 x 150 ft., brick garage. $40,000.

Calif., San Francisco — Great Western Smelting & Refining Co., Folsom and Spear Sts., having plans prepared by Morrow & Garren, Chronicle Bldg., 1 story foundry, concrete and steel, Spear and Folsom Sts. $80,000.

Que., Dainville — Manville Asbestos Co., Asbestos, plans plant here. $100,000.

Ontario—Continental Wood Products Co. Ltd., 166 McGill St., Montreal, Que., have been awarded rights by Provincial Government, for cutting pulp on 1,049 sq.mi. in districts of Algoma and Sudbury on condition that they build paper mill, 100 ton daily capacity. $150,000.

Ont., Bolton—J. Walshaw & Son, Ltd., plan to rebuild 2 story and basement, rein.-con. and brick plant recently destroyed by fire. $200,000. Engineer and architect not selected.

Ont., Brampton — Gummed Paper Co. plans to build addition to factory. $40,000. W. Hood, mgr.

Ont., Ft. William—Mountain Stone Co., Port Arthur, plans to build plant at Mount McKay. $100,000. H. F. Hewitson, mgr.

Ont., Oshawa — General Motors Corp., plans 2 or 3 story, rein.-con., brick and steel factory, Division St. $200,000. Engineer and architect not selected.

Ont., Toronto — Crouse Hinds Co., 7 Labatt Ave., having plans prepared by Sproatt & Rolph, 1162 Bay St., for either addition or construction new 1 or 2 story and basement, rein.-con., brick and steel warehouse, plain foundation, Labatt Ave. $150,000.

Ont., Toronto—Loblaws Grocerterias Ltd., 130 King St. E., plans 3 story and basement, rein.-con. and brick warehouse, plain foundation, St. Helens Ave. $150,000. Engineer and architect not selected.

BIDS DESIRED

Conn., Hartford—Aug. 13, by Capitol Furniture Co., 148 Temple St., 3 story, 40 x 80 ft. storehouse, rein.-con., plain foundation, Temple St. $50,000. D. A. Guerriero, 1029 Main St., archt. Noted May 10.

Conn., Hartford—Aug. 14, by A. Bergman, 261 Pleasant St., 3 story, 45 x 50 ft. storage building, brick and steel, plain foundation, Market and Pleasant Sts. $40,000. J. E. Marchetti, 721 Main St., archt. Noted June 7.

Conn., New Haven—Connecticut Co., 22 Church St., receiving bids 1 story, 68 x 210 ft. garage and machine repair shop, rein.-con., steel and brick, plain foundation, Grand Ave. $60,000. Harte & Stamur, c/o owner, engrs. and archts.

Pa., Dormont—Bartey Bros., West Liberty Ave., taking bids 2 story, 50 x 67 ft. rein.-con. and steel garage, McFarlane Rd. $40,000. Private plans.

Pa., Phila.—Aug. 22, by P. S. Tyre, archt., 1509 Arch St., 2 story and basement, 70 x 209 ft. rein.-con. sales and service building, Chelten Ave., for Koelle-Greenwood Motor Co., 6025 Germantown Ave. $100,000.

O., Toledo—Aug. 16, by Progress Laundry Co., 420 East Market St., Indianapolis, Ind., 3 story, 63 x 146 ft., rein.-con. laundry, here. $60,000. R. N. Edwards, 45 Union Trust Bldg., Indianapolis, Ind., archt. and engr.

Ill., Chicago—D. H. Patterson c/o Holton, Seeley & Co., 140 South Dearborn St., receiving bids 1 story, 125 x 135 ft., garage, fireproof, 1314-28 East 53rd St. $40,000. L. E. Russell, 25 North Dearborn St., archt.

Wis., Manitowoc—W. J. Raeuber, archt., South 8th St., taking bids 2 story, 50 x 100 ft., brick and steel foundry, plain foundation, 21st St., for Grimm Aluminum Casting Co., South 21st St. $40,000.

Wis., Racine—F. Applegate, 1043 Washington St., taking bids 1 story, 60 x 105 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $55,000. Noted June 28.

Wis., Racine — H. Koelbel, 2116-16 St., taking bids 1 story and basement, 40 x 110 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, 15th and Racine Sts. W. J. Redden, 2819 Arlington Ave., archt.

Mo., St. Louis—Toomey & Volmer Co., 3721 Cass Ave., taking informal bids 4 story and basement, 50 x 127 ft. factory, plain foundation. $75,000. Private plans.

Mo., St. Louis—Trade Realty Co., 111 North 7th St., will build 2 story, 100 x 124 ft., rein.-con. and brick garage and show room, Washington St. $55,000. Work will be done by separate contracts under supervision of N. B. Howard, archt., Arcade Bldg. Noted May 24.

Industrial Works (Continued)

Calif., San Francisco—Bekins Fireproof Storage Co., 13th and Mission Sts., receiving bids 7 story, rein.-con. warehouse. Geary and Emerson Sts. $100,000. Noted May 24.

Calif., San Francisco—Terminal Warehouse Co., 631 2nd St., receiving bids 6 story and basement, rein.-con. warehouse, Brannan St. near 2nd St. To exceed $75,000.

BIDS RECEIVED

Pa., Phila. — F. V. Nickels, archt., 15 South 21st St., July 30, 4 story, 70 x 150 ft. rein.-con. garage and service station, North Broad St., from F. Warren, 132 South 17th St. $144,527. Owners name withheld.

CONTRACTS AWARDED

Mass., South Boston (Boston P. O.)—U. T. Hungerford Brass & Copper Co., 295 Franklin St., Boston, 2 story, 80 x 240 ft. warehouse, rein.-con. and brick, O St., here, to Natl. Eng. Co., 60 Federal St., Boston. Archts. est. $125,000.

R. I., Providence—Hamilton & Hamilton, Jr., 66 Eddy St., 1 story, 53 x 200 ft. factory, brick and timber, plain foundation, Allens Ave., to C. I. Bigney Constr. Co., 184 Washington St. Archts. est. $40,000.

Conn., Manchester—Orford Soap Co., 1 story, 140 x 160 ft. storehouse, brick, plain foundation, Hilliard St., to Manchester Constr. Co., 953 Main St., South Manchester. Archts. est. $50,000. Noted July 26.

Conn., Waterbury—Lockwood, Greene & Co., engrs., 24 Federal St., Boston, 5 story, rein.-con. building, here, to J. W. Ferguson Co., 152 Market St., Paterson, N. J., for Oakville Co., Oakville St.

Conn., Waterbury—French Mfg. Co., 128 Robbins St., 1 story, 72 x 120 ft. factory, brick and steel, plain foundation, to Torrington Bldg. Co., 182 Church St., Torrington. Archts. est. $40,000.

Conn., Waterbury—Scovill Mfg. Co., 99 Mill St., remodeling factory, East Main St., to Berlin Constr. Co., Berlin. Archts. est. $50,000.

Conn., Willimantic—Rossie Velvet Co., Mystic, 2 story and basement, 50 x 100 ft. factory addition, brick and timber, plain foundation, at plant here, to O. Willard, 70 Valley St. Archts. est. $40,000.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., general contract additions and alterations at asphalt plant, 90th St. and East River, to W. W. Constr. Co., 51 East 42nd St., $49,600. Noted July 19.

N. Y., New York—G. W. Whalen, comr. Plant & Structures, Municipal Bldg., housing station, Cromwell Ave. south of West 170th St., for Street Cleaning Dept., to M. Miller Co., 709 6th Ave., $84,800. Noted July 26.

N. Y., New York—Garrison Ave. Constr. Co., c/o D. S. Lang, archt. and engr., 110 West 40th St., will build 1 story brick, steel and stone garage, plain foundation, Garrison and Bryant Aves., by day labor. $50,000.

Pa., Dubois—Miles & Co., 1 story, 50 x 80 ft. brick and steel addition to garage, to B. C. Skinner, Dubois. Archts. est. $40,000.

Pa., Pittsburgh—C. J. Allen, c/o City Deposit Bank, 2 story and basement, 66 x 200 ft. concrete and brick garage, Denny and Mifflin Sts., to Feltyberger Reed Constr. Co., Peoples Bank Bldg. Archts. est. $90,000.

Tenn., Nashville—U. S. Tobacco Co., 10th and Harrison Sts., 2 story, brick and concrete warehouse, to G. B. Howard & Co., 4th Ave. N., $40,000.

Ky., Owensboro—Owensboro Clay Products Co., brick and concrete block factory, to J. M. Cutshall & Sons, Brazil, Ind. Est. cost $50,000-$75,000.

Ky., Smiths Grove—Dark Tobacco Growers' Cooperative Assn., Bowling Green, 1 story, brick warehouse, near Bowling Green, to Raymond Contg. Co., Bowling Green, $40,000.

O., Cleveland Heights (Warrensville, P. O.)—M. J. Bender, 5510 Woodland Ave., Cleveland, 1 story and basement, 55 x 75 ft., brick and timber garage, Mayfield and Noble Rds., here, to Russell-Wales Co., 1419 St. Clair Ave., Cleveland. Archts. est. $40,000.

O., Euclid—K. F. Spieth, 3439 East Scarborough Rd., Cleveland Heights, 1 story, 40 x 100 ft., brick and timber garage and commercial building, here, to Russell-Wales Co., 1419 St. Clair Ave., Cleveland. Archts. est. $40,000. Noted July 12.

Ill., Chicago—Slaters Fireproof Storage Co., 907 Rush St., 5 story, 100 x 123 ft., fireproof warehouse, 2416-22 South La Salle St., to Anderson & Nelson, 2432 Irving Park Blvd. Archts. est. $150,000.

Ill., Chicago—Stewart-Warner Speedometer Corp., Lincoln and George Sts., 6 story, 141 x 217 ft. factory addition, fireproof, to J. Jensen c/o owner. $750,000.

Wis., Appleton — Fox River Paper Co., Water St., 1 story, 30 x 260 ft., brick and steel addition, plain foundation, South Island St., to C. R. Meyer & Sons, 50 State St., Oshkosh. Archts. est. $42,000.

Wis., Green Bay—Green Bay Newspaper Co., 315 Cherry St., 2 story and basement, 60 x 114 ft., brick and concrete plant, plain foundation, to Wisconsin Eng. & Constr. Co., 315½ Jefferson St., Wausau. Archts. est. $100,000.

Wis., Green Bay—Green Bay Sugar Co., 123 North Washington St., 2 story, 60 x 90 ft., drying plant, brick, rein.-con. and steel, plain foundation, to H. J. Selmer Co., McCartney Bldg. Archts. est. $50,000.

Wis., Madison—French Battery & Carbon Co., c/o A. O. Olman, 1133 Rutledge St., 2 story, 60 x 150 ft., rein.-con., brick and steel factory, plain foundation, to G. Nelson, 1117 West Johnson St.

Wis., Madison—University of Wisconsin will build 1 story, 50 x 80 ft. heating plant, brick, steel and rein.-con., plain foundation, by day labor. $88,000. Noted June 21.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 205 Lake St., 2 story, 67 x 84 ft., brick, steel and concrete power house, plain and wood pile foundation, to Dahlman Constr. Co., 456 Bway. $70,000. Noted July 26.

Wis., New London—New London Motor Co. 1 story and basement, 60 x 120 ft., brick and concrete garage, plain foundation, to F. Schoenrock & Sons, New London. Archts. est. $40,000.

Wis., New London — M. Smith, 2 story, 38 x 120 ft., brick and concrete garage, plain foundation, to F. Schoenrock & Sons, New London. Archts. est. $40,000.

Minn., Austin—Austin Auto Co., 1 story and basement, 85 x 140 ft. garage, brick and concrete, Lansing Ave., general contract to Wagner Constr. Co., Austin. Total $45,000.

Mo., St. Louis—Toomey & Volland Scenic Co., 3737 Cass Ave., 4 story, 50 x 100 ft., rein.-con., brick and steel plant, to McKelvey Constr. Co., 911 Title Guaranty Bldg. Archts. est. $50,000.

Tex., Dallas—Brown Cracker & Candy Co., 603 Caruth St., 7 story, brick and concrete factory, Jefferson and Caruth Sts., to Hughes-O'Rourke Constr. Co., Praetorian Bldg., $275,000. Engrs. est. $300,000. Noted July 26.

Tex., Dallas—D. David, 2924 Park Row, 2 story and basement, 75 x 100 ft., brick, warehouse, Laws River and Griffin Sts., to Hickey & Montgomery, Magnolia Bldg., $40,000.

Que., Montreal—Montreal Light, Heat & Power Co., Craig St. W., 2 story, 65 x 67 ft. rein.-con. and steel sub-station, Beaumont St., to W. Irving, 26 Stanley St., $43,000.

Ont., Saulte Ste. Marie—Golden Grain Bakery Co., 52 Wellington St. W., 2 story and basement, 40 x 60 ft. rein.-con. and brick bakery, plain foundation, to McLarty Bros., Wellington St. W. Archts. est. $50,000.

Ont., Toronto—J. G. Pendrith, 970 Queen St. W., 2 story, 56 x 142 ft. concrete, brick and steel machine shop, plain foundation, King St. W., to L. E. Dowling, 167 Yonge St. Engrs. est. $50,000.

Buildings

PROPOSED WORK

Mass., Boston — School — Schoolhouse Dept., City Hall, having preliminary plans prepared by J. J. Driscoll, 6 Beacon St., rein.-con. and brick, wood pile foundation, Warrenton St. $500,000.

R. I., Exeter—Administration, etc.—State School Bd., Providence, having plans prepared by T. S. McLaughlin, archt., 72 Weybosset St., Providence, 3 story, 70 x 200 ft., brick and fireproof addition for administration and service purposes, at State School, here. $200,000.

R. I., Pawtucket—High Schools—School Dept., had plans prepared by R. C. N. Monahan, 255 Main St., 3 story, brick and steel, plain foundation, Mineral Spring Ave., $350,000; having plans made 3 story, brick and fireproof, Exchange St., $250,000.

R. I., Providence—Home—T. S. McLaughlin, archt., 72 Weybosset St., takes bids about Sept. 1, 2 story, brick and concrete, Fruit Hill, for Franciscan Mission of Mary c/o architect. $150,000.

R. I., Woonsocket — Theatre — Whiting Realty Co., c/o Bijou Theatre, plans 3 story fireproof, Main and Federal Sts. $150,000. S. P. Whiting, pres. Engineer and architect not announced.

Conn., Manchester—Armory—Connecticut Natl. Guard having plans prepared by Payne, Griswold & Keefe, Manwaring Bldg., New London, 2 story, brick and steel, plain foundation. $175,000. Noted May 10.

N. Y., Albany—Office, etc.—E. V. Stratton Motors Co., 25 Washington Ave., plans 10 story, 60 x 140 ft., steel and brick, plain foundation. Engineer and architect not selected.

N. Y., Brooklyn—Hospital—Bikur-Cholim Hospital, Lafayette and Sumner Aves., soon takes bids brick, steel and stone, plain foundation. $1,000,000. A. Weiser, 9 West 48th St., New York, archt. and engr. Noted July 12.

N. Y., Coney Island (Brooklyn P. O.)—Hotel, etc.—Sea Gate Hotel & Bath Corp., c/o R. H. Segal, archt., 110 West 40th St., New York, soon takes bids 13 story, rein.-con. and steel, Surf Ave. and 24th St. $1,000,000.

N. Y., Long Beach—Apartment—Chanin Constr. Co., c/o S. Malkind, archt., 16 Court St., Brooklyn, having plans prepared 6 story, 100 x 120 ft. brick, steel and stone, plain foundation. $500,000.

N. Y., New York—Clubhouse—Grand St. Boys Assn. Inc., 1482 Bway., soon takes bids 5 story, brick, steel and stone, plain foundation, 106 West 55th St. Sommerfeld & Steckler, 31 Union Sq., engrs. and archts.

N. Y., New York—Hospital—Jewish Maternity Hospital, 270 East Bway., plans 75 x 125 ft., brick, steel and stone, plain foundation, 5th Ave. and 108th St. $750,000.

N. Y., New York—Office—Professional Offices, Inc., c/o Ewing & Allen, archts. and engrs., 101 Park Ave., soon takes bids 11 story, brick, steel and stone, plain foundation, 121 East 60th St. $900,000.

N. J., Camden—Business—Bell Telephone Co., 17th and Arch Sts., Phila., having plans prepared by J. T. Windrim, Commonwealth Bldg., Phila., 4 story and basement, 136 x 140 ft., steel and stone, 7th and Federal Sts., here. $600,000.

N. J., Clifton—High School—Bd. Educ. had plans prepared by Lee & Hewitt, 152 Market St., Paterson, 4 story, brick, marble and concrete, Main Ave. $500,000.

N. J., Englewood—Hospital—Englewood Hospital Assn. having plans prepared by Crow, Lewis & Wick,, archts. and engrs., 200 5th Ave., New York, brick, steel and stone, plain foundation. $1,000,000.

Pa., Cynwyd—Exchange—Bell Telephone Co., 17th and Arch Sts., having plans prepared by J. T. Windrim, Commonwealth Bldg., Phila., 2 story and basement, 84 x 85 ft. steel, brick and stone, Mill Rd. and Bentley Ave. $170,000.

Pa., Phila.—Apartment—H. L. Miller, 5427 Addison St. W., having plans prepared by R. A. Kerns, Fuller Bldg., and takes bids in October, 8 story, 45 x 230 ft., brick and steel, Overbrook and Lane Aves.

Pa., Phila. — Apartment — Wallace & Werner, arihts., 1012 Walnut St., prepared plans and will take bids during next 2 months, 6 story, 150 x 190 ft. rein.-con., brick and steel, City Line and Overbrook Ave. $500,000. Owner's name not announced.

Pa., Phila.—Exchange and Office—Bell Telephone Co., 17th and Arch Sts., having plans prepared by J. T. Windrim, Commonwealth Bldg., 2 story and basement, 73 x 214 ft. brick, steel and stone, 17th and Lombard Sts. $550,000.

Pa., Pittsburgh—Hotel and Welfare—Salvation Army, 324 Diamond St., having revised plans prepared by T. Pringle, Renshaw Bldg., and takes new bids about Oct. 1, 8 story and basement, 63 x 120 ft., 2nd Ave. and Cherry Way. $500,000.

Pa., Pittsburgh—Store and Office—A. W. Smith Co., Keenan Bldg., plans 4 story and basement, 110 x 171 ft., 6th and Smithfield Sts. $1,000,000. Engineer and architect not selected.

Md., Baltimore—Apartment—N. J. Myerberg, 210 North Calvert St., had plans prepared by J. E. Moxley, Jr., Equitable Bldg., 4 story and basement, 75 x 84 ft., brick, plain foundation, St. Paul and 25th Sts. $150,000.

Md., Baltimore—School—Johns Hopkins Hospital, Wolfe and Monument Sts., takes

Buildings (Continued)

new bids in September, 8 story, rein.-con. and brick. Monument and Wolfe Sts. $950,000. Archer & Allen, 1 East Lexington St., archts. Noted May 3.

N. C., Asheville—Store—H. Parker plans department store, South Pack Sq. $200,000.

N. C., Concord—Hotel and Temple—Stokes Lodge having plans prepared by W. H. Peeps, 222 Latta Arcade, Charlotte, 7 or 8 story, probably brick and concrete. $200,000.

N. C., Fayetteville—Hotel—Fayetteville Hotel Co. having plans prepared by W. G. Rogers, Trust Bldg., Charlotte, and takes bids in about 50 days 8 story, 90 x 115 ft., steel, brick, stone and concrete. $250,000.

N. C., Hickory—High School—City having plans prepared by C. G. Sayre, Anderson, S. C., for high school. $225,000. Noted July 12.

Fla., Key West—Opera House, etc.—J. M. Renedo having plans prepared by S. Centurion, Havana, Cuba, and Key West, opera house, office building, etc., rein.-con. and steel, Duval St. $250,000.

Fla., Ocala—Hotel—Marion Impvt. Co. having plans prepared by F. J. James, Citizens Bank Bldg., Tampa, 10 story, 93 x 100 ft., brick and steel, Magnolia St. $550,000.

Miss., Biloxi—Hotel—Buena Vista Hotel Co. having plans prepared by C. Mathis, archt., New Orleans, La., 4 story, 190 x 400 ft., on beach. $150,000. J. W. Apperson, Exchange Bldg., Memphis, Tenn., and M. J. Anderson, Porter Bldg., Memphis, dirs.

La., Baton Rouge—Terminals—City plans election to vote on $350,000 bonds for terminals. J. W. Bellingsley, Interstate Bldg., New Orleans, consult. engr.

La., New Orleans—Apartment Hotel—W. L. Stevens, archt., Louisiana Bldg., preparing plans 7 story, 107 ft. high, 56 x 118 ft., rein.-con. and brick, Louisiana Ave. and Prytania St. $150,000. Owner's name withheld.

Tenn., Nashville — Apartment — E. C. Scurggs, Belmont Blvd., soon lets contract 2 story, containing 24 apartments, brick and stone, 18th and Belcourt Sts. $150,000. G. Waller, Independent Life Bldg., archt.

Ky., Covington — Station — Louisville & Nashville R.R., 9th St. and Bway., Louisville, plans brick station, here. $150,000. W. H. Courtenay, ch. engr.

Ky., Lexington—Memorial—University of Kentucky plans memorial building. $190,000. J. I. Lyle, chn. building com. Engineer and architect not selected.

O., Cleveland—Apartments—M. F. Narosny, 2435 Overlook Rd., plans two 3 story and basement, brick and timber, 1912 and 1924 East 93rd St. $160,000 each. Private plans.

O., Cleveland—College—Sisters of Notre Dame, c/o Sister Superior, Superior Ave. and Ansel Rd., plans 3 and 4 story, brick, steel and concrete college buildings, Green Rd. $350,000. Engineer and architect not selected.

O., Cleveland—Commercial—J. Klein and B. Harris, Engineers Bldg., having preliminary plans prepared by W. S. Longee, Marshall Bldg., converting 4 story, 100 x 268 ft. theatre into commercial building, 5012 Euclid Ave.

O, Dayton—School—Bd. Educ. having plans prepared by Gebhart & Schaeffer, 507 Keith Bldg., 3 story, 200 x 200 ft., rein.-con., brick and stone, plain foundation, Hickory St. $570,000.

Ill., Chicago—Apartment—M. Sidon c/o E. Steinborn, archt., 111 North Dearborn St., plans 3 story and basement, 100 x 125 ft., fireproof, Rockwell St. near Logan Blvd. $150,000.

Ill., Chicago—Apartment—Hotel—A. A. Rosenberg c/o M. Leviton & Co., archts., 123 West Madison St., plans 8 story, 50 x 175 ft., fireproof, 1226-28 Pratt Blvd. $200,000.

Ill., Evanston—Store and Office—Evanston Shops Building Corp., c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., Chicago, plans 2 story, 116 x 120 ft., fireproof, Davis St. $175,000.

Wis., Madison — Academy — Dominican Sisters of Sacred Heart Academy, 2209 Monroe St., plans 4 story brick, rein.-con. and steel, plain foundation, Edgewood St. $150,000. Engineer and architect not selected.

Wis., Madison—Hospital—Bd. Health, c/o K. Corscatt, secy., 119 East Washington Ave., plans 2 story and basement, brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Madison—Hospital—Wisconsin Memorial Hospital Assn., Capitol, plans 4 story addition, rein.-con., brick and steel, plain foundation. $185,000. F. Lorenz, secy. Engineer and architect not selected.

Wis., Manitowoc — Hotel — New Hotel Corp., c/o T. W. Gray, 526 North 8th St., having preliminary plans prepared by M. Tullgren & Sons Co., 425 East Water St., Milwaukee, 5 story and basement, brick and concrete, plain foundation, 10th and Washington Sts. $500,000.

Wis., Rhinelander—High School—School Bd. had plans prepared by Smith, Reynolds & Brandt, Dempsey Bldg., Manitowoc, 2 story and basement, 131 x 216 ft. and 72 x 89 ft., brick, tile and concrete, plain foundation. $350,000.

Ia., Dakotah—Court House—Humboldt Co. election Oct. 2 to vote on $225,000 bonds for 3 or 4 story and basement, court house. J. C. McFarland, aud. Engineer and architect not selected.

Minn., Minneapolis—Apartment—C. W. Nelson & Bro., 3655 Harriet Ave., having plans prepared by Ekman, Holm & Co., 302 Phoenix Bldg., 3 story and basement, 58 x 106 ft., brick, tile and stone, Bryant Ave. S. near 40th St. $150,000.

Minn., Northfield—Lodge Home—I. O. O. F. of Minnesota, c/o H. W. Phillips, 432 Globe Bldg., St. Paul, having plans prepared by W. L. Alban, 347 Endicott Bldg., St. Paul, 3 story and basement, rein.-con., brick and tile, here. $150,000.

Minn., Proctor—School—Bd. Educ. having plans prepared by E. F. Broomhall, 710 Alworth Bldg., Duluth, 2 story and basement, 125 x 200 ft., brick and tile. $300,000.

Minn., St. Paul—School—Dept. Educ., City Hall, plans 3 story and basement, rein.-con., brick and tile, Summit Ave. near Grotto Ave. $400,000. F. X. Tewes, city archt.

Kan., Great Bend—High School—City plans election to vote on $225,000 bonds for high school. E. E. Morrison, pres.

Kan., Great Bend—Hotel—A. R. Moses plans rein.-con. and steel hotel. $150,000. Engineer and architect not selected.

Kan., Great Bend — Temple — Masonic Temple Assn. plans temple. $150,000. C. F. Heaton, secy. Architect and engineer not selected.

Mo., Chillicothe—High School—Bd. Educ. takes bids about Sept. 1, 2 story and basement, rein.-con. and brick, plain foundation, West Calhoun St. $300,000. R. W. Roberts, Chillicothe, archt. Noted May 3.

Tex., Waco — Court House — McLennan Co. plans election to vote on $400,000 bonds for 7 story and basement, 80 x 127 ft., brick, stone and concrete. H. F. Cason, Cameron Bldg., archt. and engr.

Okla., Tulsa—Church—First Presbyterian Church, 7th and Boston Sts., takes bids about Sept. 1, 4 story and basement, 80 x 140 ft., brick and stone. $300,000. Hawk & Parr, 101 Magnolia Bldg., Oklahoma City, archts.

Okla., Tulsa—Jail and Police Station—Having plans prepared by M. Schultz, city engr., and soon takes bids rein.-con. and brick. $150,000.

Calif., Hanford—Store and Lodge—Hanford Lodge, B. P. O. E., having plans prepared by Swartz & Ryland, archts., Rowell Bldg., Fresno, 4 story, fireproof. $150,000. Noted May 10.

Calif., Long Beach—Bank and Office—Bank of Italy, Eddy and Powell Sts., San Francisco, plans approximately 10 story, fireproof, American Ave. and 3rd St., here.

Calif., Los Angeles—Automobile Sales—A. Costello having plans prepared by W. D. Lee, archt., 400 Sun Bldg., 4 story, 72 x 200 ft., rein.-con. $150,000.

Calif., Los Angeles—Hospital—Methodist Hospital Assn., having plans prepared by A. W. Rea and C. E. Garstang, Trust and Savings Bldg., main building 5 story and basement, 37 x 163 ft., rein.-con., and nurses building 4 story and basement, 80 x 136 ft., brick, Grand Ave. $500,000.

Calif., Los Angeles—Hotel—Wheeler & Weingand having plans prepared by L. L. Jones, 602 Grosse Bldg., 5 story, 98 x 103 ft., brick, Santa Monica Blvd. $250,000.

Calif., Los Angeles—Mercantile—Wurlitzer Co., 117 East 4th St., Cincinnati, O., plans 13 story and basement, 51 x 150 ft., 816 South Bway., here. $1,000,000. Property and construction details being handled by A. C. Blumenthal Co., Loew State Bldg., Los Angeles.

Calif., Sacramenton—Store—Hale Bros., 9th and K Sts., plans 3 story, rein.-con. addition. $150,000.

Calif., San Francisco—Orphanage—San Francisco Protestant Orphan Asylum, c/o Bliss & Faville, archts., Balboa Bldg., having plans prepared 3 story administration building, six 2 story concrete and stucco cottages, and 1 story rein.-con. laundry and power house, on 10 acre site bounded by 28th and 30th Aves., Vicente and Wawona Sts. $350,000.

Calif., Santa Ana — Store and Office — Huntenlocker Co., c/o M. E. Durfee, archt., Cassou Bldg., Anaheim, having plans prepared 10 story, rein.-con., here. To exceed $250,000.

Que., Cartierville—Hospital—Community of Sisters of Providence, Decarie Blvd., plan hospital for incurables here. $500,000. Viau & Venne, 76 St. Gabriel St., Montreal, archts.

Que., Montreal—Office—Natl. City Co., St. James St., plans 10 story, rein.-con., brick, steel and stone, on St. James St. $600,000.

Que., Montreal—Temple—Masonic Temple Assn., Ltd., c/o J. J. York, chn., 2275 Notre Dame St. E., having plans prepared and takes bids in September, 10 story, 100 x 130 ft. rein.-con., steel and stone. $600,000. Engineer and architect not announced.

Que., Notre Dame De Grace—Church—Trinity Memorial Church, Claremont Ave., Montreal, plans 2 story, 83 x 169 ft., Sherbrooke and Northcliffe Aves., here. $225,000. Ross & McDonald, Belmont St., Montreal, archts.

Ont., Toronto — Convent — Sisters of Loretto, 403 Wellington St. W., plan 3 story, rein.-con., brick and steel, plain foundation, Yonge St. $500,000. Engineer and architect not selected.

Ont., Windsor—School—Separate School Bd., 616 Pierre Ave., having plans prepared by J. P. Jacques, 3 Ouellette Ave., 2 story and basement, 8 room, rein.-con. brick and steel, plain foundation. $150,000.

B. C., Point Grey—Library—University of British Columbia, 10th and Willow Sts., Vancouver, having plans prepared by Sharp & Thompson, archts., London Bldg., Vancouver, 3 story, 100 x 120 ft., rein.-con., brick and granite, here. $350,000. P. P. Brown, London Bldg., Vancouver, engr.

BIDS DESIRED

R. I., Providence—Store and Apartment—W. R. Walker & Son, archts., 49 Weybosset St., receiving bids and open same about Aug. 15, 3 story, brick and fireproof, Dean and Washington Sts., for J. Bartley, 67 Washington St. $150,000.

N. Y., Jamaica—Bank—Lawyers Title & Trust Co., Fulton St., will build brick, steel and stone addition, plain foundation, 367 Fulton St. Work will be done by separate contracts under supervision of A. J. Thomas, archt. and engr., 15 East 47th St., New York.

N. Y., New York—Apartment—Starrett Bros., Inc., 101 Park Ave., will build 14 story, brick, steel and stone, plain foundation, Park Ave. and 65th St., by separate contracts. J. E. R. Carpenter, 598 Madison Ave., archt. and engr. Noted June 28.

N. Y., New York—Schools—Aug. 28, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn; P. S. 196, Bushwick Ave. between Scholes and Meserole Sts.; P. S. 75, Faile St. north of Whitlock Ave.; P. S. 78, Fish Ave. between Needham Ave. and Hicks Sts.; P. S. 98, West 212th St. 100 ft. westerly from 10th Ave., here. Noted June 7.

N. Y., Thiells—Hall and Industrial—Sept. 5, by M. B. Patterson, pres. Bd. Mgrs. Letchworth Village, 7 Wall St., New York City, assembly hall and industrial building at Letchworth Village, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Aug. 9.

Pa., Pittsburgh—Store and Apartment—Watkins Realty Co., Vandergrift Bldg., will build 7 story and basement, 60 x 390 ft., Murray and Morrowfield Sts. $400,000. Work will be done by separate contracts. J. E. Dwyer, Forbes Murray Bldg., archt.

Pa., Ridgway—School—Aug. 25, by Bd. J. M. Schramm, secy., 2 story, 88 x 250 ft., brick, tile and stone. M. E. Kressley & Co., 134th St., Harrisburg, archts. Noted June 7.

Md., Salisbury—Hotel—Aug. 28, by B. K. Gibson Co., archts., 624 South Dearborn St., Chicago, 4 or 5 story and basement, 64 x 106 ft., steel and concrete, here, for Wicomico Hotel Co., Salisbury. $250,000.

W. Va., Institute—School—Sept. 28 by State Bd. Control, Charleston, 46 x 90 ft., brick, tile and terra cotta, at West Virginia School for Colored Deaf and Blind, here. J. S. Lakin, pres. Wysong & Jones, Odd Fellows Bldg., Charleston, archts.

Buildings (Continued)

W. Va., Montgomery—Physical Education—Sept. 28 by State Bd. Control, Charleston, 90 x 110 ft., brick, concrete, steel and terra cotta, at New River State School, here. J. S. Lakin, pres. Wysong & Jones, Odd Fellows Bldg., Charleston, archts.

S. C., Marion—School—Aug. 15, by School Bd., high school. $150,000. W. J. Wilkins & Co., Florence, archts.

La., New Orleans—Office—Aug. 16, by E. Weil, Whitney Central Bldg., 3 story, 185 x 192 ft. rein.-con., brick and steel addition to Maison Blanche Bldg., Iberville and Burgundy Sts. for Maison Blanche Co., Maison Blanche Bldg., $150,000.

O., Cleveland — School — St. Ladislaus Church, 2813 East 92nd St., taking bids 2 story and basement, 118 x 159 ft., brick, steel and concrete, East 92nd St. and Holton Ave. $150,000. W. C. Jansen, Electric Bldg., archt. Noted May 17.

O., Dayton—Alumni Hall—Aug. 21, by H. Germann, archt., Schwind Bldg., 3 story, brick, stone and steel, plain foundation, on campus, for University of Dayton. $300,000.

O., Lima—Schools—Aug. 14, by Bd. Educ. 2 schools, 2 story, 84 x 121 ft., brick, steel and concrete. $200,000. T. D. McLaughlin, Savings Bldg., archt.

Ill., Chicago—Apartment—Owner c/o M. H. Callner, 177 North State St., receiving bids 3 story, 134 x 200 ft., fireproof, Buena St. near Clarendon St. $200,000. R. Gregori, 155 North Clark St., archt.

Wis., Milwaukee—Business and Apartment—Aug. 16, by M. Tullgren & Sons, archts., 425 East Water St., 3 story and basement, 60 x 150 ft., brick and concrete, plain foundation, Wells St., for Statzer Granite Co., 723 Grand Ave. $150,000.

Wis., Milwaukee—Lodge—Aug. 15, by R. Messmer & Bros., 221 Grand Ave., 3 story and basement, 90 x 106 ft., brick, tile and concrete, plain foundation, North Ave., for Columbia Lodge, K. of P., c/o F. Alburtus, 2640 Fond du Lac Ave. $150,000.

Wis., Wauwatosa—Home—Aug. 15, by R. Messmer & Bros., archts., 221 Grand Ave., Milwaukee, 3 story and basement, 80 x 167 ft., brick and concrete, plain foundation, West Main St., for Evangelical Kinderfreund Society, West Milwaukee Ave. $150,000. Noted July 12.

Ia., Boone — High School — Aug. 13 (change of date) by R. T. Duckworth, secy. School Bd., 3 story and basement, 85 x 132 ft., rein.-con., brick and stone addition. $150,000. Dougher, Rich & Woodburn, 320 Valley Natl. Bank Bldg., Des Moines, archts. Noted July 12.

Ia., Glenwood—Childrens—Aug. 11, by State Bd. Control, Des Moines, 4 story and basement, 100 x 120 ft. concrete, brick and stone, State Institution Grounds, here. $150,000. J. H. Strief, chn. H. F. Liebbe, state archt.

Tex., Groesbeck—Courthouse—Aug. 18, by Limestone Co., 3 story and basement, 104 x 168 ft., brick, stone and concrete, plain foundation. $400,000. Joor Eng. Co., Slaughter Bldg., Dallas and Midwest Eng. Co., Amarillo, engrs. Noted May 10.

Tex., Houston — Y.W.C.A. c/o Briscoe & Dixon, archts. and engrs., Carter Bldg., taking bids brick, stone and concrete building, Dallas and Crawford Sts. $200,000.

Calif., Glendale—Hotel and Apartment—A. G. Lindley and C. Selkirk, archts., Amer. Bank Bldg., Los Angeles, receiving bids 5 story and basement, rein.-con. and tile, East Bway. and Glendale Ave., here, for Ambrosini Hotel Co., c/o architects, $350,000. Noted Apr. 26.

Calif., Los Angeles—Store and Office—Walker & Eisen, archts., Pacific Finance Bldg., receiving bids 13 story and basement, 55 x 168 ft., rein.-con., for Eighth & Olive Holding Co. $700,000.

Calif., Los Angeles—Store and Office—Walker & Eisen, archts., Pacific Finance Bldg., taking bids 12 story and basement, 120 x 137 ft., rein.-con., Hollywood Blvd. and Vine St., for Taft Realty Co., 5751 Hollywood Blvd. $850,000. Noted May 24.

BIDS RECEIVED

N. Y., New York—Bath House—J. Miller, pres. Manhattan Boro, Municipal Bldg., Aug. 1, general contract incl. electrical work for both house at 35 West 134th St., from T. A. Reilly Co., 48 East 41st St., $318,000; plumbing and water supply systems and gas fittings, from S. L. Snyder Co., 260 West 41st St., $29,585; heating and ventilating system, from Austin Eng. Co., 124 West 42nd St., $28,972.

Ill., Edwardsville — High School.— Bd. Educ., 2 story and basement, rein.-con. and brick, Hadley Farm, general contract from J. L. Schwager, Edwardsville, $133,845; heating from Elliott & Barry, 1426 Ohio St., St. Louis, Mo., $26,218.

Ia., Burlington—Municipal—City, general contract 3 story and basement, rein.-con., brick, tile and stone, from R. C. Elvin & Co., 852 Plymouth Bldg., Minneapolis, Minn., $115,940. Noted Nov. 2.

Tex., Austin — Biology — University of Texas, general contract 3 story and basement, 65 x 192 ft., from Wattinger Bros., Littlefield Bldg., $318,640. Engrs. est. $300,000.

CONTRACT AWARDED

N. Y., Elmhurst—Clubhouse—Lodge 878 B.P.O.E., 226 Mott Ave., Long Island City, 4 story, 75 x 116 ft., brick and stone, Queens Blvd. and Simonson Pl., here, to G. H. McEntee & Co., 103 Park Ave., New York. Archts. est. $800,000.

N. Y., New York—Apartment—Rothaus Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 110 ft., Morris Ave., by day labor. $200,000.

N. Y., Troy — Laboratory — Rensselaer Polytechnic Institute, 4 story and basement, 55 x 75 ft. addition to Russell Sage Electrical laboratory, rein.-con. and brick, plain foundation, 8th St., to Foundation Co., 120 New York City, $195,125. Archts. est. $198,000.

N. Y., Troy—Police. etc.—Bd. Contr. & Supply, 3 story and basement, 64 x 125 ft., brick and steel, headquarters for Police, Fire and Water Depts., plain foundation, State St., to C. F. Crowley, Troy, $220,300. Noted July 19.

Pa., Baden — Chapel — Mt. Gallitzin Academy, 2 story and basement, 54 x 135 ft., Beaver Rd., general contract to Duquesne Constr. Co., Cypress and Aspin Sts., Pittsburgh. Archts. est. $150,000.

Pa., Johnstown—Store—Capital Amusement Co., 3 story and basement, 80 x 132 ft., Vine and Franklin Sts., to W. H. Smith & Sons, Johnstown. Archts. est. $150,000.

Pa., Phila.—Apartment—Walnut Constr. Co., 48th and Walnut Sts., will build 4 story, 140 x 195 ft. rein.-con., brick and steel, 48th and Walnut Sts., by day labor. $350,000. Stetler & Deysher, 1521 North 52nd St., archts.

Pa., Wilkinsburg—Church—Mifflin Ave. Methodist Episcopal Congregation, 1 story and basement, 67 x 100 ft. stone and brick addition, Mifflin Ave., to Hodder Constr. Co., 817 Talbot St., Braddock. Archts. est. $150,000.

N. C., Charlotte—Store—J. B. Ivey & Co., 13 North Tryon St., 5 story and basement, 86 x 237 ft., brick, concrete and steel, to McDevitt-Fleming Co., McC and Lindsey Sts., Chattanooga, Tenn., $300,000. Steel contract awarded some time ago. Noted May 31.

O., Cleveland — Apartment — M. Morris, 1829 Grasmere Ave., 3 story and basement, 39 x 145 ft., brick, 2043 East 77th St., to Wimkur Bros., 9305 Pierpont Ave. Archts. est. $150,000. Noted June 21.

O., Cleveland — Store — McCrory Stores Corp., 1107 Bway., New York City, 4 story, 60 x 110 ft., brick, steel and concrete, 2041 East 4th St., to S. W. Emerson Co., Union Bldg. Archts. est. $160,000. Noted June 7.

O., Columbus — Journalism, etc. — Bd. Trustees Ohio State University, constructing journalism building, 2 story and basement, 80 x 117 ft., also 1 story, 105 x 220 ft. addition to chemistry building, both brick and concrete, on campus, to D. W. McGrath, 255 Broad St., $67,500 and $141,000 respectively. Noted Aug. 2.

O., Logan—Court House—D. M. Heft, aud. Hocking Co., 3 story and basement, 70 x 117 ft., rein.-con., brick, and cut stone, to E. H. Latham, 60 East Broad St., Columbus, $176,900. Noted Aug. 2.

Ill., Chicago—Church—St. Columbanas Catholic Parish, c/o J. Burns, archt., 64 West Randolph St., 1 story, 80 x 189 ft., fireproof, 71st and Calumet Sts., to Joslyn Bros., 7118 Eberhart Ave. Archts. est. $350,000. Noted July 26.

Ill., Chicago—Theatre, Store and Office—D. S. Klafter, archt., 64 West Randolph St., 2 story, 125 x 126 ft., fireproof, 3940-46 Fullerton Ave., to Thogerson & Erickson, 4804 North Kedzie Ave. Archts. est. $750,000. Owners name withheld. Noted June 28.

Ill., Monmouth—Gymnasium—Monmouth College, 2 story, rein.-con. and brick, to D. P. Lorenz Co., Moline. Archts. est. $228,000.

Wis., Clinton—High School—Bd. Educ., 2 story, 60 x 180 ft., brick, rein.-con. and steel, plain foundation, to O. Zahn, Sullivan. Archts. est. $150,000.

Wis., Rice Lake — Church — Bethany Lutheran Congregation, 68 x 100 ft., brick and tile, plain foundation, to C. W. Peterson, Milltown. Archts. est. $150,000. Noted Aug. 2.

Wis., West Allis—Theatre—Greenfield Ave. Bldg. Corp., c/o H. Welbourne, pres., 662 72nd Ave., 2 story and basement, 70 x 120 ft., brick and concrete, plain foundation, to Pfeifer Constr. Co., 586 66th Ave. Archts. est. $150,000. Noted June 7.

Ia., Davenport—Bank and Office—Union-Davenport Trust and Savings Bank, 7 story, brick, steel and stone, 3rd and Brady Sts., to Hoggson Bros., 485 5th Ave., New York City. Archts. est. $850,000.

Ia., Des Moines—Clinic—Medical Clinic, 505 Commonwealth Bldg., general contract 4 story and basement, 40 x 125 ft., rein.-con., brick and stone, 10th and Grand Sts., to Sugarman Constr. Co., 8th and Tuttle Sts., $160,180. Noted July 19.

Minn., Minnetonka Beach—Club—Lafayette Club, c/o C. M. Harrington, pres., 712 Chamber of Commerce, Minneapolis, 2 and 3 story and basement, 90 x 247 ft., brick and stucco, general contract to Madsen Constr. Co., 848 Builders Exch. Bldg. Minneapolis. Cost complete $300,000. Noted May 31.

Wyo., Casper—Office—F. L. Cottman, 1st and Beech Sts., general contract for 2 story and basement, (ultimately 6 story), 75 x 100 ft., rein.-con., West 2nd St., to Larsen & Jourgensen, West Midwest Ave., $91,682.

Mont., Missoula—Hospital—St. Patricks Hospital, Pine and Owens Sts., 4 story and basement, rein.-con., brick, tile and terra cotta addition, to Huetter Constr. Co., North 1101 Division St., Spokane, Wash. Archts. est. $150,000.

Tex., Texarkana—Office and Bank—Texarkana Natl. Bank, general contract 5 story and basement, to Murch Bros. Constr. Co., St. Louis, $250,000.

Calif., Los Angeles—Hotel—A. E. Mortimer and G. Witte, Chapman Bldg., 5 story and basement, rein.-con., 2nd and Figueroa Sts., to Los Angeles Building & Contg. Co., Marsh-Strong Bldg., Los Angeles, $267,000. Noted May 10

Calif., Los Angeles — Office and Loft — Southern California Gas Co., 950 South Bway., 4 story and basement, rein.-con., 7th St. and Santa Fe Ave., to Foundation Co., Higgins Bldg., $275,000.

Que., Montreal—School—Catholic School Comrs., 3 story, 60 x 185 ft. rein.-con., brick, steel and stone, St. Joseph Blvd., to J. C. Frehette, 324 Breboeuf St., $150,000.

Que., Outremont — School — Bd. Protestant School Comrs., 4 story, 77 x 210 ft. rein.-con., brick, steel and stone, Lajoie St., to A. and D. Boileau, 245 McDonald Ave., $250,000.

Federal Government Work

PROPOSED WORK

Miss., Gulfport—Breakwater—U. S. Engineer plans 1,400 ft. breakwater at ship basin, here. E. North, U. S. E. C., Mobile, Ala., engr. in charge.

Md., Annapolis—Water Supply Improvements—Spec. 4890—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans improvements to water supply, here.

D. C., Anacostia—Hangar—Spec. 4868—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids landplane hangar, here.

Wash., North Head—Quarters, etc.—Spec. 4895—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans barracks quarters and engine house, here.

Wash., Puget Sound — Repairs — Spec. 4894—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to Marine Quarters, 1, 2, 3 and 4, here. Bids to be opened at local yard.

Calif., San Diego — Storehouse — Spec. 4809—Bureau Yards & Docks, Navy Dept. Wash., D. C., soon receives bids paint and oil storehouse, here.

H. T., Honolulu—Dredging—Spec. 4891—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging at Naval Wharf, here. Bids will be opened at local yard.

BIDS DESIRED

Pa., Phila.—Repairs—Aug. 28, by J. M. Hoffman, Division of Docks and Wharves, Navy Bldg., Wash., D. C., repairs to substructure and deck of portions Piers 97, 98

Federal Government Work (Continued)

and 99, Phila. Army Supply Base, foot of Oregon Ave., here, for U. S. Shipping Board. Apply to District Agent, U. S. Shipping Board Emergency Fleet Corp., 140 North Broad St.

Ala., Mobile—Pontoon Pipe—Aug. 30 at office U. S. Engineer, Mobile, 1,200 ft. pontoon pipe. Adv. E.N.-R., Aug. 9.

Tenn., Memphis—Hose—Aug. 14 at office Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., furnishing and delivering rubber hose; adv. E.N.-R. Aug. 9.

Neb., Mitchell—Siphon—Sept. 12 at office Bureau Recl., Mitchell, constructing Stiver Canyon concrete siphon, Sta. 5685 on Ft. Laramie Canal, North Platte Project, Nebraska-Wyoming, near Haig, Neb. D. W. Davis, comr.; adv. E. N. R. Aug. 9.

Colo., Denver—Pistons, etc.—Sept. 12 at office Bureau Recl., Denver, furnishing 2 pistons and valves in Elephant Butte Dam, Rio Grande Project, New Mexico-Texas. D. W. Davis, comr. Adv. E.N.-R., Aug. 9.

Ore., Klamath Falls—Dam—Sept. 12, at office Bureau Recl., Klamath Falls, furnishing materials (except cement and metal work) and constructing Gerber Dam. D. W. Davis, comr.; Adv. E.N.-R. Aug. 9.

Calif., Petaluma—Dredging—Aug. 30, at office U. S. Engineer, Custom House, San Francisco, dredging 327,000 cu.yd. in Petaluma Creek, Sonoma Co.

BIDS RECEIVED

Delaware—Excavation—U. S. Engineer, Wilmington, completing, widening and dredging Chesapeake and Delaware Canal, creating new entrance from Delaware Bay and improving entrance at Chesapeake Bay, Delaware and Maryland, 6,000,000 cu.yd. excav., (1) Sect. A, 5 mi. (2) Sect. B, 3 mi. (3) Sect. D, 7 mi., from Arundel Corp., Pier 2, Pratt St., Baltimore, Md., (1) $0.139 (2) $0.139 (3) $0.40; Atlantic Gulf and Pacific Co., 13 Park Row, New York City, (1) $0.1244 (2) $0.1547 (3) $0.2447; Delaware Dredging Co., 139 South 3rd St., Phila., Pa., (1) $0.1678 (2) $0.1848. Noted July 5.

D. C., Wash.—Intake Chamber, etc.—U. S. Engineer, 250 Old Land Office Bldg., Items A. B and C being intake chamber, cut and cover conduit and tunnel respectively of water supply conduit for Dist. of Columbia, from Empire Eng. Co., 216 East Lexington St., McLean Contg. Co., Fidelity Bldg., Arundel Corp, Pier 2, Pratt St., and M. A. Long Co., 2016 West North Ave., all contractors located in Baltimore, Md. Noted June 28.

Virginia — Quarters, etc. — Spec. 4855 — Bureau Yards & Docks, Navy Dept., Wash., D. C., inspectors quarters, stable and garage, at Naval Ammunition Dept, St. Juliens Creek, here, (1) work complete, from H. A. Tignor, 321 Polk St., Hampton, (1) $31,486 (2) $4,925 (4) $625 (5) $125. Noted June 14.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing 240,000 ft. yellow pine No. 2, common or better, for Dam 46, Ohio River, main items, 1,760 pieces 2 x 12 in. x 22 ft., 1,100 pieces 1 x 4 in. x 12 ft., and 4,000 pieces 1 x 4 in. x 18 ft., from Allied Sales Corp., Tuscaloosa, Ala., $8,939.

CONTRACT AWARDED

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., Army Bldg., removing St. George Shoal, New York and New Jersey Channels, to G. H. Breyman & Bros., 17 Battery Pl., $7,200.

La., New Orleans—Pumps—U. S. Engineer, 329 Custom House, furnishing two 20 in. dredge pumps to Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $11,200. Noted July 12.

Tenn., Memphis—Tanks—District Engineer, Mississippi River Dredging Dist., P. O. Box 1017, two 20,000 bbl. fuel oil tanks, at U. S. Dredge Depot, here, to Walsh & Weidner Boiler Co., Main and Sycamore Sts., Chattanooga, $26,494. Noted June 21.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing yellow pine No. 1 common, 1300 pieces, 6 x 8 in. x 20 ft., 250 pieces 4 x 6 in. x 20 ft., 120 pieces 2 x 4 in. x 10 ft. etc., to King Sparrow Lumber Co., Hattiesburg, Miss., $32 per M ft. Noted Aug. 2.

Ky., Louisville—Pump—U. S. Engineer, P. O. Box 72, deep well centrifugal pump, double stroke, 8 in. drop pipe, for Dam 44, to Belknap Hardware & Mfg. Co., 2nd and Washington Sts., $2,230. Noted July 26.

Ill., Great Lakes—Incinerator, etc.—Spec. 4869—Bureau Yards & Docks, Navy Dept., Wash., D. C., incinerator chimney and flue, here, to Continental Chimney Co., Inc., 118 North La Salle St., Chicago, $6,795 (60 days). Noted July 26.

Tex., Galveston—Dredging—U. S. Engineer, Galveston, dredging in Texas City Channel, to J. Jacobson, 2311½ Ave. C, $24,780. Noted June 28.

Calif., San Diego—Filling—Spec. 4888—Bureau Yards & Docks, Navy Dept., Wash., D. C., additional filling, here, to H. G. Fenton, Dewey St., $0.60 per cu.yd., total $3,000 (30 days). Noted July 26.

Calif., San Diego—Roads and Walks—Spec. 4871—Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks at Naval Operating Base Hospital, here, to H. H. Peterson, 356 Spreckles Bldg., $7,627 (70 days). Noted July 12.

Miscellaneous

PROPOSED WORK

Shipping Platform — Pittsburgh, Pa. — H. J. Heinz Co., 1062 Main St., having plans prepared by Hunting & Davis, engrs., Century Bldg., 2 and 3 story, 25 x 500 ft. rein.-con. and steel shipping platform, Progress St. $175,000.

Park—Baton Rouge, La.—City plans election to vote on $75,000 bonds for park. J. W. Bellingsley, Interstate Bldg., Ned Orleans, consult. engr.

Transmission Line—Kentucky—Louisville Ry. Co., Traction Bldg., Louisville, plans 6 mi. transmission line from Scotts Station to Shelbyville. $45,000. G. A. Bogard, ch. engr.

Grain Elevator—Louisville, Ky.—R. D. Reidling, 18th and Magnolia Sts., plans rebuilding grain elevator recently destroyed by fire. $40,000.

Levee—Caledonia, Minn.—Houston Co. Drainage & Conservancy Dist. 1, plans levee and pumping station. $428,000. Central States Eng. Co., 602 Laurel Bldg., Muscatine, Ia., engrs.

Stadium — Louisville, Ky. — Du Pont Manual Training High School plans stadium between Texas Ave. and Eastern Parkway. $200,000.

Transmission Line — Shullsburg, Wis. — Northern Mines Co. plans high power transmission line. $25,000. A. Rodhams, supt. Private plans.

Elimination of Grade Crossings—Dallas, Tex. — Gulf, Colorado & Santa Fe R.R., Union Station, plans elimination of grade crossings by elevation of railway tracks on Haskell Ave., Ervay, Harwood and Merlin Sts. and over Missouri, Kansas & Texas R.R. tracks. $1,000,000. City to pay part of cost. F. Merritt, ch. engr. E. A. Kingsley, city engr.

Subway — Long Beach, Calif. — Having plans prepared subway under Ocean Blvd. near foot of Pine St. $75,000. R. D. Van Alstine, Long Beach, engr.

Gas Main — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 7,660 ft. 24 in. c.i. gas mains from Rosedale and Sherbrooke Sts. Notre Dame de Grace to Grand Blvd. and Cote St. Luke Rd., 24,340 ft. 20 in. c.i. gas mains from Grand Blvd. to Graham and Beaumont Sts., Outremont. $250,000. E. S. Stanton, supt. gas distribution.

Pipe — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., soon takes bids 35,000 ft. 20 and 24 c.i. pipe. E. S. Stanton, supt. gas distribution.

BIDS DESIRED

Foundation Wall, etc.—New York, N. Y.—Aug. 17, by W. H. Gompert, archt. Flatbush Ave. extension and Concord St., Brooklyn, foundation wall, piers, trap pits, etc., at George Washington High School, Audubon Ave. about 432 ft. north of West 190th St., here.

Underground Fire Alarm System—St. George, N. Y.—Aug. 14, by T. J. Drennan, fire comr., Municipal Bldg., New York, portion of underground fire alarm system, here.

Sand Clay Gravel—Baton Rouge, La.—Aug. 21, by State Hy. Comn., Reymond Bldg., furnishing 13,160 cu.yd. sand clay gravel not less than 60% stone or 4,389 cu. yd. sand clay gravel 40% stone, for highway work in Red River Parish. J. M. Fourmy, ch. engr.

Underpass—Alabama—Aug. 28, by State Hy. Dept., Montgomery, highway underpass and approaches under tracks of Southern Ry. Co., part of Federal Aid Project 108, (1) approaches, 5,787 cu.yd. excav., 33.72 cu.yd. Class A concrete culverts, 3,349 lb. steel reinforcing, 2,600 sq.yd. plain cement concrete base course, 2,455 sq.yd. asphaltic concrete surfacing, (2) underpass, one 38 ft. steel girder complete in place, 40 cu.yd. Class A concrete, 150 cu.yd. Class B concrete, etc. W. S. Keller, state highway engr.

Tunnel—Colorado—Sept. 12, by Moffat Tunnel Comn., 1731 Araphoe St., Denver, 6.04 tunnel on line of Denver & Salt Lake Ry., 50 mi. from Denver, 24 ft. high, 16 ft. wide, paralleled by pioneer or water tunnel, 8 x 8 ft. R. H. Keays, ch. engr.; adv E. N.-R. Aug. 9 Noted July 26.

Levee—Oroville, Calif.—Aug. 15, by C. Bloom, secy. D. D. 200, at office Bd. Supervs., constructing levee, 100,000 cu.yd. earth work in levee and 14,000 cu.yd. earth work in ditches. W. Green, Biggs, engr. Noted Aug. 2.

Ties—Montreal, Que.—Aug. 15, by W. H. Grant, genl. tie agt., Room 802, Canadian Natl. Express Bldg., supplying ties for 1924.

BIDS RECEIVED

Levee—Sacramento, Calif.—Removal of Y St. levee, 144,744 cu.yd. earth excav., from Byrne-Yost-Treatster, 2512 N St., $60,049.

CONTRACTS AWARDED

Heating and Ventilating Apparatus, etc.—Arverne (Far Rockaway, P. O.)—**N. Y.**—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulating apparatus, in P. S. 42, Beach 66th and Thursby Sts., here, to Raisler Heating Co., 129 Amsterdam Ave., New York, $85,200. Noted Aug. 2.

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulation apparatus, in P. S. 190, Sheffield Ave., here, to Raisler Heating Co., Inc., 129 Amsterdam Ave., New York, $83,990; in P. S. 100, West 3rd St., here, to Gillis & Geoghegan, Inc., 537 West Bway., New York, $84,790. Noted Aug. 2.

Heating and Ventilating Apparatus, etc.—New Brighton, N. Y.—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulating apparatus, for addition to Curtis High School, Hamilton Ave. and St. Marks Pl., here, to D. J. Rice, 405 Lexington Ave., New York, $39,770. Noted Aug. 2.

Bituminous Road Material, etc. — New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., bituminous road surfacing material, to Barrett Co., 40 Rector St., $3,300; asphaltic cement, to Warner-Quinlan Co., 79 Wall St., $6,288; asphaltic wearing surface sand, to C. and C. Contg. Co., 324 Jay St., Brooklyn, $6,030. Noted July 19.

Wall—Harrisburg, Pa.—Rein.-con. river wall and walk, 1,200 ft. long, to Pyramid Constr. Co., Harrisburg, $55,446.

Tail Race, Gates, etc.—Marinette, Wis.—Menominee & Marinette Light & Traction Co., excavation of tail race, additional vertical units, and additional flood and sluice gates, to M. L. Weber, % owner. Noted June 28.

Power Unit, etc.—Peshtigo, Wis.—North Eastern Power Co., 559 Marshall St., Milwaukee, will build 4,000 kva. unit in power plant and strengthening old dam incl. new abutments, gates, etc., by day labor under supervision of Mead & Seastone, engrs. Journal Bldg., Madison, Noted June 28.

Coal Elevator—South Beloit (Beloit, Wis. P.O.), **Ill.**—Keeler Lumber and Fuel Co., 108 State St., Beloit, Wis., 60 x 100 ft. rein.-con. and timber coal elevator, 36 ft. high, here, to J. Cliff, Bluff St., Beloit. Engrs. est. $30,000.

Culvert—St. Louis, Mo.—Bd. Pub. Serv., 208 City Hall, 467.5 ft. rein.-con. culvert, 32 ft. inside diameter at base, to carry Delmar Blvd. over River Des Peres, to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $130,636. Engrs. est. $131,000. Noted Aug. 2.

Foundations — Ft. Worth, Tex. — Smith Bros. Grain Co., 601 East 6th St., foundations for addition to grain elevator, 8 tanks 16 x 75 ft., 33 x 75 ft. base, concrete, to Jones-Hettelsater Constr. Co., 706 Mutual Bldg., Kansas City, Mo., $25,000. Noted July 12.

Grand Stand — Wichita Falls, Tex. — Texas Oklahoma Fair Assn., 384 ft. steel grand stand, 38 x 73 ft., to Kansas City Structural Steel Co., 704 Orear-Leslie Bldg., Kansas City, Mo., $30,000.

Pipe Line—Hood River, Ore.—Pacific Power & Light Co., Gasco Bldg., Portland, 2.5 mi. 12 ft. diameter, wood stave pipe under 200 ft. head at Powerdale Project, here, to Continental Pipe Mfg. Co., 4519 14th St., N. W.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching ou· New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL. PROPOSALS

Bids: Aug. 27.

Abutments and Approaches for Bridge

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of new abutments and approaches for Bridge No. 43, at M. P. 100.9 on State Highway Route No. 4, over Luppatcong Creek, in the municipality of Keyport, County of Monmouth, State of New Jersey.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, August 27th, 1923, at 11:30 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, New Jersey. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Sept. 5.

Building Construction, etc.

Letchworth Village, Thiells, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Completion of Assembly Hall and Industrial Building (Girls' Group), at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall St., New York City, until 11 o'clock A.M. (Standard Time), Wednesday, September 5, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within (30) thirty days after official notice of award of contract, and in accordance with the terms of Specifications Nos. 4102, 4103, 4104 and 4105. The right is reserved to reject any or all bids. Drawings and specifications may be examined at Letchworth Village, Thiells, N. Y., at No. 7 Wall St., New York City; at the New York office of the Department of Architecture, 18th floor, Fuller Building, Broadway and 23rd St., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: August 2, 1923.

Bids: Aug. 15.

Road Work

Urbana, Ill.

Notice is hereby given that sealed proposals will be received in the office of the County Clerk at the County Court House until 2:00 P.M., August 15, 1923, for the road and bridge work listed below:

Plans and proposals will be available in the office of the County Clerk or the County Superintendent of Highways, Urbana, Illinois. Plans may be obtained for temporary use in inspecting the road by depositing a check for $25.00 with the County Superintendent of Highways. The check must be made payable to the County Treasurer of Champaign County. On the return of the plans in good condition within the time specified said check will be returned to the contractor, otherwise the said check will become the property of the County of Champaign.

All proposals shall be made on forms furnished by the County of Champaign and obtained at the office of the County Superintendent of Highways. These shall be sealed in envelopes provided for that purpose and endorsed, "Proposal for Highway Work in Champaign County, Section ———, Route ———." Proposals sent by mail in addition to being endorsed as above shall be enclosed in a second or outer envelope, and addressed to, "County Clerk of Champaign County, Urbana, Illinois."

The County of Champaign reserves the right to reject any and all bids and to waive all technicalities.

A certified check for each proposal for the sum of five (5%) per cent of the total amount bid (minimum for road work $300.00), (minimum for bridge work $400) must accompany each proposal.

Certain materials in storage for the road work (approximately one-fourth of the total requirements) are to be purchased by the successful bidder from the County of Champaign at the price and terms given in Article 15, Paragraphs 1-10 of the Proposal.

All road proposals shall be submitted for a 9 foot off center Standard Portland Cement Concrete Pavement.

Proposed Work:

Section 37-15d, State Aid Route No. 10. 6.653 miles in length. Probable shipping point, Rantoul, Illinois.

Section 42B-15d, State Aid Route No. 10. 24 foot span Reinforced Concrete Slab. Probable shipping point Mahomet, Illinois.

By order of the County Clerk,

FRED HESS,
County Clerk.

and the Superintendent of Highways.

R. F. FISHER,
Superintendent of Highways.

Bids: August 27.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the construction of the following:

Route No. 4, Section No. 20, Manasquan River-Sea Girt, in the County of Monmouth. Estimated 14,876 cu.yds. of excavation, and 39,389 sq.yds. of single line eight inch reinforced concrete pavement.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, August 27th, 1923, at 11:00 A.M., Standard Time, and opened and read immediately thereafter.

Route No. 13, Section No. 5, Trenton-Lawrenceville, in the County of Mercer. Estimated 15,000 cu.yds. of excavation; 51,000 sq.yds. of foundation, Type "C," plain concrete eight inches thick; 50,000 sq.yds. of surface, Type "S. A.," sheet asphalt three inches thick; 2,800 sq.yds. of double line eight inch reinforced concrete pavement; and 17,000 sq.yds. of concrete curb.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, August 27th, 1923, at 11:15 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to the State Highway Department, 9th floor Broad St. Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated therein and in accordance with the 1922 specifications, same to be enclosed in sealed special addressed envelopes bearing the name and address of bidder and name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Additional Specifications

Bids: Feb. 28, 1924.

Arapuni Electric Power Scheme

SECTION 1—HEADWORKS

Wellington, New Zealand

Additional specifications in connection with the above work are on exhibit for use by prospective tenderers at the New York, Cleveland, Chicago and San Francisco offices of Engineering News-Record and Electrical World.

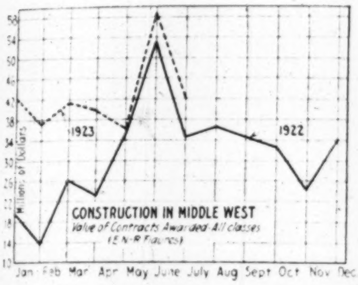
CONSTRUCTION NEWS

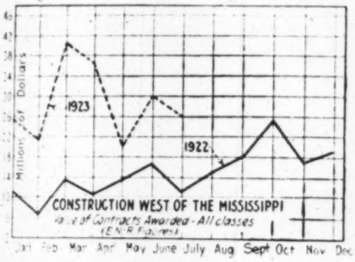
Engineering News-Record, August 16, 1923

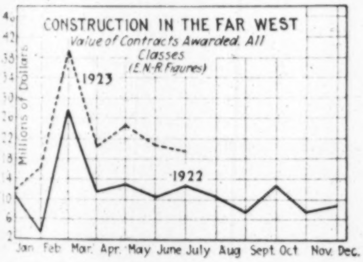
The Construction Barometer

Seasonal Decline in Contracts—South Active

VALUE of contracts awarded in July declined everwhere except in the South where heavy awards of buildings and miscellaneous projects produced a sharp rise.. The steepest drop was in the Middle West, although the July volume there was heavier than in May. The situation with respect to cost is given on the page to the left of this.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

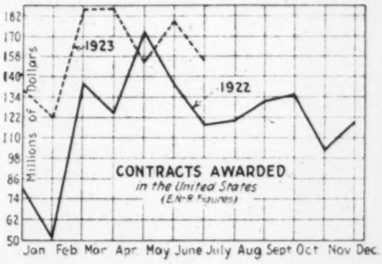
Week Ended	Public Work	Private Work	Total Contracts
July 26	23,772,000	13,340,000	37,112,000
Aug 2	17,362,000	8,888,000	26,250,000
Aug. 9	$14,514,000	$18,552,000	$33,066,000
3 Weeks	$55,648,000	$40,780,000	$96,428,000

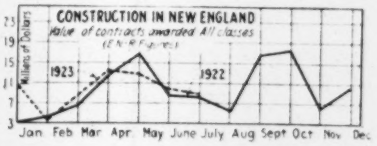
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

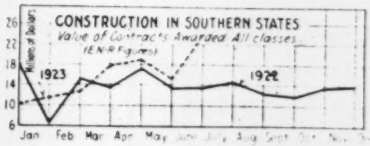
Week Ended	No.	Public Work	No.	Private Work
July 26	13	3,808,000	18	8,285,000
Aug. 2	10	3,703,000	19	6,691,000
Aug. 9	12	$4,681,000	34	$13,523,000
3 weeks	35	$12,192,000	71	$28,499,000

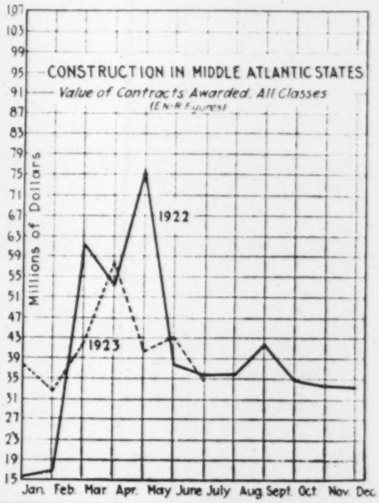
BASE PRICES UNCHANGED IN FIVE WEEKS

	Quoted On Aug. 9, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 21	Detroit, Mich.	July 26
Aug. 21	New York	Aug. 16
Aug. 21	Mount Pleasant, N. Y.	Aug. 16
Aug. 21	Brooklyn, N. Y.	Aug. 16
Aug. 22	Andrews, S. C.	July 26
Aug. 22	Joy, Ill.	Aug. 2
Aug. 22	Central Islip, N. Y.	Aug. 2
Aug. 24	Bartlett, Ill.	Aug. 9
Aug. 27	San Diego, Calif.	July 26
Aug. 27	Pennington, N. J. Adv. Aug. 16.	Aug. 16
Aug. 27	Winner, S. D.	Aug. 16
Aug. 28	Black River Falls, Wis.	Aug. 9
Aug. 29	Watertown, S. D. Adv. July 26 to Aug. 16.	July 26
Sept. 1	Pittsfield, Ill. Adv. Aug. 16.	Aug. 16
Sept. 4	Mount Vernon, N. Y. Adv. Aug. 16.	Aug. 16
Sept. 11	Hoboken, N. J. Adv. Aug. 9 and 16.	Aug. 9

SEWERS

Bids Close		See Eng. News-Record
Aug. 18	Wash., D. C.	Aug. 16
Aug. 19	Alliance, O.	Aug. 2
Aug. 20	St. George, N. Y.	Aug. 16
Aug. 21	Toronto, Ont.	Aug. 2
Aug. 21	Nashville, Tenn.	Aug. 9
Aug. 21	Phila., Pa.	Aug. 16
Aug. 22	Andrews, S. C.	July 26
Aug. 22	High Point, N. C.	Aug. 2
Aug. 24	Spencer, W. Va.	July 26
Aug. 28	Salt Lake City, Utah	Aug. 16

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Aug. 28	St. Louis, Mo.	Aug. 2
Sept. 4	Lakewood (Cleveland P. O.), O.	Aug. 16

BRIDGES

Bids Close		See Eng. News-Record
Aug. 20	Minneapolis, Minn.	Aug. 2
Aug. 20	Illinois	Aug. 9
Aug. 23	Clearwater, Fla.	July 26
Aug. 27	Keyport, N. J. Adv. Aug. 9 and 16.	Aug. 9
Aug. 28	Alabama	Aug. 16
Aug. 29	Illinois	Aug. 9
Aug. 29	Mohawk, N. J. Adv. Aug. 16.	Aug. 16
Aug. 29	North Carolina	Aug. 16
Sept. 5	Freehold, N. J. Adv. Aug. 16.	Aug. 16
Sept. 11	New Jersey	July 26
Nov. 30	Sydney, Australia	Apr. 19

EXCAVATION, DRAINAGE, IRRIGATION

Bids Close		See Eng. News-Record
Aug. 25	Green Bay, Wis.	Aug. 16
Aug. 30	New Iberia, La.	Aug. 9

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 20	New Jersey Adv. Aug. 9 and 16.	Aug. 9
Aug. 20	San Diego, Calif.	Aug. 9
Aug. 20	Utah	Aug. 9
Aug. 20	Illinois	Aug. 9
Aug. 20	Little Rock, Ark.	Aug. 16
Aug. 20	Nephi, Utah	Aug. 16
Aug. 20	Michigan	Aug. 16
Aug. 21	Virginia	Aug. 2
Aug. 21	New Kensington, Pa.	Aug. 9
Aug. 21	Maryland Adv. Aug. 9 and 16.	Aug. 9
Aug. 21	Virginia	Aug. 9
Aug. 21	Michigan	Aug. 9
Aug. 21	Wilmington, Del.	Aug. 9
Aug. 21	Utah	Aug. 9
Aug. 21	Laurel, Md.	Aug. 9

Bids Close		See Eng. News-Record
Aug. 21	Henderson, Ky. Adv. Aug. 16.	Aug. 16
Aug. 21	Barnsdall, Okla.	Aug. 16
Aug. 21	Columbus, O.	Aug. 16
Aug. 21	Massachusetts	Aug. 16
Aug. 22	Rhode Island	Aug. 9
Aug. 22	Vernon, Tex.	Aug. 16
Aug. 23	Clearwater, Fla.	July 26
Aug. 23	Yakima, Wash.	July 26
Aug. 23	Dallas, Tex.	Aug. 9
Aug. 23	Michigan	Aug. 16
Aug. 23	Connecticut Adv. Aug. 16.	Aug. 16
Aug. 23	Pulaski, Tenn.	Aug. 16
Aug. 23	Johnson City, Tex.	Aug. 16
Aug. 23	Vermont Adv. Aug. 16.	Aug. 16
Aug. 23	New York, N. Y.	Aug. 16
Aug. 24	New Mexico	Aug. 16
Aug. 24	Angleton, Tex.	Aug. 16
Aug. 24	Ohio	Aug. 16
Aug. 24	Chicago, Ill.	Aug. 16
Aug. 27	Sheridan, Wyo.	Aug. 9
Aug. 27	Bessemer, Ala.	July 26
Aug. 27	Iola, Kan.	Aug. 2
Aug. 27	San Diego, Calif.	Aug. 9
Aug. 27	New Jersey Adv. Aug. 9 and 16.	Aug. 9
Aug. 27	California	Aug. 16
Aug. 27	Marlow, Okla.	Aug. 16
Aug. 27	Bonham, Tex.	Aug. 16
Aug. 28	St. Louis, Mo.	Aug. 2
Aug. 28	Louisiana	Aug. 9
Aug. 28	Eastland, Tex.	Aug. 9
Aug. 28	Pensacola, Fla. Adv. Aug. 16.	Aug. 16
Aug. 28	Brenham, Tex	Aug. 16
Aug. 28	Florida	Aug. 16
Aug. 28	Paris, Tex.	Aug. 16
Aug. 28	South Dakota	Aug. 16
Aug. 29	Kentucky	Aug. 9
Aug. 29	Kentucky	Aug. 2
Aug. 29	Delaware Adv. Aug. 16.	Aug. 9
Aug. 29	Illinois	Aug. 9
Aug. 29	North Carolina Adv. Aug. 16.	Aug. 16
Aug. 29	Morristown, N. J. Adv. Aug. 16.	Aug. 16
Aug. 30	Pittsburgh, Tex.	Aug. 9
Aug. 30	Quebec	Aug. 16
Aug. 31	Beaumont, Tex.	Aug. 16
Aug. 31	Garnett, Kan.	Aug. 16
Sept. 1	Mt. Pleasant, Ia.	Aug. 16
Sept. 4	San Jose, Calif.	Aug. 9
Sept. 4	San Diego, Calif.	Aug. 16
Sept. 5	Freehold, N. J. Adv. Aug. 16.	Aug. 16
Sept. 11	Alabama	Aug. 16

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Aug. 20	Anna, Ill.	Aug. 16
Aug. 22	Phila., Pa.	Aug. 9
Aug. 28	Dunseith, N. D.	Aug. 16

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 18	Wake Forest, N. C.	Aug. 16
Aug. 20	Williamstown, Mass.	July 26
Aug. 20	Ft. Worth, Tex.	July 26
Aug. 20	Duquoin, Ill.	Aug. 16
Aug. 20	Kinston, N. C.	Aug. 16
Aug. 21	Hartford, Conn.	July 19
Aug. 21	Dayton, O.	Aug. 9
Aug. 21	New York, N. Y.	Aug. 16
Aug. 22	Cedar Rapids, Ia.	Aug. 2
Aug. 23	Harrisburg, Pa. Adv. July 26 to Aug. 16.	Aug. 2
Aug. 25	Ridgway, Pa.	Aug. 9
Aug. 25	Denton, Tex.	Aug. 16
Aug. 25	San Diego, Calif.	Aug. 16
Aug. 27	Murray, Ky.	Aug. 16
Aug. 28	Akron, O.	Aug. 2
Aug. 28	Salisbury, Md.	Aug. 9
Aug. 28	New York, N. Y.	Aug. 9
Aug. 28	Iron River, Mich.	Aug. 16
Aug. 30	Milwaukee, Wis.	Aug. 16
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 5	Thiells, N. Y. Adv. Aug. 9 and 16.	Aug. 9
Sept. 5	Eastview, N. Y. Adv. Aug. 16.	Aug. 16
Sept. 15	Dallas, Tex.	July 26
Sept. 15	Sedalia, Mo.	Aug. 16
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 20	Shed, etc.—Wash., D. C.	Aug. 2
Aug. 22	Dredging—Norwalk, Conn. Adv. July 26 to Aug. 16.	July 26
Aug. 22	Sub Post Office—Memphis, Tenn.	July 26
Aug. 23	Lock—Pittsburgh, Pa. Adv. July 26 to Aug. 16.	Aug. 2
Aug. 28	Superstructure—Ludington, Mich. Adv. July 19 to Aug. 16.	July 26
Aug. 28	Repairs—Phila., Pa.	Aug. 9
Aug. 30	Pipe—Mobile, Ala. Adv. Aug. 9 and 16.	Aug. 9
Aug. 30	Dredging—Boston, Mass. Adv. Aug. 2, 9 and 16.	Aug. 2
Aug. 30	Dredging—Petaluma, Calif.	Aug. 9
Aug. 31	Breakwater—Wrangell, Alaska	Aug. 16
Sept. 6	Dredging—Oakland, Calif.	Aug. 16
Sept. 11	Dredging—Galveston, Tex. Adv. Aug. 16.	Aug. 16
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
Sept. 12	Pistons, etc. — Denver, Colo.	Aug. 9
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 17	Foundation Wall, etc. — New York, N. Y.	Aug. 9
Aug. 21	Gravel—Baton Rouge, La.	Aug. 9
Aug. 22	Pier—Charleston, S. C. Adv. Aug. 2 to 16.	Aug. 2
Aug. 23	Changes to Railroad Structure—Brooklyn, N. Y.	Aug. 16
Aug. 23	Heating and Ventilating Apparatus—New York, N. Y.	Aug. 16
Aug. 24	Steam Piping—Milwaukee, Wis.	Aug. 16
Aug. 27	Dock and Yacht Basin — Sanford, Fla.	Aug. 16
Aug. 28	Underpass—Alabama	Aug. 9
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Sept. 11	Oswego, N. Y. Adv. Aug. 16.	Aug. 16
Sept. 12	Tunnel—Colorado Adv. Aug. 9 and 16.	Aug. 9
Oct. 6	Volt Insulators—Melbourne, Australia Adv. Aug. 16.	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand Adv. May 24, 31, Aug. 9 and 16.	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Oneida—Water Bd. retained N. Hill, Jr., engr., 112 East 19th St., New York City, to investigate and report on new water system. $1,500,000.

N. J., Pennington—Plans laying 4 and 6 in. mains in various streets, etc. $35,000. Remington & Vosburg, 601 Market St., Camden, engrs.

N. C., Laurinburg—Authorized $150,000 bond issue for water and sewer improvements.

N. C., Raleigh—Rejected bids pumping equipment, concrete surge tank and intake for Lake Raleigh. $40,000. Will readvertise. W. C. Olsen, Kinston, engr. Noted July 19.

Ky., Elizabethtown—Plans to improve waterworks plant. $45,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, Tenn., engr.

Kan., Goff—Making preliminary plans waterworks system. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, Mo., engrs.

Kan., Osage City—Voted $50,000 bonds to increase waterworks capacity from 40 mg. to 100 mg.

Neb., Kearney—Having preliminary plans prepared waterworks system. $75,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Mo., Braymer — Defeated $49,000 bonds for waterworks. Noted July 19.

Mo., Jamesport — Having preliminary plans prepared waterworks and sewers. $20,000 and up. Engineer not announced.

Mo., Maysville—Aug. 22, to vote on $44,000 bonds for extensions and improvements to waterworks. Shockley Eng. Co., Graphic Arts Bldg., Kansas City, engrs. Noted July 12 under "Sewers."

Mo., Ridgeway — Making preliminary plans waterworks and sewers. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Tex., Dallas—Plans lake to be formed by dam on Mountain Creek near Oak Cliff, 40,000,000,000 gal. capacity, (primarily for pleasure resort, but could be used for water supply if needed). $250,000. E. A. Kingsley, city engr.

Okla., Holdenville—Election soon to vote on $85,000 bonds enlarging filter plant, new pumping equipment and water main extensions. Macintosh Co., 1st Natl. Bldg., Oklahoma City, engrs.

Okla., Ramona — Election Aug. 14 to vote on $50,000 bonds for 8,000 ft. 4 in. and 6,000 ft. 6 in. c.i. water mains, 2 triplex pumps and well. E. W. Baker, 1st Natl. Bank Bldg., Oklahoma City, engr.

Ont., Timmins—Plans 10,000 ft. of 6 in. c.i. mains, hydrants, etc. $25,000. C. R. Murdock, Town Hall, engr.

BIDS DESIRED

New York — Aug. 21, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Queens Blvd., etc., Queens Boro. Former bids withdrawn. Noted Aug. 2.

N. Y., Brooklyn — Aug. 21, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Ocean Parkway, here.

N. Y., Mount Pleasant—Aug. 21, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, removing old Croton Aqueduct arch over Bway. near Tarrytown, here, and installing inverted steel syphon venturi meter. Former bids withdrawn. Noted Aug. 2.

N. Y., Mount Vernon — Sept. 4, by Bd. Water Supply, 19 Prospect Ave., furnishing all materials except c.i. pipe and special castings to be furnished by city, and performing all labor required for constructing complete c.i. mains with valves, hydrants, etc. N. S. Hill, Jr., 112 East 19th St., New York City, consult. engr.; adv. E. N.-R. Aug. 16.

N. J., Pennington—Aug. 27, by Boro Council Fire Hall, altering and extending present water distribution system. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. E. N.-R., Aug. 16.

O., Columbus—See "Streets and Roads."

Ill., Pittsfield—Sept. 1, earth dam, concrete gate chamber, conduit, spillway, filter and pumping plants, etc. Caldwell Eng. Co., Jacksonville, engrs.; adv. E. N.-R. Aug. 16.

S. D., Winner—Aug. 27, improving waterworks system, incl. supply pipe line and collecting system. $40,000. Prince-Nixon Eng. Co., Peters Trust Bldg., Omaha, Neb., consult. engrs.

Tex., Dallas—Koch & Fowler, engrs., Central State Bank, taking bids steel tank and tower or concrete tank and pumping unit, new addition to Dallas near Midway Rd. and Lovers Lane, for J. P. Stephenson, c/o Engineers. $150,000-$200,000.

BIDS RECEIVED

Wis., Milwaukee—For 200 g.p.m. sump pump from C. W. Miller, 209 Grand Ave., $2,837; coal and ash handling equipment, from Stephens Adamson Mfg. Co., Ridgway St., Aurora, Ill., $41,200.

O., Cleveland—Cuyahoga Co., 24,736 ft. 8 and 12 in. c.i. mains in Impvt. 41 of Co. Sewer Dist., from D. Pfahl & Co., Berea Rd., $153,405.

Mo., St. Louis—See "Streets and Roads."

CONTRACTS AWARDED

Conn., Rockville—Rockville Water Co., steel stand pipe, 60 ft. high, 30 ft. diam., concrete foundation, to Walsh Steam Boiler Wks., Holyoke, Mass. Engrs. est. $15,000.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, New York, mains in Ave. D, Huntley Dr., Bradford Pl., Newtown, 58th, and head of Vleigh Rds., Woolsey, 12th, Gardiner, Hamm, Maurice, 12th, 32nd, 34th and 59th Aves. Chauncey, Crescent, Howland, Merchant, Sunswick, 15th, 118th, 164th, 165th, 189th and 206th Sts., here, to J. A. Gregory, Inc., 361 East 124th St., New York, $27,649. Noted Aug. 2.

N. C., Raleigh—Constructing 4 filtering plant, 500,000 gal. capacity each, conditioning 7 filters, constructing coagulation basin, filter tubs and buildings, to Tucker & Laxton, Realty Bldg., Charlotte, $124,178.

Tex., Marlin—For 1 m.g. filtration plant and pumphouse, to McCall-Moore Eng. Co., Amicable Bldg., Waco, $20,155. Noted July 19.

Sewers

PROPOSED WORK

N. C., Laurinburg—See "Waterworks."

Fla., Bartow—Voted $90,900 bonds for sanitary sewerage system. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted June 28.

Ia., Des Moines—City did not open bids on Aug. 2 for Southwest Sewerage System, because of legal entanglements. $600,000. Will readvertise later. K. C. Kastberg, city engr. Noted July 26.

Kan., Topeka—Having survey made of entire city to establish needs. W. E. Baldry, city engr., in preliminary estimate states city requires 176 mi. sewers. C. A.

Waterworks (Continued)

Haskins, 3929 Oak St., Kansas City, Mo., engr.

Neb., Kearny—Having preliminary plans prepared storm sewerage system. $170,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted July 5.

Mo., Braymer — Defeated $36,000 bonds for sewers. Noted July 19 under "Waterworks."

Mo., Jamesport—See "Waterworks."

Mo., Maysville—Aug. 22, to vote on $55,000 bonds for sewers and disposal plant. Shockley Eng. Co., Graphic Arts Bldg., Kansas City, engrs. Noted July 12.

Mo., Ridgeway—See "Waterworks."

Ont., Weston—Plans 12,000 ft. vitr. tile sanitary sewers, 8 in. up, in Arthur, Denison, MacDonald, Rosemount and Springmount Sts. $35,000. H. L. Seymour, 52 Main St., engr.

BIDS DESIRED

N. Y., St. George—Aug. 20, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sanitary sewer in Waverly and Wiederer Places, North Burgher, Delafield, Dixon, Washington and Neckar Aves.; temporary combined sewer in Pierce St.; sanitary sewer in Hanover St.

Pa., Phila.—Aug. 21, branch sewers Schedule A; main sewer in Ognotz Ave., Schedule B; sewage disposal plant, completion of water and air piping at Frankford Creek Grit Chamber, Schedule C. F. H. Caven, dir. pub. wks.

D. C., Wash.—Aug. 18, by Dist. Comrs., 509 Dist. Bldg., furnishing 700,000 red sewer brick. Apply Room 320 Dist. Bldg.

O., Columbus—See "Streets and Roads."

O., Maple Heights (Bedford, P. O.)—Aug. 18, 1,676 ft. 12-15 in. tile sewers in Longwood and Sterling Aves. $25,000. C. W. Courtney, Leader News Bldg., Cleveland, engr.

Utah, Salt Lake City—Aug. 28, 8, 10 and 12 in. vitr. sewers, etc., in Dist. 409. $25,000. S. A. Cannon, city engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in (1) Central Ave. (2) Voorhees Pl. (3) Idaho St. (4) Lake St. (5) 161st St., in Boro of Queens, from Spinella & Muccinni, 6102 18th Ave., Brooklyn, (1) type A $80,168; J. Gallo, 203 Division St., Brooklyn, (1) type B $72,793 (2) type B $13,648; Green Contg. Co., 734 Vernon Ave., Astoria, (2) type A $15,803; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (3) $4,853 (5) $2,730; J. H. Johnson, (4) $5,914. Noted Aug. 2.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg. altering and improving sewer in East 12th St., from P. J. Donlon Contg. Co., Snyder Ave. and East 56th St., Brooklyn, $23,275; in West St. from T. A. Reilly Co., 48 East 41st St., $19,071. Noted Aug. 2.

Md., Baltimore—Bd. Awards, City Hall, Aug. 8, constructing sludge digestion tanks Nos. 24, 25 and 26, and sludge drying beds Nos. 9 and 10, at Baltimore Sewage Treatment Wks., 5,000 cu.yd. excav., 4,000 cu.yd. rolled embankment, 4,655 cu.yd. concrete masonry, 450,000 lb. reinforcing bars, 1,100 cu.yd. sand and 3,000 cu.yd. gravel for sludge beds, 4,500 lin.ft. 4 in. drain tile, 87 tons c.i. pipe, 910 lin.ft. industrial railroad track, from P. C. Streett Eng. Co., 406 St. Paul St., $158,207. Noted July 26.

O., Euclid—Storm and sanitary sewers in Johnson Rd., from Iafornaro Constr. Co., 2218 Murray Hill Rd., Cleveland, $51,800; Cut Rd., from C. W. Jackson, 1318 East 84th St., Cleveland, $114,823; Lakeshore Blvd. Sect. 3, from Hadded Mall Co., Schofield Bldg., Cleveland, $73,226; Lakeshore Blvd., Sect. 4, from Trifelletti Bros., Lorain, $50,410; Chardon Rd., from Curro Bros. and B. J. Whittaker, 2208 Mayfield Rd., Cleveland, $35,189; Euclid Ave. from G. Darwich, 9214 Kempton Ave., Cleveland, $16,729; Lakeshore Blvd. Sect. 1, from Amato Constr. Co., c/o Sewers Contractors Exch., The Arcade, Cleveland, $82,930; Lakeshore Blvd. Sect. 2, from Graham & Henderson, 1274 West 108th St., Cleveland, $101,743. Noted July 26.

O., Maple Heights (Bedford, P. O.)—For 8,617 ft. 12-24 in. tile sewer in Dunham Rd., from B. J. Whittaker, c/o Sewer Contractors Exch., Cleveland, $58,862.

Wis., Rhinelander—For 26,502 ft. vitr. clay pipe, etc., from Roise Constr. Co., 252 Hennepin Ave., Minneapolis, Minn $92,956. Noted July 19

Calif., Los Angeles—Bd. Pub. Wks., Sect. 1 of north outfall sewerage system, (1) 5,145 lin.ft. 7 ft. interior diam. sewer (2) 566 lin.ft. 5 ft. interior diam. pipe, (a) submarine rein.-con. pipe construction (b) cast iron pipe construction, from Ross Constr. Co., Forum Bldg., Sacramento, (1a) $627,000 (1b) $527,000 (2a) $100,000 (2b) $100,000; San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, (1a) $823,000 (1b) $823,000 (2a) $67,920 (2b) $67,920. Noted June 28.

Calif., Los Angeles—Furnishing pipe for Sect. 1 of outfall sewer, from United States Cast Iron Pipe & Fdry. Co., Wright & Callender Bldg., (2) $575,068 (2a) $509,230 (2b) $476,626 (2c) $437,254 (2d) $615,750 (2e) $509,769 (2f) $477,165 (2g) $476,901, start delivery within 2 weeks from award of contract, finish 10 months; Western Concrete Pipe Co., Los Angeles, submarine concrete pipe, $198,300, start delivery 60 days, complete 180 days; J. Balch, Los Angeles, submarine rein.-con., $147,000, start delivery Nov. 15; Ross Constr. Co., Forum Bldg., $197,141, start delivery 60 days; Birmingham Machine & Fdry. Co., 3700 10th Ave., Birmingham, Ala., c.i. pipe $650,000 alternate $518,000 start delivery 120 days; Llewllyn Iron Wks., 1200 North Main St., c.i. pipe $582,246.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in 25th St., to Awixa Corp., Mt. Vernon, $652,211. Noted Aug. 9.

Ill., Chicago—Sanitary Dist. of Chicago, 910 South Michigan Ave., constructing North Side Sewage Treatment Works, Division A, aeration tanks, settling tanks and operating galleries, to J. Griffiths & Sons Co., 112 West Adams St., $5,602,636. Noted Aug. 9.

Mo., Kansas City — Monolithic concrete sewer in Dist. 457, to W. C. Mullins Constr. Co., 419 Nelson Bldg., $73,403.

Mo., St. Louis—Pitzmans Co. of Surveyors & Engineers, 615 Chestnut St., 12,830 cu. yd. earth trenching, 18,050 ft. 6-30 in. vitr. clay sewers, etc., in Westmoor Park 2, for Westmoor Realty Co., to McKelvey Constr. Co., 811 Title Guaranty Bldg., $30,000. Noted Aug. 1.

Ark., Little Rock — See "Streets and Roads."

Waste Disposal

BIDS DESIRED

O., Lakewood (Cleveland P. O.)—Sept. 4 (change of date) garbage disposal plant. 100,000 lb. daily capacity. $88,000, E. A. Fisher, city engr. Noted July 12.

Bridges

PROPOSED WORK

Ill., Belleville — Louisville & Nashville R.R., 9th St. and Bway., Louisville, Ky., plans concrete ridges over its tracks on Lebanon Ave., here. $25,000. W. H. Courtenay, ch. engr.

BIDS DESIRED

Vermont—See "Streets and Roads."

N. Y., Mohawk—Aug. 29, by Mohawk Town Bd. at office of town clerk, Fonda, 2 steel bridges each having 74 ft. span, (on abutments furnished by town). E. Smith, supt. highways; adv. E. N.-R. Aug. 16.

N. J., Freehold—Sept. 5, by Bd. Freeholders Monmouth Co., constructing Bridge U-11, and earth dam containing sheet pile and rein.-con. core-wall. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. E. N.-R. Aug. 16.

Alabama—Aug. 28, by State Hy. Comn., Montgomery, concrete bridge over Flint River, part Federal Aid Project 39, Madison Co., 888 cu.yd. concrete, 87,762 lb. reinforcing, 540 sq.yd. 1 in. concrete surface 1:2:3½ mix, etc. W. S. Keller, state highway engr.

North Carolina—Aug. 29, by State Hy. Comn., Raleigh, rein.-con. bridges and culverts on State Project 641, Iredell Co., $65,800; State Project 495, Warren Co., $36,600; State Project 745, Forsyth Co., $33,500. C. M. Upham, state highway engr.

Ohio—See "Streets and Roads."

South Dakota—See "Streets and Roads."

BIDS RECEIVED

N. J., Mays Landing—See "Streets and Roads."

Michigan—State Highway Dept., Lansing, Bridge 611001, 90 ft. concrete girder, 22 ft. roadway, near White Hall, Muskegon Co., from R. Love & Son, Muskegon, $31,405.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, July 31, constructing bridges, **c s means concrete slab, c g concrete girder, s steel, c concrete, sub substructure, super superstructure and c c concrete culvert**, from C. B. Mautz, Benton, **3 c s 1-2B-White means (3 concrete slab, Route 1, Sect. 2-B, White Co.)** $9,331; from Zimmerly Bridge Co., Paris, 2 c s and 1 c g 1-3B White, $10,038; from Ferguson Constr. Co., 1033 North 2nd St., Rockford, 2 c g 1-28B White, $21,407, 1 c g and 1 c s 2-55B McLean $20,351, 2 c g 3-23B Mercer $37,735, 1 c g 24-4B Christian $35,890 (all bids less 1%); from M. and P. Contg. Co., Rockport, Ind., 1 c g 1-40B Massac $4,814; from W. H. Shons, South Liberty Ave., Freeport, 1 c g and sub for 1 steel 1-38B Johnson, $19,465, 1 c g and 1 sub for steel, 1-39B Massac, $16,179, 1 super for steel 1-39C Johnson, $6,670, 1 super for steel 1-39C Massac, $15,162, 1 c c, 1 c s, 1 c g and 2 sub for steel 34-1B Saline, $33,287, 2 c s and 3 c g 34-2B Saline, $24,833, 3 c c, 1 c s and 3 c g 34-3B Hardin, $55,204, super for 1 steel 34-5C Hardin $24,892; from F. E. Marsh & Co., Jefferson, Ia., 1 sub for steel 2-63B McLean $20,296; from Continental Bridge Co., Monadnock Blk., Chicago, 1 super for steel 2-63C McLean $20,570, 1 super for steel Route 7, Federal Aid Project 7 Sect. R-3 Bureau $5,687; from General Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., 1 sub for steel 3-59B Madison $24,207, 1 super for steel 3-59C Madison $22,882, 1 s and 1 c c 3-74B Randolph $32,595, super for 2 steel 34-1C Saline $17,789; from F. O. Panton, South Elgin, 1 c s 6-F Cook $8,796; from Sheldon Constr. Co., Putnam Bldg., Davenport, Ia., 1 c s and 1 sub for steel Route 7, Federal Aid Project 7, Sect. R-2 Bureau Co. $21,547; from St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., 1 super for steel 33-4C Jasper $13,013; from Barber & Lively, 1 c c and 2 c g 34-4B Hardin $11,018; from Fraser-Davis Constr. Co., 2 c s, 1 c g and 1 sub for steel 34-5B Hardin $36,282. Noted July 19.

Calif., Compton—Los Angeles Co., (Los Angeles), bridge over Los Angeles River on Long Beach Blvd., near here, from J. Simpson & Co., 701 Antonio St., Los Angeles, $65,450.

Ore., Brookings—State Hy. Comn., Salem, 160 ft. bridge over Winchuck Creek, near here, from A. B. Gridley, Marshfield, steel and wood $26,895, wood $24,530; Portland Bridge Co., Yeon Bldg., Portland, steel $34,540.

CONTRACTS AWARDED

Me., Eagle Lake — State Hy. Comn., Bridge Dept., Augusta, rein.-con. I-beam bridge, two 50 ft. spans, between here to Nadeau, Aroostook Co., to E. Cyr & Co., Waterville, $21,053.

Vermont—See "Streets and Roads."

Maryland—State Hy. Dept., Baltimore, bridge over Toms Creek on road from Frederick to Emmitsburg, Frederick Co., Contr. F-65, 305 cu.yd. concrete, to R. B. Poffenberger, Myersville, $16,720; bridge over Youghiogheny River on road from Oakland to Hutton, double span rein.-con. arch, Garrett Co., Contr. G-26, to Monangahela Constr. Co., Fairmount, W. Va., $19,615. Noted Aug. 9.

Kentucky—State Hy. Dept., Frankfort, 170 ft. concrete bridge over Blackwater Creek, Morgan Co., five 34 ft. spans, to Ellis & Smeathers, Owensboro, $32,451; 120 ft. concrete bridge, four 30 ft. spans, over Triplett Creek, Rowan Co., and 108 ft. concrete bridge, two 34 ft. and one 40 ft. spans, over Bank Lick Creek, Kenton Co., to Broaddus & Forbes, Richmond, $9,783 and $20,782 respectively. Noted Aug. 2.

Ore., Perry—State Hy. Comn., Salem, rein.-con. trestle, twelve 16-30 ft. spans, over Grande Ronde River, here, to Union Bridge Co., Kenton Sta., Portland, 900 cu.yd. Class A concrete $30.50, 135,000 lb. reinforcing $0.06, etc., total $39,135.

Dams

PROPOSED WORK

Tenn., Lawrenceburg — Voted $80,000 bonds for dam and power plant at Shoal Creek. Freeland, Roberts & Co., Independent Life Bldg., Nashville, consult engrs. Noted July 26.

Tex., Dallas—See "Waterworks."

BIDS DESIRED

N. J., Freehold—See "Bridges."

BIDS RECEIVED

Calif., Merced—Merced Irrigation Dist., constructing Exchequer Dam, (1) contractor furnishes aggregate for concrete (2) district furnishes aggregrate for concrete, (a) 6,000 cu.yd. common excav. (b) 50,000 cu.yd. rock excav. (c) 310,000 cu.yd. concrete (d) 60 cu.yd. pressure grout (e) 1,000 ft. 5 in. drainage wells (f) 2,000 ft. 8 in. grout holes (g) 5,000 ft. contraction seals (h) 6,000 ft. grout and miscellaneous pipes (i) 15,000 lb. reinforcing (j) 60,000 lb. structural steel works (k) 5,000 sq.ft. coating, metal work (l) 8,000 sq.ft. coating, waterways (m) 200,000 lb. setting valves and gates, from L. S. Atkinson, Jr., Phoenix, Ariz., (1a) $5 (1b) $5 (1c) $5 (1d) $75

Dams (Continued)

(1e) $5 (1f) $4 (1g) $2 (1h) $0.25 (1i) $0.05 (1j) $0.05 (1k) $0.05 (1l) $0.05 (1m) $0.05 (2a) $5 (2b) $5 (2c) $3.50 (2d) $75 (2e) $5 (2f) $4 (2g) $2.50 (2h) $0.25 (2i) $0.05 (2j) $0.05 (2k) $0.05 (2l) $0.05 (2m) $0.05; Utah Constr. Co., Phelan Bldg., San Francisco, (1a) $2.50 (1b) $5.75 (1c) $6.20 (1d) $40 (1e) $5 (1f) $2.25 (1g) $1 (1h) $0.80 (1i) $0.04 (1j) $0.05 (1k) $0.10 (1l) $0.10 (1m) $0.04 (2a) $2.50 (2b) $5.75 (2c) $3.75 (2d) $10 (2e) $5 (2f) $2.25 (2g) $1 (2h) $0.80 (2i) $0.04 (2j) $0.05 (2k) $0.10 (2l) $0.10 (2m) $0.04; Foundation Co., 58 Sutter St., San Francisco, (1) $1,632,235 with fee of $80,000, (2) $985,635 with fee $50,000. Noted July 26.

CONTRACTS AWARDED

New York—See "Streets and Roads."

Railways

PROPOSED WORK

North Carolina—Appalachian & Western North Carolina Ry., c/o F. T. Miller, ch. engr., Greensboro, having surveys made for routes of proposed railroad, in several northwestern counties State Legislature provided $50,000 for surveys and will appropriate $10,000,000 toward construction after route has been determined.

BIDS DESIRED

Ontario—Ottawa Electric Ry., Albert St., Ottawa, taking bids extending 1¼ mi. electric line through Eastview. $110,000. F. D. Burpee, mgr.

Excavation, Drainage Irrigation

PROPOSED WORK

S. D., Elk Point—City and Chicago, Milwaukee & St. Paul Ry., 80 East Jackson St., Chicago, Ill., plans river retard work in Elk Point Drain Dist. 1. $55,350.

Tex., Edinburg—See "Miscellaneous."

Calif., Yreka—Butte Valley Irrigation Dist. plans election to vote on $594,000 bonds for irrigation project.

Porto Rico, San Juan—West India Mchy. & Supply Co., 75 Tetuan St., soon takes bids for 380,000 cu.yd. excav.

Ont., Owen Sound—Dominion Dept. Pub. Wks., Parliament Bldgs., Ottawa, plans dredging harbor, here. $75,000 bonds voted. K. M. Cameron, acting ch. engr.

BIDS DESIRED

Wis., Green Bay—Aug. 25, by Farm Drain Dist. 5, 2½ mi. 6-8 in. tile outlet drain in Lawrence Twp., near here. L. M. Schindler, 721 Clark St., Appleton, engr.

CONTRACTS AWARDED

Ia., Sioux City—Woodbury Co., improvements in Garretson D.D. 1, 1,159,150 cu.yd. excav., to J. R. Reese, Hamburg, $96,526. Noted July 12.

Mo., Brimson—Brimson D.D., system of levees and drainage canals, pumping station, etc., to Munn Constr. Co., St. Joseph. Engrs. est. $100,000.

Calif., Los Angeles—Bd. Harbor Comrs., dredging in west basin of Los Angeles Harbor, 2,800,000 cu.yd., to Pan-Pacific Constr. Co., 629 Citizens Natl. Bank Bldg., $0.1575 per cu.yd., total $441,000. Noted Aug. 9.

Streets and Roads

PROPOSED WORK

N. J., Trenton—Mercer Co. plans resurfacing 10,000 sq.yd. Princeton Ave., asphalt. $30,000. J. E. English, city engr.

W. Va., Charleston—Loudon Dist., Kanawha Co., election Aug. 27, to vote on $200,000 bonds for road work. F. G. Burdette, co. engr.

W. Va., Williamson—Lee Dist., Mingo Co., voted $297,000 bonds for road work. L. C. Linkous, co. engr. Noted July 19.

Tenn., Brownsville—Haywood Co. voted $150,000 bonds for State and Federal road from Memphis to Bristol.

Ky., Calhoun—McLean Co. voted $350,000 bonds for road work. Noted June 1.

O., Canton—Stark Co. soon takes bids improving about 2 mi. Hartville-Uniontown Rd., Sect. B, 16 ft. $50,000. G. Sickafoose, Court House, engr.

O., Cleveland—Cuyahoga Co. opens bids in fall grading and paving Richmond Rd. 6 and Kinsman Rd. $390,581. F. R. Lander, Court House, engr.

O., Lisbon—Columbiana Co. plans waterbound macadamizing 4.5 mi. Hanoverton-Salem Rd., 20 ft. J. Kirk, Court House, engr.

O., Steubenville—Jefferson Co. plans improving 4 mi. Toronto-Empire Rd., 20 ft. J. N. Leech, Court House, engr.

O., Steubenville—Jefferson Co. soon takes bids resurfacing 3 mi. New Somerset-Hammondsville Rd. J. N. Leech, Court House, engr.

Michigan—State Hy. Dept., Lansing soon takes bids grading and surfacing 1 mi. State Trunk Line Rd. 51-6, Ottawa Co., concrete, 2 mi. State Trunk Line Rd. 10-21, Sect. D, Iosco Co., gravel, and 3 mi. Federal Aid Project 120, Ottawa Co., asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Ill., Belleville—St. Clair Co. plans grading and paving Belleville-Freeburg, Belleville-Smithton and Belleville-Millstadt Rds. also balance East St. Louis-Cahokia Rd. $240,000. Address county engineer.

Ia., Dubuque—Plans 250,000 sq.yd. paving for 1924. $500,000. W. Cullen, city engr.

Wyoming—State Highway Dept., Cheyenne, plans gravel surfacing 1.8 mi. Federal Aid Project 154, Big Horn Co., engrs. est. $17,886 (Federal aid $11,563); surfacing 7.481 mi. Federal Aid Project 155 Crook Co., engrs. est. $116,600 (Federal aid $76,382), 49 mi. Federal Aid Project 140, engrs. est. $81,026 (Federal aid $52,383), 10,634 mi. Federal Aid Project 143 Johnson Co., engrs. est $84,611 (Federal aid $30,864) Z. E. Sevison, state highway engr.

Kan., Independence—Making plans and soon takes bids grading and bituminous macadam surfacing 5.141 mi. Independence-Caney Rd., 18 ft. H. K. Hibbard, co. engr.

Kan., Wellington—Making preliminary plans grading and paving 9th St. from Washington to C Sts., 11th St. from Washington to C Sts. and from B to A Sts.; repairing asphaltic concrete pavements on Harvey St. from Washington St. to Rock Island tracks. $30,000.

Mo., Columbia—Making plans improving 5,600 ft. Bway., Locust St., Turner and Garth Aves. $50,000.

Mo., East Prairie—Making preliminary plans grading and paving 2,900 ft. Washington and Locust Sts., 18 ft. $26,000.

Mo., St. Louis—Community Estate Corp. making plans street and sewer work, $125,000. Pitzmans Co. of Surveyors & Engineers, 915 Chestnut St., engrs. Contract for 60,000 cu.yd. grading, average haul 400 ft., to O. Finar, Southwest and Sublette Aves., $0.19 per cu.yd.

Tex., Center—Takes bids about Sept. 15, paving various streets, 40,000 sq.yd. concrete and 10,000 sq.yd. asphalt on gravel. $125,000. I. R. Titus, c/o Titus & Dillon, Center, engr. Noted Aug. 9.

Tex., Corsicana—Navarro Co. defeated $4,500,000 bonds for improving highways. A. P. Mays, co. judge. Noted June 28.

Tex., Floresville—Wilson Co. voted $100,000 bonds for hard surfacing 15 mi. highway, 18 ft. Noted July 19.

Tex., Laredo—Webb Co. election Aug. 25, to vote on $250,000 bonds to be supplemented by $380,000 from State Hy. Comn. for topping 33 mi. road from here toward San Antonio and from here to Mirando Oil Fields, also gravel extension from here toward Corpus Christi, 18 ft.

Tex., Riogrande—E. Garza, judge Starr Co. takes bids in September for grading and gravel surfacing 32 mi. and grading 16 mi. $350,000.

Tex., San Angelo—Tom Green Co., plans grading and surfacing with macadam base and bituminous topping 9.7 mi. Carlsbad Rd. 18 ft. $64,500. G. Gilchrest, San Angelo, engr.

Tex., Sulphur Springs—Hopkins Co. voted $50,000 bonds improving Ridgeway Rd. Dist. Rd. from Precinct 1 to Hunt Co. line. R. E. Bertram, co. judge.

New Mexico—State Highway Dept., Santa Fe, plans gravel surfacing 34.343 mi. Federal Aid Project 106, Otero Co., engrs. est. $219,990 (Federal aid $135,294). J. A. French, state highway engr.

Calif., Arcata—Having plans prepared paving 12 blocks various streets, 5 in. asphaltic concrete, 2 courses. W. S. Farley, Monadnock Bldg., San Francisco, engr.

Calif., Los Angeles—Having plans prepared grading, curbing, sidewalks and 6 in. concrete paving 1 mi. Compton Ave. between Vernon Ave. and south city limits. $80,000. J. A. Griffin, city engr.

Calif., Oakland—Had plans prepared improving portions Alcatraz Ave., 127,202 sq.ft. grading, 8,260 sq.ft. concrete gutter, 118,237 sq.ft. bituminous concrete, etc.; Madison St. between 1st and 7th Sts., 75,066 sq.ft. grading, 2,601 sq.ft. concrete gutter, 72,455 sq.ft. asphaltic concrete, etc. W. W. Harmon, city engr.

Calif., Santa Barbara—Santa Barbara Co. to vote on $200,000 bonds constructing Lompoc-Harris Rd.

Que., Montreal—Plans asphalt pavements as follows: 1,331 ft. Rosemount Blvd., 23-46 ft., $14,884, 1,704 ft. DeGaspe St., 28 ft., $15,215, 6,077 ft. Notre Dame St., 41-46 ft., $142,036, 1,100 ft. Darling St., 30 ft. $15,000; asphalt and block pavements on 1,000 ft. Brennan St., 31-37 ft., $35,060, 702 ft. Rose de Lima St., 33-35 ft., $16,424, 2,218 ft. Jacques Hertel St., 36 ft., $65,050, 160 ft. Francois Barry St., 30 ft., $4,212, 1,550 ft. DeLa Roche St., 36 ft., $34,200; concrete sidewalks on 125 ft. St. Joseph Blvd., 8 ft., $723, 480 ft. Marcil Ave., 4 ft., $1,970, 360 ft. Goulet St., $178, 1,700 ft. Gouin Blvd., 6 ft., $11,170, 26,165 ft. 3rd, 2nd, Grey, Old Orchard and Harvard Aves., D'Aragon, DeLaRoche, Valmont, Hochelaga, Boyer, De Normanville, St. Andree and Henri Julien Sts., all 5 ft., $112,180; cement slab sidewalks on 14,340 ft. Queen Mary Rd., Chabot, Marquette and Cartier Sts., 4 ft. $11,262. E. Gauthier, asst. city clk.

Ont., Georgetown—Plans 9,000 sq.yd. concrete pavement and 8,000 lin.ft. concrete curb. $25,000. R. Smith, Oakville, engr.

BIDS DESIRED

Vermont—Aug. 23, by T. W. Dix, ch. engr. Dept. of Highways, Montpelier constructing 1.33 mi. concrete road in Windsor and 1.85 mi. road in Ferrisburg incl. 62 ft. steel truss bridge. Former bids rejected. Adv E. N.-R., Aug. 16. Noted July 26.

Massachusetts—Aug. 21, by State Hy. Comn., Boston, paving 16,457 ft. road in Gay Head, bituminous macadam, $150,000; 2,755 ft. in Bourne, bituminous macadam $30,000; 9,165 ft. in Hingham, bituminous concrete and bituminous macadam, $100,000. All 18 ft. W. F. Williams, ch. engr.

Connecticut—Aug. 23, by J. A. MacDonald, state highway comr., Hartford, 6,413 ft. Bethlehem-Woodbury Rd.; 18,191 ft. in towns of Clinton and Madison, 3,700 ft. in Farmington, 18,122 ft. in Kent, 10,480 ft. in Mansfield, 28,240 ft. in New Hartford, 5,518 ft. in Plainville, 15,800 lin.ft. in Putnam and 19,250 ft. in Trumbull; 24 ft. rein.-con. girder bridge in Canton; adv. E. N.-R. Aug. 16.

N. Y., New York—Aug. 23, by J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving Riverside Dr., West 68th, West 69th, West 83rd, 93rd, East 97th and West 108th Sts.

N. J., Freehold—Sept. 5, by Bd. Freeholders Monmouth Co., rein.-con. paving Riverside Dr., Rd. 52, Sect. 1, and Red Bank-Oceansport Rd. 45, Sect. 1. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. E. N.-R. Aug. 16.

N. J., Morristown—Aug. 29, by Bd. Freeholders Morris Co., constructing section of Parsippany-Littleton Rd., Hanover Twp., also road from Long Valley to Hunterton Co. line Rd., Washington Twp., rein.-con. W. H. Hosking, clk.; adv. E. N.-R. Aug. 16.

North Carolina—Aug. 29, by State Hy Comn., Raleigh, grading and hardsurfacing (concrete or asphaltic paving) various projects in Perquimans, Pitt, New Hanover, Alamance, Rockingham, Anson-Union, Iredell, Forsyth and Buncome Counties; topsoil, sand clay, gravel or grading projects in Franklin and Warren Counties. C. M. Upham, state highway engr.; adv. this issue.

Florida—Aug. 28, by State Rd. Dept., Tallahasse, grading and surfacing 7.121 mi. road from Wabasso to Sebastian River, Project 36 B, St. Lucie Co.; 9,517 mi. from Brooksville to Pasco Co. Line, Project 545, Hernando Co. Alternate bids on bituminous macadam on 8 in. rock, sheet asphalt with binder course on 8 in. rock or plain concrete. W. F. Cocke, state highway engr.

Fla., Pensacola—Aug. 28, Bd. Comrs. Escambia Co., grading and rein.-con. paving 7 mi. road. W. E. Wheat, co. engr.; adv. E. N.-R. Aug. 16.

Alabama—Sept. 11, by State Hy. Comn., Raleigh, improving 10.208 mi. highway between Center and Gadsden, Federal Aid Project 137, Cherokee Co., 35 acres clearing, 80,680 cu.yd. common and 5,341 cu.yd. solid rock excav., 88,940 sta.yd. overhaul, 788 cu.yd. concrete, 82,914 lb. reinforcing, 10,526 cu.yd. gravel surfacing, 1 mi. haul, 17,000 cu.yd. ½ mi. additional haul, 15,713 cu.yd. chert, 1 mi. haul, 60,000 cu.yd. chert ½ mi. additional haul, etc., $130,200; 1.83 mi. between Decatur and Cullman, Federal Aid Project 83, Sect. B, Morgan Co., 5,500 cu.yd. crushed stone base, 14,582 sq.yd. bituminous concrete, etc., Bridges at Sta. 27-03, 97 cu.yd. concrete, 3,400 lb. reinforcing, etc., $40,000; 11.195 mi. between Attalla and Gadsden, Federal Aid Project 104, Sects. C and D, Etowah Co., 8,500 cu.yd. excav., 6,900 sta.yd. overhaul, 13,300 sq.yd. concrete base, 12,400 sq.yd. asphaltic concrete, 100 cu.yd. brick pavement, 4,000 lb. reinforcing, etc., $45,000; 6.129 mi. between Russellville and Phil Campbell, Federal Aid Project 35, Sect. B, Franklin Co., 19 acres clearing, 36,408 cu.yd. common and 20,220 cu.yd. solid rock excav., 2,201 sta.yd. overhaul, 455 cu.yd. concrete, 38,922 lb. reinforcing, 17,000 cu.yd. local gravel surfacing, one mi. haul, 7,300 cu.

Streets and Roads (Continued)

yd., ½ mi. additional haul, 5,100 cu.yd. clay binder, 8,500 cu.yd. gravel to be screened, 65,000 sq.yd. mixing gravel and clay, etc., $180,000; 19.815 mi. between Double Springs and Haleyville, Federal Aid Project 133, Winston Co., 90,712 cu.yd. common and 4,984 cu.yd. solid rock excav., 3,432 sta.yd. overhaul, 394 cu.yd. concrete, 27,266 lb. reinforcing, 47,000 cu.yd. local gravel, 1 mi. haul, 700,000 cu.yd. gravel ½ mi. additional haul, etc., $411,884. W. S. Keller, state highway engr.

Tenn., Pulaski—Aug. 23, paving 13,000 sq.yd. various streets, rock asphalt on limestone. $25,000. B. H. Klyce 4th and 1st Natl. Bank Bldg., Nashville, engr. Noted July 19.

Ky., Henderson—Aug. 21, by Comr. Pub. Wks., improving Green and 2nd Sts.; adv. E. N.-R. Aug. 16.

Ky., Louisville—W. S. Campbell, chn, building com., Bd. of Tuberculosis Hospital, 2910 High St., receiving bids 50,000 cu.yd. grading for Waverly Hill Sanatorium. To exceed $25,000.

Ohio—Aug. 24, by Dept. Highways and Pub. Wks., grading, bridging and paving 56.379 mi. roads in Brown, Defiance, Hardin, Harrison, Highland, Jefferson, Lawrence, Morgan, Morrow, Perry, Putnam, Stark, Trumbull, Belmont, Columbiana, Clermont, Greene, Paulding and Portage Counties, various materials; curbing 14.77 mi. roads in Coshocton, Crawford, Hancock and Mahoning Counties; widening 2.67 mi. roads in Richland Co.; grading and graveling Sect. "R" Zanesville-Dresden Rd. and Sect. "A" Newark-Coshocton Rd., both Muskingum Co.; bridge approaches on road in Brown Co.; bridges in Brown and Lawrence Counties. A. V. Donaheys, dir. highways.

O., Columbus—Aug. 21, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 370 ft. Gates St. and 1,174 ft. 18th St., both 24 ft., and 3,453 ft. Hanford St., 36 ft., brick or asphalt; 1,621 ft. alley north of Indiana Ave., 15 ft., 705 ft. alley north of McMillan Ave. and 896 ft. alley west of Linwood Ave., both 20 ft., brick or concrete; 475 ft. 5th St., 20 ft., asphalt, concrete or brick; 6,955 ft. 8-24 in. vitr. sewers in Emerick and 3rd Sts., alley north of Hosack St., alley north of Hinkle Ave. and alley north of Cleveland Ave.

Michigan—Aug. 20, by State Hy. Dept., Lansing, grading and surfacing 4.197 mi. Federal Aid Project 50 Sect. B, Monroe Co., 41,579 cu.yd. excav., 49,185 sq.yd. concrete, also Bridge 580902, 60 ft. span near LaSalle, Monroe Co., 199 cu.yd. rein.-con., 677 cu.yd. concrete, 28,550 lb. reinforcing steel. F. F. Rogers, state comr.

Michigan—Aug. 23, by State Hy. Dept., Lansing, grading and surfacing 1.92 mi. State Trunk Line Rd. 10-21, Sect. D, Iosco Co., 11,269 cu.yd. excav., 17,848 sq.yd. gravel. F. F. Rogers, state comr.

Ill., Chicago — Aug. 24, by Bd. Local Impvts., 207 City Hall, paving streets and alleys. $87,300. C. D. Hill, ch. engr.

Ia, Mt. Pleasant—Sept. 1, by Auditor Henry Co., grading 7.26 mi. road from here west, 161,684 cu.yd. excav., 5,732 ft. 6 in., 7,870 ft. 8 in. and 530 ft. 12 in. tile, etc. C. E. Smith, co. engr.

Kan., Garnett—Aug. 31, by Clerk Anderson Co., grading and gravel surfacing 8.474 mi. King of Trails, Federal Aid Project 113, Sect. B. F. T. Bonebrake, co. engr. Noted July 26.

South Dakota — Aug. 28, by State Hy. Dept., Pierre, improving roads, **(F. A. P. 105, A Brown means Federal Aid Project 105 A Brown Co.)**, grading 7.27 mi. F. A. P. 105 A, Brown, 52,924 cu.yd. excav.; 2 mi. F. A. P. 105 B, Brown Co., 6,895 cu.yd. excav.; 14.58 mi. F. A. P. 142, Brown, 117,680 cu.yd. excav.; 11.74 mi. F. A. P. 134, Douglas, 90,607 cu.yd. excav.; 14.29 mi. F. A. P. 141, Hughes, 133,572 cu.yd. excav.; 6.88 mi. F. A. P. 147, Hutchinson, 50,966 cu.yd. excav.; 10.35 mi. F. A. P. 75 B, Perkins, 83,866 cu.yd. excav.; 7.37 mi. F. A. P. 157, Jones, 93,550 cu.yd. excav.; graveling 8.76 mi. F. A. P. 136 Hamlin, 13,133 cu.yd. gravel; also one 45 ft., one 120 ft. and one 84 ft. concrete and steel viaducts on F. A. P. 134, Douglas, one 64 ft., one 66 ft. and one 96 ft. viaduct on F. A. P. 141, Hughes. F. D. Hudgins, state engr.

Ark., Little Rock—Aug. 20, by J. Jung, chn. Street Impvt. Dist. 343, c/o Kingworthy and Kingworthy, Boyle Bldg., grading, paving and sewers in East 14th and McAlmont Sts., 11,500 sq.yd. concrete, 5,500 cu.yd. earth excav., 3,000 lb. reinforcing steel, etc. Ford & McCrea, Gazette Bldg., engrs.

Tex., Angleton—Aug. 24, by J. T. Loggins, judge Brazoria Co. grading and shell surfacing 6 mi. State Highway 19 A, 49.3 cu.yd. concrete, 2,710 cu.yd. borrow excav., and 15,044 cu.yd. shell. $50,000. E. N. Gustafson, engr.

Tex., Beaumont — Aug. 31 (change of date), by B. B. Johnson, judge, Jefferson Co., rein.-con. paving 7.35 mi. State Highway 40 (Voth Rd.). $315,000. A. C. Love, co. engr. Noted July 19.

Tex., Bonham—Aug. 27, by S. E. Neilson, Judge Fannin Co., grading and rein.-con. surfacing 7.35 mi. State Highway 5, Federal Aid Project 344, 1,016.9 cu.yd. concrete, 77,196 sq.yd. concrete pavement, 51,549 cu.yd. roadway and 40,087 cu.yd. borrow excav., etc. $292,228. P. B. Price, Honey Grove, engr. Noted May 31.

Tex., Brenham—Aug. 28, by J. H. Chappell, judge Washington Co., grading and bridging 19.2 mi. Brenham-Washington Rd., 18 ft., $200,000; 17.3 mi. State Highway 36, Federal Aid Project 358, 24 ft. $185,000. G. A. Bracher, co. engr. Noted July 19.

Tex., Johnson City—Aug. 23, by W. Martiney, judge Blanco Co., grading and gravel surfacing 7.19 mi. State Highway 20 A, from Hays Co. Line west, 95.5 cu.yd. concrete 30,130 cu.yd. borrow, 44,642 cu.yd. roadway, 1,242 cu.yd. loose and 6,238 cu.yd. solid rock excav., 12,271 cu.yd. gravel, etc., $58,000; grading and shale adobe surfacing 5.53 mi. State Highway 20 A, 143 cu.yd. concrete, 29,276 cu.yd. roadway, 28,795 cu.yd. borrow 11,527 cu.yd. shale adobe, etc., $50,000. J. W. Puckett, co. engr.

Tex., Paris—Aug. 28, by W. D. Lawrence, judge Lamar Co., grading and paving 2.54 mi. State Highway 5, 16.7 cu.yd. concrete, 3,353 cu.yd. roadway and 9,150 cu.yd. borrow excav., 27,356 sq.yd. concrete, etc. $75,000. W. M. Fooshee, co. engr.

Tex., Vernon—Aug. 22, by E. L. McHugh, judge Wilbarger Co. concrete surfacing 24,176 sq.yd. State Highway 5, Federal Aid Project 276 C, $80,000; concrete paving 6,007 sq.yd. County Project 2, north of here, $26,000. J. B. Nabors, co. engr. Noted Aug. 9.

Okla., Barnsdall — Aug. 21, by J. C. Blankenship, city clk., grading and paving 4th and 7th Sts., 5,300 sq.yd. vertical fibre brick, 2,700 lin.ft. concrete curbing, 2,700 lin.ft. concrete gutter, 1,250 cu.yd. excav., etc. $32,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Marlow—Aug. 27, by G. L. Orr, city clk., grading and paving Bway and Main Sts., 30 ft., 13,900 sq.yd. asphalt, 13,170 lin.ft. curbing, etc. $73,815. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

New Mexico — Aug. 24 by State Hy. Comn., Santa Fe, constructing 15.29 mi. Artesia-Lakewood Rd., Federal Aid Project 116, Eddy Co., 34,591 cu.yd. Class 1 excav., 17,016 cu.yd. Class 1 borrow, 30,318 cu.yd. 2 course gravel surfacing, 154.4 cu.yd. Class A concrete for bridges, 15,188 lb. reinforcing 22,099 ft. wooden superstructure; 32.413 mi. Carlsbad-Lovington Rd., Federal Aid Project 18, Eddy Co., 4,587 cu.yd. Class 1 excav., 10,143 cu.yd. Class 1 borrow, 23,020 cu.yd. one course caliche or gravel, 15.7 cu.yd. Class A concrete for bridges, 5,109 ft. wooden superstructure, etc.; 13.333 mi. road east from Cap Rock, Federal Aid Project 30-A, Lea Co., 18,603 cu.yd. Class 1 excav., 4,302 cu.yd. Class 2 excav., 23,929 cu.yd. Class 1 borrow, 27,841 cu.yd. 2 course crushed caliche, etc.; 12.128 mi. road west from Tatum, Federal Aid Project 30-B, Lea Co., 21,640 cu.yd. Class 1 excav., 19,135 cu.yd. Class 1 borrow, 25,254 cu.yd. 2 course crushed caliche, etc.; 11.581 mi. Valmont-Escondido Rd., Federal Aid Project 49, Otero Co., 11,301 cu.yd. Class 1 borrow, 13,589 cu.yd. 2 course gravel surfacing, etc.; 56.907 mi. Gladstone-Clayton Rd., Federal Aid Project 58, Union Co., 25,104 cu.yd. 2 course caliche, 3,027 cu.yd. clay plating, etc.; 54.058 mi. Clayton-Nara Visa Rd., Federal Aid Project 59, Union Co., 42,013 cu.yd. 2 course caliche, 9,863 cu.yd. clay plating, etc. J. A. French, state highway engr.

Utah, Nephi—Aug. 20, by State Rd. Comn., Salt Lake City, grading and paving Main St., here, Federal Aid Project 53, 18,880 sq.yd. concrete, 2,200 cu.yd. earth and 1,600 cu.yd. borrow excav. $50,000. H. C. Means, state road engr.

California—Aug. 27, by State Hy. Comn., Sacramento, improving 1.1 mi. road between Roseville and Lincoln, Placer Co., 2,675 cu.yd. concrete, etc.; paving with waterbound macadam shoulders 8.1 mi. between west boundary and Banta, San Joaquin Co., 13,700 tons broken stone in shoulders; improving road between Santa Clara River and point 1/5 mi. east, Los Angeles Co., 600 cu.yd. embankment, 640 yd. concrete. R. M. Morton, state highway engr.

Calif., San Diego — Sept. 4, by A. H. Wright, city clk., paving 12th St. Extension in Balboa Park, 2,140 cu.yd. excav. and 159,142 sq.ft. paving, bids on 1½ in. warrenite bitulithic on 3 in. bituminous, 1½ in. Topeka mixture asphalt (Willite process) on 3 in. asphaltic concrete (Willite process) and 1½ in. asphaltic concrete on 3 in. bituminous. F. A. Rhodes, city engr.

Quebec—Aug. 30, by J. L. Boulanger, deputy minister Dept. Rds., Quebec, graveling 48,663 ft. Iberville-St. Albans Highway. G. Henry, c/o Dept. Rds., engr.

BIDS RECEIVED

N Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Aug. 9, sheet asphalt repaving Edgecombe Ave., from Interboro Asphalt Co., 2306 Creston Ave., $62,094; West 63rd St., from Sicilian Asphalt Paving Co., 41 Park Row, $4,359; East 107th St., from C. D. Beckwith, Inc., 2875 Bway., $32,395; 109th St., from Brusstar Constr. Co., Harlem River and 150th St., $41,810; widening and sheet asphalt repaving 56th St., from W. J. Fitzgerald, 547 West 45th St., $48,924. Noted Aug. 2.

Pennsylvania—State Hy. Dept., Harrisburg, surfacing and improving roads, **(A means Application and R means Route)** 23,470 ft. R. 86 and 272, A. 2327 and 2328, Fairview Twp. and Boro., Erie Co., from Mayer Bros. Constr. Co., 312 Commerce Bldg., Erie, $152,595; 7,881 ft. A. 1242 and 1249, Chichester Twp. and Trainer Boro., Delaware Co., from Highway Constr. Co., Phila., $81,601; 16,310 ft. R. 133, Marple and Newtown Twps., Delaware Co., from Highway Constr. Co., Phila., $122,749; 14,953 ft. R. 95, spur, A. 2273, Wetmore Twp., McKean Co., from J. C. Devine Co., Alliance, O., $154,271; 7,051 ft. A. 2452, Pocono and Paradise Twps., Monroe Co., from W. E. Supplee, Wayne, $54,946; 34,422 ft. A. 2355, Lower Mt. Bethel Twp., Northampton Co., from Ambler-Davis Co., Harrison Bldg., Phila., $273,566; 17,527 ft. A. 2227 and 2228, Upper Nazareth and Bushkill Twps., Northampton Co., from Juniata Co., 410 Empire Bldg., Phila., $175,201; 612 ft. A. 2431, Burrell Twp., Indiana Co., from A. R. Cooper, Idamar, $14,254; 10,855 ft. R. 247, Dunbar Twp., Fayette Co., from W. H. Wilkey, 317 Fayette Title & Trust Bldg., Uniontown, $88,377; 2,303 ft. A. 2578, Center and Hopewell Twps., Beaver Co., from D. W. Challis & Sons Inc., 420 Centennial Ave., Sewickley, $36,055; 11,202 ft. R. 73, Center and Butler Twps., Butler Co., from C. E. Walter, Butler, $118,849; 23,776 ft. R. 295, A. 2316-17 and 18, Elk Creek and Conneaut Twps., Erie Co., from C. H. Fry Constr. Co., 609 West 19th St., Erie, $176,826; 13,977 ft. R. 196, Richmond and Covington Twps., Tioga Co., from A. W. Hinaman, Canton, 12,017 ft. R. 111, Franklin Twp., Greene Co., from Myers Paving Co., Waynesburg, $37,394. Noted July 26.

Pennsylvania—State Hy. Dept., Harrisburg, Aug. 8, surfacing and improving roads, **(A means Application and R Route)** 12,994 ft. R. 247, Perry Twp., Fayette Co., from Garvey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $68,610; 15,659 ft. R. 2, Point Twp., Northumberland Co. and Mahoning Twp., Montour Co., from T. B. Evans, 344 Ferry St., Danville, $182,878; 3,749 ft. R. 124, A. 2178, Dover Boro., York Co., from Warren Bros. Co., 9 Cambridge St., Boston, Mass., $73,379; 6,397 ft. R. 167, A. 2195, East Stroudsburg Boro., Monroe Co., from Standard Bitulithic Co., 50 Church St., New York City, $118,518; 18,206 ft. A. 2573, 74 and 75, Springfield, Marple and Upper Providence Twps., Delaware Co., from V. Di Francesco, 17 Mifflin Ave., Llanerch, $176,287; 7,272 ft. R. 108, North Strabane Twp., Washington Co., from Garvey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $46,110; 15,654 ft. R. 211, A. 2369, Otto and Foster Twps., McKean Co., from D. L. Dennis, Eldred, $139,729; 7,731 ft. R. 258, A. 2357, Washington Twp., Erie Co., from W. B. Constr. Co., 909 Cascade St., Erie, $61,968; 27,876 ft. R. 258, A. 2331-32 and 34, Mill Creek, Summit and McKean Twps., Erie Co., from Johnson, Drake & Piper, Inc., Slippery Rock, $208,189; 42,580 ft. A. 2222-23 and 24, Washington and Plainfield Twps., Northampton Co., from W. G. Raub, Red Lion, $378,233; 3,199 ft. R. 1, Halifax and Upper Paxton Twps., Dauphin Co., from Bennett Randall Co., Lebanon; 1,030 ft. A. 2513, Montrose Boro., Susquehanna Co., from E. V. Chappell, 27 Wall St., Binghamton, N. Y., $15,209; 20,005 ft. R. 175, Upper Nazareth Twps., Northampton Co., from Juniata Co., 410 Empire Bldg., Phila., $111,190; 3,666 ft. R. 163, Slatington Boro., Lehigh Co., from S. N. Weaver known as Nicholasville Rd., State Project 23, Sect. A1, town, $64,697. Noted July 26.

Delaware—State Hy. Dept., Dover grading and paving 4.58 mi. road from Kirkwood to Tybouts Corner, CN-13, from Van Auken & Robbins, Theendara, N. Y., 35,000 cu.yd. excav. $0.95, 7,880 cu.yd. concrete $15.10, etc., total $184,398; 0.91 mi. road

Streets and Roads (Continued)

from Dupont to Dagsboro, CS-28, from Hannaman-Burroughs Co., Salisbury, Md., 2,600 cu.yd. excav. $1.30, 1,650 cu.yd. concrete $15, etc., total $29,675. Noted July 26.

Maryland—State Rds. Comn., Baltimore, Aug. 7, paving 1 mi. road from Jarrettsville toward Federal Hill, Harford Co., Contr. H-32, 9,000 sq.yd. concrete, from Clarke & Bresnan, American Bldg., Baltimore, $32,112. Noted Aug. 2.

O., Cleveland — Cuyahoga Co., Aug. 4, grading and paving 10,404 cu.yd. Highland Rd., concrete, from P. Di Giora, 4826 Pearl Rd., $38,501; Sprague Rd. 1, from Lake Erie Constr. Co., Perry Payne Bldg., $41,322, Sprague Rd. 3, from Hill & Hill, Pavers Exch., Society for Savings Bldg., $65,543. Sprague Rd. 1 and 3 involve 28,400 lin.ft. 4 in. tile gutter and 27,400 cu.yd. concrete. Noted Aug. 2.

O., Cleveland Heights (Warrensville, P. O.)—Grading, curbing and asphalt paving Rushleigh and Pembrook Rds., from Spence Bros., 2740 Random Rd., Cleveland, $24,562 and $26,533 respectively; Winsford and Dresden Rds., from Rieley Bros., The Arcade, Cleveland, $21,037 and $13,530 respectively.

Michigan — State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 125, Gratiot Co., 22,288 cu.yd. excav., 56,731 sq.yd. concrete, from Holmes, Crane & Bartling, Alma, $123,962.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.285 mi. State Trunk Line Rd. 37-5, Sects. A, B and E, Barry Co., 11,451 cu.yd. excav., and 26,011 sq.yd. concrete, from W. Neafe & Son, 117 Catherine St., Kalamazoo, $37,470. State furnishes cement.

Michigan—State Hy. Dept., Lansing, grading and surfacing 1,467 mi. State Trunk Line Rd. 65-2, Washtenaw Co., 6,731 cu.yd. excav. and 17,447 sq.yd. concrete, from Ann Arbor Asphalt Co., Ann Arbor, $42,119.

Michigan—State Hy. Dept., Lansing, improving roads, **(S. T. L. Rd. 47-8, and 21-10, Sect. A, Shiawassee means State Trunk Line Rd. 47-8 and 21-10, Sect. A, Shiawassee Co.)**, grading and surfacing **1.451 mi. S. T. L. Rd. 47-8 and 21-10, Sect. A, Shiawassee Co.**, from Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $32,037; **6.88 mi. S. T. L. Rd. 66-17, Sects. A and B, Kalhaska**, from J. Davidson & Sons, Farwell, $69,457; **1.324 mi. S. T. L. Rd. 37-2, Sect. A, Barry**, from A. E. Green, 47 Union Ave., N. E., Grand Rapids, $21,392; **(F. A. P. 49, Sect. A, Cass, means Federal Aid Project 49, Sect. A, Cass Co.) 6.531 mi. F. A. P. 49, Sect. A, Cass)**, from Lenderink & Baker, 501 Kalamazoo Natl. Bank Bldg., Kalamazoo, $102,469; **1.25 mi. F. A. P. 68, Sect. C, Clinton**, from Sager Bros., 308 Weber St., Saginaw, $34,384.

Mo., St. Louis—Bd. Pub. Serv., City Hall, Aug. 7, from Frazier-Davis Constr. Co., Arcade Bldg., grading, surfacing and installing water pipe along private right of way from Hog Hollow Rd. to site of new waterworks at Howards Bend, Clayton Co., 31,850 cu.yd. embankment $0.35 per cu.yd., 2,010 cu.yd. cinders $2.40, 6,800 cu.yd. macadam $3.80, 6,700 ft. 6 in. pipe $0.60, total $46,332.

Tex., Ft Worth—Tarrant Co. surfacing 2.64 mi. State Highway 40, bituminous macadam on crushed stone, (a) rock asphalt, (b) 1 in. Amesite, from T. A. Griffin Constr. Co., 411 North Texas Bldg., Dallas, (a) $34,312; Genl. Constr. Co., 403 Cotton Exch. Bldg., (b) $44,228. Above prices include bid of Tarrant Co. for constructing base at $15,164. Engrs. est. $65,000.

Calif., San Diego—Common Council, improving 30th St. between Adams and University Aves., from Griffith Co., 25 14th St., 281,941 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete at $0.192 per sq.ft., etc., total $54,329. Noted June 14.

Calif., San Mateo—Improving portions 1st, 2nd and 3rd Aves., etc., from Galbraith & Jones Yuba City, 323,000 sq.ft. 5 in. concrete pavement at $0.189 per sq.ft., 6,000 yd. excav. $1.49, 14,500 ft. concrete curb $0.50, 3,500 sq.ft. concrete approach $0.24, 2,725 sq.ft. concrete walks $0.20, etc. Noted Aug. 2.

Calif., Stockton — City Council, from Clark & Henery Constr. Co., 38 South Sutter St., improving East Main and East Lafayette Sts., etc., 11,412 lin.ft. concrete curb and gutter, 55,836 sq.ft. concrete walks, 191,911 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, $68,054, streets in City Park terrace, 9,417 cu.yd. excav., 8,657 lin.ft. concrete curb and gutter, 51,265 sq.ft. sidewalks, 163,408 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, $53,364; from J. E. Johnson, Commercial & Savings Bank Bldg., improving East Main, A, B and C Sts., etc., 7,541 lin.ft. concrete curb and gutter, 28,396 sq.ft. concrete walks, 115,448 sq.ft. 2 in. asphaltic concrete on 3 in. crushed rock, 13,229 sq.ft. 2½ in. crushed rock and 2½ in. asphaltic concrete base, 2 in. asphaltic concrete surface, etc., $39,339. Noted May 17.

CONTRACTS AWARDED

Vermont—Dept. of Highways, Montpelier, constructing 3.03 mi. gravel road in Randolph, Federal Aid Project 40, 24,067 cu. yd. earth excav., 6,258 cu.yd. sub-base of field or quarry stone, 6,520 cu.yd. gravel surface course, to McCabe & Giovannini, Boston, $78,450; 3,850 ft. Morrisville-Hardwick Rd., 21 ft., in Wolcott, with one 80 ft. steel truss bridge, Federal Aid Project 37, and 0.3 mi. Lamoile River Rd., in Hyde Park, with 64 ft. concrete arch bridge, Federal Aid Project 39, to Guild & Douglas, Springfield, $19,413 and $15,729 respectively. Noted July 26.

Massachusetts—State Hy. Dept., Boston, paving 7,700 ft. road in Framingham, 20 ft., bituminous macadam, to R. H. Newell Co., Uxbridge, $49,010. Noted July 26.

Massachusetts—State Hy. Comn., Boston, paving 21,521 ft. road, 18 ft., in Rochester and Wareham, bituminous macadam, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $152,576.

Mass., Medford — Street Comn., paving 23,000 sq.yd. Arlington St. and Winthrop Sq., bituminous macadam, to Coleman Bros., Inc., 245 State St., Boston, $2.25 per sq.yd.

New York—Bd. Water Supply, Municipal Bldg., New York City, clearing and grubbing Schoharie Reservoir and constructing diverting dam down-stream from intake of Shandaken tunnel in towns of Gilboa and Conesville, Schoharie Co., Prattsville, Greene Co., and Roxbury, Delaware Co., Contr. 205, to Rice & Ganey, Inc., Grand Central Terminal, New York City, $290,800. Noted Aug. 9.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading sidewalk space and laying sidewalks on Clermont Ave., to J. J. O'Brien, Jr., William St., Jamaica, $1,346; curbing, laying sidewalks, etc., on Forest Ave. and recurbing, etc., George St. to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $5,105 and $6,665 respectively; repaving with improved granite blocks Grand St., to Kennedy & Smith, Inc., 93 Amity St., Flushing, $95,867; grading, curbing and laying sidewalks on Provost St., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, $10,549; curbing and laying sidewalks on Graham Ave., to W. J. Fitzgerald, 547 West 45th St., New York City, $26,507. Noted July 26.

N. J., Mays Landing—Atlantic Co., Guarantee Trust Bldg., Atlantic City, repairing or reconstructing Absecon Blvd., also additions to 9 bridges, to C. H. Earle, Chelsea Bank Bldg., Atlantic City, $935,712. Noted Aug. 13.

Maryland — State Hy. Dept., Baltimore, concrete surfacing 1.01 mi. road from Crellin to West Virginia state line, Garrett Co., Contr. G-16, to Monongahela Constr. Co., Fairmount, W. Va., $35,791; 1.35 mi. in Wicomico Co., Contr. Wi-23, to P. D. Phillips & Bro., Salisbury, $45,427. Noted Aug. 9.

Md., Baltimore—Bd. Awards, 2,100 sq.yd. granite block paving and 17,615 sq.yd. asphalt, Contr. 241-OONA, to Amer. Paving & Contg. Co., Montebello, $81,131. Noted Aug. 9.

South Carolina—State Hy. Dept., Columbia, rock asphalt surfacing Project 222, Union Co., to General Road & Drainage Constr. Co., Liberty Bank Bldg., Columbia, $26,490.

Fla., De Land—For 95,000 sq.yd. concrete paving to Inglis Constr. Co., Jacksonville, at $2.66 per sq.yd., total $300,000.

Fla., Tallahassee—Paving 3.5 mi. North Monroe, North Adams and North Calhoun Sts., North and South Park Ave., 2 in. sheet asphalt on 8 in. Florida lime rock, to Hutton Eng. Co., Atlanta, Ga., $175,054. Noted July 12.

Miss., Aberdeen—Grading and paving 8 mi. North Meridan St. and Darracott Rd., 14 ft., to A. Brannin, Aberdeen. Engrs. est. $100,000.

Miss., Shelby—Bolivar Co. graveling 35 mi. in Shelby Separate Rd. Dist., to L. M. Ellis Co., Shelby, $0.50 first mi. and $0.21 each additional.

Kentucky—State Hy. Dept., Frankfort, constructing 6.1 mi. Lancaster-Richmond Rd., Garrard Co., to E. E. Price & Co., Lexington, $47,404; gravel surfacing using concrete pipe 12.1 mi. Newcastle-Carrollton Rd., State Project 46, Sect. A, Henry, Trimble and Carroll Counties, to Ellis & Smeathers, Owensboro, $271,123, 3.39 mi Lagrange-Newcastle Rd., State Project 19, Sect. A, Oldham Co., to Moynanhan & Turner, Lexington, $69,634; Waterbound macadam surfacing 5.4 mi. Lexington-Nicholasville Rd., State Project 23, Sect. A1, Jessamine Co., to J. H. Hostetter, Lexington, $34,044. Noted Aug. 2.

Ky., Henderson—Warrenite paving Main, Elm, Green and Washington Sts., to Anderson Asphalt Paving Co., Hamilton, O., $175,000.

Ky., Louisville—Gardiner Realty Co., 422 West Liberty St., 30,000 sq.ft. concrete sidewalks, grading and surfacing ½ mi. road, in Garland Sub-division, West End here, to Webb-Clark Co., 422 West Liberty St., $47,000. Noted Aug. 9.

Ind., Jeffersonville—Paving Mechanic St. from 7th to 10th Sts., macadam, concrete sidewalks, to T. O'Neill, Jeffersonville. Engrs. $25,000.

Michigan—State Hy. Dept., Lansing, improving roads **(F.A.P. 89, A, B and C, Calhoun means Federal Aid Project 89, Sects. A, B and C, Calhoun** Co.) grading and surfacing **2.456 mi. F.A.P. 89, A, B and C, Calhoun**, to Rockford Constr. Co., Tecumseh, 12,259 cu.yd. excav. $0.80, 317 cu.yd. 1:2:4 concrete $20, 1,799 sq.yd. 7 in. rein.-con. pavement $1.55, 21,099 sq.yd. 8 in. rein.-con. $1.58, and 6,015 sq.yd. 8 in. special rein.-con. $1.80, total $57,670. **14.654 mi. F.A.P. 73, A, B, D and F, Monroe, Sect. A** to Hudson & Coons, Owasso, 35,377 cu.yd. excav. $0.53, 402 cu.yd. 1:2:4 concrete $25, 884 cu.yd. 1:3:6 concrete $19, total $50,002, **Sect B** to C. L. Dunbar, 7034 Canfield St., Detroit, 54,136 cu.yd. excav. $0.55, 382 cu.yd. 1:2:4 concrete $25, 334 cu.yd. 1:3:6 concrete $20, total $53,404, **Sect. D and F**, to Koch Building and Supply Co., Ann Arbor, 25,871 cu.yd. excav. $0.57, 225.8 cu.yd. 1:2:4 concrete $25, total $30,349; **(S.T.L. Rd. 14-44, Clinton means State Trunk Line Rd. 14-44, Clinton Co.) 5.328 mi. S.T.L. Rd. 14-44 and F.A.P. 124, Clinton** to Bryan & Whitmore, Grand Ledge, 21,447 cu.yd. excav. $0.52, 23,172 sq.yd. gravel surface, Class B, $0.77, 30,819 sq.yd. gravel Class B, $0.58, total $53,144; **1.769 mi. S.T.L. Rd. 11-22, Berrien**, to Woodby, Grandes & Granzon, Benton Harbor, 7,190 cu.yd. excav. $0.70, 21,102 sq.yd. 8 in. rein.-con. pavement $1.60, total $43,827; **1.121 mi S.T.L. Rd. 11-16, Emmet**, to E. Cosene, Levering, $22,251; **1.084 mi. S.T.L. Rd. 17-13, Calhoun**, to Rockford Constr. Co., Tecumseh, $24,769.

Michigan—State Hy. Dept., Lansing, rejected bids Aug. 1, grading and surfacing 5.415 mi. Federal Aid Project 93, Ingham Co., 30,201 cu.yd. excav., 63,419 sq.yd. concrete pavement. Work will be done by day labor. Noted July 26.

Michigan—State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 13-15, Grand Traverse Co., 12,505 cu.yd. excav., 4,851 sq.yd. concrete and 11,583 sq.yd. gravel, to Hersey Gravel Co., Hersey, $26,918.

Ill., McClusky—Grading and concrete paving Alton-Jerseyville Rd., 18 ft., to D. C. Condin, Omaha, Neb., $99,996.

Wis., Milwaukee—Paving, etc., 1,647 cu. yd. Green Bay Ave., vibrolithic concrete, to Czerwinski Constr. Co., 378 16th Ave., $27,412; concrete paving alleys 1,444 sq.yd. to Schwerm Bros., 50 Lee St., $4,508, 2,348 sq. yd. to F. Hildebrand, 1040 23rd Ave., $9,742, 786 sq.yd. to F. Schomann, 770 28th St., $2,206, 7,933 sq.yd. to J. Bluhm & Sons, 1298 Achilles Pl., $23,118, 2,523 sq. yd. to Bodemann Constr. Co., 691 48th St., $15,210, 746 sq.yd. to Clayton Constr. Co., 397 Farwell Ave. $3,025. Noted Aug. 2.

Ia., Jefferson—Greene Co., 8 in. rein.-con. paving, to Empire Constr. Co., 302 Flynn Bldg., Des Moines, road through Scranton, 21,208 sq.yd. concrete $2.45 and 2,905 cu. yd. excav. $0.50, road through Grand Junction, 16,123 sq.yd. concrete $2.34 and 4,978 cu.yd. excav. $0.50. Noted July 26.

Montana—State Hy Comn., Helena, grading, gravel surfacing and building culverts on 5.12 mi. Federal Aid Project 84-C, Roosevelt Co., to Fitzgerald & Staunton, 114 1st Ave., S., Great Falls, $36,885.

Mo., St. Louis—See "Proposed Work."

Mo., St. Louis—Grading, curbing and paving 26,493 sq.yd. streets in Shaws Garden Subdivision, Kentucky rock asphalt, to Webb-Kunze Constr. Co., 5927 Fyler Ave., $112,000. Engrs. est. $115,000.

Ark., Little Rock—Paving Bway. from Markham to 22nd St., Improvement Dist. 340, asphalt on concrete, storm and sanitary sewers, etc.., to Gregory & Wilson, Little Rock. Engrs. est. $195,000.

Tex., Abilene—Curbing and paving 11,000 sq.yd. 7th St. and Sayles Blvd., 6 in. concrete, to Owens & Barbean, Abilene. $2.52 per sq.yd. Engrs. est. $25,000.

Tex., Center—Shelby Co. grading and gravel surfacing 3.57 mi. State Highway 35, 16 ft., to Brown & Root, Georgetown, $26,525. Noted Aug. 2.

Tex., Ft. Worth—Paving Capps St. and Mississippi Ave., etc., 2 in. Warrenite

Streets and Roads (Continued)

bitulithic on 5 in. concrete, to West Texas Constr. Co., Cotton Exch. Bldg., $83,574.

Tex., Temple—Brick paving 8,066 sq.yd. and curbing 3,190 ft., to Panhandle Constr. Co., Lubbock, $27,000. Engrs. est. $30,000.

Oregon—State Hy. Comn., Salem, crushed rock surfacing 12.38 mi. Klamath Falls Highway, 18 ft., Klamath Co., to W. D. Miller, Klamath Falls, $55,025; widening 8.82 mi. of road bed on Swenson-Astoria Sect. Columbia Highway, Columbia Co., to J. Slotte Co., Astoria, $81,232; resurfacing 2 mi. road on Union Co., to Warren Constr. Co., 289 East Salmon St., Portland, $48,649; constructing 4,180 ft. Taylors Ferry Highway, Multnomah Co., 22 ft., to Lundstrom & Carlson, Wircester Bldg., Portland, concrete pipe, $27,964.

Calif., El Cerrito—Improving Potrero Ave., to L. L. Page, 728 Bissell Ave., Richmond, 831 yd. roadway, cut, $0.50, 14,234 ft. sidewalk $0.20, 2,982 ft. concrete curb $0.70, 7,470 ft. concrete gutter $0.25, 30,551 ft. 8 in. macadam $0.1325, etc. Noted Aug. 2.

Calif., Glendale—Grading, curbing, guttering and paving with 1½ in. National on 4 in. asphaltic concrete, Glendale Ave., to P. L. Ferry, 614 Acacia Ave., paving $0.23 per sq.ft. grading $0.045, guttering $0.25, curbing $0.50 per lin.ft., total $157,535. Noted Aug. 2.

Calif., Merced—Grading and paving M St. between 24th and 27th Sts., 1½ in. warrenite on 2½ in. asphaltic concrete, to Valley Paving & Constr. Co., Visalia, $58,500.

Calif., Taft—Concrete curbing, guttering and paving with 5 in. concrete 4th St. between Kern St. and north city limits, to C. W. Wimmer, Taft, $29,350. Noted June 21.

Industrial Works

PROPOSED WORK

N. Y., Brooklyn—L. Gershowitz, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., having plans prepared 1 story, 100 x 100 ft., rein.-con., brick and steel garage, plain foundation, 1st St. $40,000.

N. Y., Buffalo—W. E. Telling, pres. Telling-Belle Vernon Co., 3825 Cedar St., Cleveland, O., plans ice cream factory, here. To exceed $100,000.

Pa., Altoona—Davis Murray Motor Co., 1921 Union Ave., plans 3 story and part basement, 25 x 100 ft. garage and 1 story, 25 x 120 ft. sales building, both concrete, brick and steel, Beals Ave. $100,000. Engineer and architect not announced.

Pa., Bellefonte — Decker Bros., North Spring St., having plans prepared 3 story and basement, 90 x 120 ft. rein.-con. brick and steel garage and service shop. $80,000. Private plans. Noted July 26.

Pa., Hoboken (Blawnox P. O.)—Comrs. Allegheny Co., Court House, Pittsburgh, having plans prepared by S. F. Heckert, Bessemer Bldg., Pittsburgh, 3 story and basement, 70 x 330 ft. concrete addition to workhouse here. $200,000.

Pa., Warren—W. H. Frest Co. having plans prepared 2 story and basement, 40 x 70 ft. brick and steel garage, Liberty Ave. $40,000. Private plans.

W. Va., Dunbar—Dunbar Flint Glass Corp. having plans prepared 1 story, 50 x 120 ft. and 1 story, 40 x 120 ft. glass plant. $125,000. Private plans.

W. Va., Martinsburg—F. Hodgson having plans prepared by H. Westenhaver, 712 South Virginia St., 3 story and basement, 74 x 79 ft. garage, brick and tile, King St. $65,000.

N. C., Charlotte—Etheredge Motor Co., 219 West 4th St., plans garage and sales room, etc. $100,000. Lockwood, Greene & Co., Piedmont Bldg., engrs.

N. C., South Rocky Mount (Rocky Mount P. O.)—Atlantic Coast Line Ry., Wilmington, soon takes bids new shop buildings, here. $500,000. J. E. Willoughby, Wilmington, ch. engr.

Tenn., Lebanon—Lebanon Woolen Mills soon takes bids addition to plant. $150,000. D. W. Southgate, Presbyterian Bldg., Nashville, engr. Noted Aug. 2.

Tenn., Pulaski—Amer. Cigar Co. plans 3 story, 50 x 150 ft., factory. $50,000.

O., Cleveland—Amer. Stove Co., 4415 Perkins Ave., had plans prepared by Carter-Richards Co., Engineers Bldg., 1 story, 72 x 132 ft., brick and steel plant addition, Hough Ave. $40,000.

O., Cleveland—Caxton Co., Caxton Bldg., plans 2 or 3 story printing plant, brick, steel and concrete, Lakeside Ave. To exceed $50,000. D. L. Smith, pres. Engineer and architect not selected.

O., Cleveland—Standard Oil Co. of Ohio, East Ohio Gas Bldg., had plans prepared 1 and 2 story, garage and pumphouse, brick, steel and concrete, Berea Rd., $40,000; also 1 and 2 story, 28 x 80 ft. and 32 x 92 ft. garage, pumphouse, stable and wagon shed, brick, steel and concrete, Babbitt Rd. and St. Clair Ave., $50,000. Private plans.

O., Cleveland—Independent Towel Supply Co., 1822 Central Ave., had plans prepared by Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., 1 story and basement, 35 x 80 ft. boiler house, brick, steel and concrete. $50,000.

Ill., Chicago—Gumbinsky Bros. Co., 2261 South Union Ave., plans paper mill, incl. group of buildings, to cover 20 acres, 31st St. and California Ave. $4,000,000, incl. $1,500,000 worth of equipment. A. Epstein, 2007 Pershing Rd., engr. B. M. Barter, Grand Rapids, Mich., mech. engr.

Ill., Freeport—W. T. Rawleigh Co., 101 South Liberty Ave., having plans prepared by J. R. and E. J. Low, 1st Central Bldg., Madison, Wis., 1 story, 100 x 110 ft. power plant, rein.-con., brick and steel. $200,000.

Wis., Cobb—O. F. Guderian and H. Terens, Markesan, plan 2 story and basement, brick, rein.-con. and stone plant, plain foundation here $50,000. Engineer and architect not selected.

Wis., Green Bay—Green Bay Sugar Co., 123 North Washington St., having plans prepared by A. Bentley & Sons Co., archts., 201-31 Belmont Ave., Toledo, O., 60 x 100 ft. warehouse, steel.

Minn., Austin — Austin Auto Co. having plans prepared 1 story and basement, 85 x 140 ft. garage, etc., brick and concrete, Lansing Ave. $45,000. Private plans.

Kan., Topeka—Illinois Power & Light Co., Illinois Merchants Bank Bldg., Chicago, plans 25,000 kw. generating plant. $3,000,000. A. Lucas, ch. engr. W. A. Baehr, 232 South Clark St., Chicago, engr.

Kan., Topeka—Simplex Rim Co., c/o L. L. Pearce, 3824 East 1st St., Wichita, having preliminary plans prepared 2 story factory. $75,000. Private plans.

Mo., St. Louis—J. F. Queeny, 3453 Hawthorne Blvd., having plans prepared by Mauran, Russell & Cromwell, Chemical Bldg., converting Southern Hotel into garage, 6 story and basement, Bway. $175,000.

Ark., Pine Bluff—Local syndicate c/o J. E. Boyce, Chamber of Commerce, making preliminary plans 2 and 3 story, 10,000 spindle textile mill. $911,683. Private plans.

Tex., Corsicana—Navarro Ice Co. plans plant on South 12th St. along tracks Cotton Belt R. R. $100,000.

Tex., Ft. Worth—Crystal Ice Co., 301 East Magnolia St., plans plant, Arlington Heights. $60,000. Engineer and architect not announced.

Ore., Portland — Pub. Dock Comn., Spaulding Bldg., soon takes bids refrigerating plant and storage room, capable of handling 160,000 boxes of apples, on Municipal Dock 4. G. B. Hegardt, Stark St. Dock, ch. engr.

Calif., Los Angeles—A. L. Stetson, 119 Santa Fe Ave., having plans prepared by Edelman & Barnett, 726 H. W. Hellman Bldg., 4 story and basement, 86 x 260 ft. warehouse, rein.-con., 2nd St. near Santa Fe Ave. $250,000.

Calif., San Francisco — City and San Francisco Co. plan power plant, for distribution of power generated from Hetch Hetchy Project. M. M. O'Shaughnessy, city engr.

Calif., San Francisco — Hale Bros., 5th and Market Sts., had plans prepared by G. de Comesnil, Chronicle Bldg., 8 story and basement, warehouse and loft, rein.-con., Stevenson St. near 5th St. $100,000.

Que., Quebec—Quebec Liquor Comn., P O. Box 1800, Montreal, having plans prepared by Dept. Pub. Wks., Quebec, for bottling plant and warehouse, Dalhousie St. here. $500,000.

BIDS DESIRED

Va., Radford—Radford Motor Co. taking bids 1 story, 50 x 150 ft., garage, brick. Private plans.

Ala., Pell City—E. R. Bukacek receiving bids 1 story, 100 x 175 ft. garage, brick. Private plans.

O., Cleveland—H. Gaffney, treas. Alliance Lumber Co., Sloan Bldg., taking bids 1 story, 92 x 186 ft., brick and steel garage, East 101st St. $50,000. L. Skolnik, 6th-St. Clair Bldg., archt.

Ill., Anna—Aug. 20, by T. S. Thompson, archt., Carbondale, general contract 3 story, brick and rein.-con. factory, here, for Marks & Haas Clothing Co., 1300 Washington Ave. $100,000.

Ill., Chicago—M. Bonlokke, 7508 South Halsted St., receiving bids 72 x 119 ft. garage, fireproof, 7504-6 South Halsted St. $40,000. Kocher & Larson, 6250 South Halsted St., archts.

Ill., Chicago — Ronneberg, Pierce & Hauber, archts., 10 South La Salle St., receiving bids 3 story factory addition, fireproof, for D. O. James Mfg. Co., 112 West Monroe St. $50,000.

Wis., Madison—Chicago & Northwestern Ry. Co., c/o B. R. Kulp, 2015 South Blair St., taking bids 1 story, 50 x 104 ft., brick, rein.—con. and steel power house, plain foundation. $100,000. Private plans. Noted May 31.

Wis., Madison—Claude & Starck, archts., Badger Annex, taking bids 2 story and basement, 66 x 122 ft. garage, rein.-con. and brick, plain foundation, for Madison Nash Co., 155 East Wilson St. $60,000. Noted June 21.

Wis., Milwaukee — A. Seidenschwartz, archt., 290 3rd St., taking bids 1 story, 50 x 77 ft., brick and steel foundry addition, plain foundation, for Milwaukee Steel Fdry. Co., 127 South Water St. $45,000. Noted Aug. 9.

Wis., Portage—R. A. Phillips, archt., Beaver Bldg., Madison, taking bids 2 story and basement, 50 x 70 ft. garage and repair shop, brick and rein.—con., plain foundation, here, for E. Weinke, $40,000. Noted Aug. 2.

N. D., Dunseith—Aug. 28, by State Bd. Administration, Bismarck, 1 story and basement, brick power house. $40,000. Keith & Kurke, Equity Bldg., Fargo, archts.

Mo., St. Louis—H. M. Bixby, State Natl. Bank Bldg., will build 2 story, 95 x 100 ft., brick and concrete shop, Maryland St. $75,000. Work will be done by separate contracts under supervision of P. J. Bradshaw, archt., International Life Bldg.

CONTRACTS AWARDED

Conn., Waterbury—American Brass Co., 1 story, 75 x 210 ft. garage, brick and timber, plain foundation, Freight St., to O. Lacroix Constr. Co., 95 Bank St. Archts. est. $40,000.

N. Y., Brooklyn—Bordens Farm Products Co., Inc., 110 Hudson St., 4 story pasteurization and distributing plant, brick, steel and stone, plain foundation, 3rd Ave., to Perry Reid Co., 348 West 14th St., New York City. Archts. est. $350,000.

N. Y., New York—C. S. Levy, c/o Moore & Landseidel, archts. and engrs., will build 1 story, 100 x 125 ft., brick, steel and stone garage, plain foundation, West 145th St., by day labor. $50,000.

N. Y., New York—New York World, 63 Park Row, 5 story, brick, steel and stone plant, plain foundation, 13 Frankfort St., to W. J. Brush, 32 Union Sq. Archts. est. $150,000.

Pa., Pittsburgh—W. W. Martin, 5847 Center Ave., 1 story and basement, 60 x 190 ft. concrete, brick and tile garage, Penn Ave., to J. G. McClean, 4910 Baum Blvd. Archts. est. $40,000.

O., Cleveland—Mid West Mfg. Co., 3748 East 91st St., 3 story, 48 x 120 ft., brick and steel factory addition, to Dresser-Minton Co., The Arcade. Archts. est. $50,000.

O., Cleveland—Salvation Army, c/o V. Post, 122 West 14th St., New York City, 4 story, 60 x 180 ft., brick, steel and concrete industrial building and hotel, East 55th St. near Longfellow Ave., here, general contract to Van Blarcom Co., Plymouth Bldg. Archts. est. $175,000. Noted March 15.

O., Columbus—Linde Air Products Co., 320 Dublin Ave., 1 story, 106 x 141 ft., concrete, brick and steel factory, Marion Rd., to E. H. Latham Co., 60 East Broad St., $45,000.

Ill., Chicago—H. T. Adams Mfg. Co., 6796 South Chicago Ave., 1 and 2 story, 100 x 125 ft. factory, fireproof, 8561-69 South Chicago Ave., to Carnegie Co., 189 West Madison St. Archts. est. $50,000.

Wis., Madison—University Motor Co., 2201 University Ave., will build 2 story and basement, 50 x 100 ft., garage and repair shop, brick, rein.-con. and steel, University Ave., by day labor. Noted Aug. 2.

Wis., Milwaukee—Milwaukee Tank Wks., 1615 Fratney St., 1 story, 82 x 115 ft., brick and timber shop, plain foundation, to O. C. F. Randolph, 53 West Jackson Blvd., Chicago. Archts. est. $40,000.

Mo., Pierce City—Vance Milling Co. will build 3 story and basement flourmill, 75 bbl. daily capacity, by day labor. $45,000. Private plans.

Calif., San Francisco — Williams Bros. Aircraft Corp., 1211 Van Ness Ave., 1 and 2 story, factory, concrete, 25th St. and Potrero Ave., to Lindgren & Swinerton Co., Inc., Standard Oil Bldg., percentage basis, about $40,000. Noted July 12.

Calif., Sacramento — Sacramento Pipe Wks., R St. near 7th St., 1 story plant, brick, 16th and North B Sts., to I. C. Boss, 2615 K St., $40,000. Noted Dec. 7.

Ont., Toronto—Empire Mfg. Co. Ltd., 160 John St., 7 story and basement, 44 x 122 ft. rein.-con. and brick factory, plain foundation, Spadina Ave., general contract to L. E. Dowling Co., 167 Yonge St. Archts. est. $200,000.

Buildings

PROPOSED WORK

Mass., East Boston (Boston, P. O.)—High School—City of Boston, City Hall, Boston, having plans prepared by J. Gray, 175 High St., Boston, rein.-con. and brick, wood pile foundation, probably 4 story, East Eagle St., here. $1,000,000.

Mass., Hyde Park (Boston, P. O.)—Police Station—Pub. Wks. Dept., Boston, soon takes bids 2 story and basement, 79 x 140 ft., brick and granite with Indiana limestone trimmings, pile foundation, Hyde Park Ave. $200,000. Maginnis & Walsh, 100 Boylston St., Boston, archts. Noted Apr. 4.

Mass., Pittsfield—Church—Unity Church Society having sketches made by Harding & Seaver, 7 North St., for church. $200,000. E. J. Moses, 43 Linden St., pastor.

R. I., Providence—School—Commissioner of Educ., State House, having plans prepared by W. R. Walker & Son, 49 Weybosset St., 3 story and basement, 60 x 200 ft., yellow brick, plain foundation, Gaspee St. $400,000.

Conn., Bristol—School—School Dist. 3 plans 2 story, 25 rooms, brick, plain foundation. $200,000. E. H. Funk, 83 Prospect St., chn. building com. H. A. Hayden, 175 Main St., archt.

N. Y., Brooklyn—Hotel—St. George Hotel, Henry and Clark Sts., having plans prepared by E. Roth, archt. and engr., 119 West 40th St., New York, 12 story, brick and steel addition, plain foundation.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 63, brick, steel and stone, plain foundation, Williams St., here. $700,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, soon takes bids P. S. 28, 5 story, brick, steel and stone, Herkimer and Fulton Sts., here. $850,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr.

N. Y., Flushing—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Concord St. and Flatbush Ave. extension, Brooklyn, P. S. 107, brick, steel and stone, plain foundation, Franconia Ave., here.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, brick, steel and stone, plain foundation, 128th St. and St. Nicholas Ave. $250,000. Owner's name withheld.

N. Y., New York—Apartment—C. I. Weinstein Building Corp., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., having plans prepared 5 story, brick, steel and stone, plain foundation, Pinehurst Ave. $150,000.

N. Y., New York—Loft—M. Blumenstock, c/o Shampan & Shampan, archts. and engrs., 188 Montague St., Brooklyn, having plans prepared brick, steel and stone, plain foundation, 250 West 37th St., here. $1,000,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids brick, steel and stone addition to P. S. 10, Lexington Ave. and 111th St. $750,000. W. H. Gompert, Fatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

D. C., Wash.—Hotel—Harrington Hotel Co., 11th and E Sts., N.W., having plans prepared by A. B. Fitz Simons, Colorado Bldg., for hotel addition. $400,000.

N. C., Hickory—High School—Voted $250,000 bonds for high school, on Claremont College property. Noted Aug. 9.

N. C., Wilson—Courthouse and Jail—Wilson Co. had plans prepared by A. Bishop, Petersburg, Va., courthouse and jail, sandstone marble, Nash and Tarboro Sts. $200,000. Noted June 21.

Ky., Louisville—School—City election in November to vote on $1,000,000 bonds for schools.

O., Canton—Lodge and Store—Eagles Lodge, 335 Tuscarawas St. W., plans 6 story, 100 x 110 ft., Market Ave. S. $200,000.

O., Cleveland—Apartment Hotel—I. Margolin, 2496 Derbyshire Rd., having plans prepared by M. Weis, 617 Union Bldg., 6 story and basement, brick, steel and concrete, 3701 Euclid Ave. $350,000.

O., Cleveland Heights (Warrensville P. O.)—Commercial and Apartment—J. Laronge, 214 Williamson Bldg., Cleveland, plans 4 story, brick and steel, Coventry Rd., here. $250,000. Engineer and architects names withheld.

O., Ravenra—Commercial and Theatre—P. E. Robinson, 627 Bulkley Bldg., Cleveland, had plans prepared by Crosby Eng. Co., 627 Bulkley Bldg., Cleveland, 4 story, 55 x 100 ft., brick, steel and concrete, here. $150,000.

O., Warren—Hotel—Warren Hotel Co., c/o P. E. Robinson, 627 Bulkley Bldg., Cleveland, had plans prepared by Crosby Eng. Co., Bulkley Bldg., Cleveland, 12 story, 81 x 176 ft., brick, steel and concrete. $1,000,000.

Ill., Waukegan—Hotel—T. Durke, Waukegan, plans 4 story, fireproof, Greenwood Ave. along tracks Chicago & Northwestern Ry, here. $150,000. P. Gerhardt, 64 West Randolph St., archt.

Wis., Madison—Hospital—Madison Lutheran Hospital Assn., 729 East Gorham St., having plans prepared by F. Riley, Conklin Bldg., 4 story, hospital and sanitarium, brick, rein.-con. and steel, plain foundation, Chandler St. $200,000.

Wis., Milwaukee—Dormitory, etc.—Concordia College, c/o G. Barth, pres., 3127 State St., plans 2 and 3 story, brick and concrete, plain foundation, 31st St. $300,000. Engineer and architect not selected.

Wis., Milwaukee—Lodge—Ku Klux Klan, c/o W. F. Wieseman, 1037 39th St., plans brick and concrete, plain foundation. $500,000. Engineer and architect not selected.

Wis., Sheboygan—Office and Lodge—Bowler Realty Co., c/o T. M. Bowler, pres., North 8th St., plans 4 story and basement, 75 x 190 ft., brick, rein.-con. and steel, plain foundation, Center and 8th Sts. Engineer and architect not selected.

Kan., Topeka—Office—First Baptist Church, 9th and Jackson Sts., having preliminary plans prepared 10 story and basement, 75 x 110 ft., rein.-con., brick and steel, concrete pile foundation, Jackson St. $250,000. Private plans.

Mo., St. Louis—Office—Industrial Loan Co., 714 Chestnut St., having preliminary plans prepared 19 story and basement, 82 x 85 ft., rein.-con., brick and steel, concrete piles foundation, Chestnut St. $1,000,000. Private plans.

Tex., San Antonio—Church—First Baptist Church plans 1 story and basement, 80 x 140 ft., rein.-con. stone and brick, 4th and Taylor Sts. $175,000. W. E. Simpson Co., N. B. of C. Bldg., engr. Architect to be selected within few days.

Tex., Temple—Schools—Election in September to vote on $325,000 bonds for various new schools. Address Bd. Educ., c/o O. F. Gober. Engineer and architect not selected.

Okla., Tulsa—Office—A. W. Hailey, c/o 1st Natl. Bank, Natl. Bank Bldg., had plans prepared by Rush, Endicott & Rush, 101 Lorton Bldg., 5 story and basement, 75 x 140 ft., rein.-con., brick and stone. $150,000.

Calif., Fresno—Office—W. B. Holland, Fresno and L Sts., having plans prepared by R. L. Felchlin Co., Bank of Italy Bldg. 4 story addition, fireproof, L and Fresno Sts. $150,000.

Calif., Glendale—Hotel—Glendale Hotel Co., Inc., having plans prepared by A. F. Priest, 716 Fay Bldg., Los Angeles, 5 story, 103 x 150 ft., brick, California St. and Brand Blvd. $300,000. Noted July 12.

Calif., Los Angeles—High School—City having plans prepared by E. H. Cline, 743 North Wilton Pl., high school, Boyle Heights. To exceed $250,000.

Calif., Los Angeles—Loft—Newmark & Co., c/o W. D. Lee, archt., Sun Bldg., having preliminary plans prepared for loft, about 6 story, rein.-con., East 7th St. To exceed $300,000.

Calif., Los Angeles—Store and Apartment—A. O. Evans, c/o W. Allen, archt., Bank of Italy Bldg., having plans prepared 3 story and basement, brick, 35th St. and Vermont Ave. $175,000.

Calif., Los Angeles—Store and Loft—A. C. Blumenthal, Loew State Bldg., plans 8 or 9 story, fireproof, Bway. near 9th St. To exceed $500,000. Engineer and architect not selected.

Calif., Oakland—Office—Alameda Co. Builders Exchange, 351 12th St., plans 100 x 125 ft., fireproof, Hobart and Webster Sts. $150,000 or more. Engineer and architect not selected.

Calif., Vallejo—Bank—Central Commercial Bank, had plans prepared by Hermann Safe Co., 216 Fremont St., San Francisco, 1 story and basement, rein.-con. and steel, Georgia St. $150,000.

Ont., Toronto—Convent—Sisters of Loretto, 403 Wellington St. W., having plans prepared by J. P. Hynes, 73 King St. W., 3 story and basement, rein.-con., brick and steel, plain foundation, Yonge St. $500,000. Noted Aug. 9.

BIDS DESIRED

N. Y., Eastview—Chapel—Sept. 5, at office of F. L. Merritt, clk. Westchester Co., Court House, White Plains, chapel, here. Walker & Gillette, 128 East 37th St., New York City, archts.; adv. E. N.-R. Aug. 16.

N. Y., New York—Apartment—Six Thirty West 170th St. Corp., c/o G. M. Miller, archt. and engr., 1482 Bway., will build 6 story, 75 x 100 ft., brick, steel and stone, plain foundation, 624 West 170th St. $200,000. Work will be done by separate contracts under supervision of architect.

N. Y., New York—Police Station—Aug. 21, by R. E. Enright, police comr., at bookkeepers office, 240 Centre St., new 42nd Precinct Police Station House and garage, Wadsworth Ave. and West 182nd St. Noted Nov. 9.

N. C., Kinston—Institutional—Aug. 20, by C. B. McNairy, supt. Caswell Training School, constructing hospital, boys industrial building, girls industrial building, cold storage plant, mule barn and implement shed. H. A. Underwood, 916 Commercial Bank Bldg., Raleigh, engr.

N. C., Wake Forest—Dormitory—Aug. 18, by Building Com. Wake Forest College, constructing dormitory, brick. $150,000. Wilson & Berryman, Columbia, S. C., archts.

Ky., Murray—School—Aug. 27, by State Normal School Comn., Frankfort, 3 story, 60 x 120 ft., brick, Tudor Gothic style, here. $150,000. Joseph & Joseph, Francis Bldg., Louisville, archts.

O., Cleveland—Commercial—Aug. 17, by Watson Co., archts., 4614 Prospect Ave., 2 story (ultimately 8 story) and basement, 66 x 189 ft., brick, steel and concrete, Euclid Ave. near East 18th St., for Rogers Building, c/o J. J. Callow, 1900 Euclid Bldg. $150,000.

O., Portsmouth—Hotel—H. K. Hempstead, (owner) and De Voss & Donaldson, archts., Portsmouth, taking bids Hempstead Hotel, 2 story, 75 x 77 ft. and 1 story, 60 x 77 ft., brick, stone and concrete. $150,000.

Mich., Iron River—School—Aug. 28, by D. B. Henley, secy. Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation. $150,000. Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., Detroit, archts.

Ill., Chicago—Apartment—A. L. Himelblau, archt., 30 North Dearborn St., receiving bids 4 story, 120 x 250 ft., fireproof, Howard and Marshfield Sts., for F. H. Janiszeski, 1373 West Chicago Ave. $500,000.

Ill., Chicago—Apartment—Owner, c/o A. R. Grant, 7033 Sheridan Rd., receiving bids 3 story and basement, 120 x 200 ft., fireproof, Simpson and Ridge Sts. $250,000. R. F. France, 155 North Clark St., archt.

Ill., Chicago—Apartment—A. H. Quitsow, archt., 11 South La Salle St., receiving bids 3 story and basement, 100 x 149 ft., fireproof, Greenleaf and Winthrop Sts. $200,000. Owners name withheld.

Ill., Chicago—Apartment-Hotel—G. G. and E. O. Anders, c/o T. R. Bishop, archt., 35 South Dearborn St., receiving bids 5 story, 150 x 150 ft., fireproof, 5474-84 Cornell Ave. $1,000,000.

Ill., Duquoin—Church.—Aug. 20, by Dougherty & Gardner, archts., Stahlman Bldg., Nashville, 2 story, 97 x 118 ft., rein.-con., brick and stone, here, for First Baptist Church. $150,000. Noted July 12.

Wis., Milwaukee—School—Aug. 30, by School Bd., 3 story and basement, 130 x 157 ft., brick, tile and concrete, plain foundation, Franklin St. $475,000. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Mo., Sedalia—High School—Sept. 15, by Bd. Educ., 3 story, 185 x 190 ft., rein.-con., brick and stone. $400,000. W. T. Bast, Sedalia, archt. W. B. Ittner, 911 Locust St., St. Louis, associated archt. Noted Dec. 14.

Tex., Denton—Administration—Aug. 25, by M. O. Flowers, pres. Bd. Regents Texas State Teachers College, at Galvez Hotel, Galveston, 3 story, rein.-con., stone and brick, here. $300,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts.

Okla., Ponca City—Lodge—Ponca City Lodge 83 A. F. & A. M., receiving bids 5 story and basement, 50 x 140 ft., rein.-con., brick and stone. $200,000. Smith & Senter, 401 Commerce Investment Bldg., Okmulgee, archts.

Calif., San Diego—Aug. 25, by Army and Navy Y. M. C. A., concrete and steel, on full block fronting on Bway. $550,000. L. Rogers, Spreckels Bldg., archt. Noted Nov. 16.

BIDS RECEIVED

N. Y., Kew Gardens (Jamaica, P. O.)—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Aug. 8, P. S. 99, Kew Gardens Rd. from 82nd Rd. to 83rd Ave., here, from G. F. Driscoll, 115 Schermerhorn St., Brooklyn, $364,990. Noted Aug. 2.

N. Y., Syracuse—School—Bd. Contr. & Supply, general contract Danforth Normal School, 2 story and basement, 166 x 257 ft., West Kennedy St., from Dawson Bros., Union Bldg., limestone $295,300, terra cotta $293,330; heating from J. R. Sheehan Co., $42,890. Noted July 19.

Calif., Los Angeles—High School—Bd. Educ., constructing Fremont High School, brick and rein.-con., 79th and South Park Sts., from J. C. Bannister, 903 North Mariposa Ave., $424,970. Noted July 12.

Buildings (Continued)

CONTRACTS AWARDED

Conn., Bristol — Church — St. Josephs Church, 60 x 170 ft. brick and stone, plain foundation, to G. L. Lacourse, George St. Archts. est. $200,000. Noted June 7.

N. Y., Mineola—Hospital—Nassau Hospital, 5 story, brick, steel and stone addition, plain foundation to Wills Eagelholf Co., 101 Park Ave., New York City. Archts. est. $350,000. Noted Nov. 16.

N. J., Oakland—Seminary—Home Mission Seminary, c/o Reilly & Hall, archts. and engrs., 405 Lexington Ave., New York City, 2 story, 50 x 150 ft., brick, steel and stone, plain foundation, here, to E. M. Waldron, 27 Central Ave., Newark.

Pa., Franklin—Bank—Exchange Bank of Franklin, 3 story and basement, 68 x 85 ft., limestone, brick, granite and concrete, 13th and Liberty Sts., to Hunkin-Conkey Constr. Co., New Century Bldg., Cleveland, O. Archts. est. $250,000. Noted July 5.

Pa., Harrisburg—Hotel—Penn Harris Hotel Co., c/o W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 12 story and basement, 30 x 200 ft. concrete, brick and steel addition, to Hunkin-Conkey Constr. Co., Century Bldg., Cleveland, O. Archts. est. $800,000. Noted Apr. 26.

Md., Baltimore — Business — Southern Supply Co., Calvert and Saratoga Sts., 4 story, 78 x 100 ft., concrete, 315-19 North Calvert St., to Consolidated Eng. Co., Calvert Bldg., $150,000. Noted July 19.

O., Cleveland—Hotel—See "Industrial Works."

Ill., Chicago — Store, Office and Hall — Owner, c/o S. J. Robbins, 140 North Dearborn St., 2 story, 156 x 225 x 350 ft., fireproof, Milwaukee and Lundale Aves., to McKeown Bros., 112 West Adams St. Archts. est. $1,250,000.

Wis., Weyauwega — High School — Bd. Educ., 2 story and basement, 60 x 115 ft., brick, rein.-con. and steel, plain foundation, to F. C. Lemke, Clintonville. Archts. est. $150,000. Noted July 12.

Ia., Conrad—School—Bd. Educ., general contract 3 story and basement, rein.-con., brick, tile and stone, to Spencer Constr. Co., Spencer, $109,400. Noted July 19.

Wyo., Cheyenne—School—School Bd., 2 story and basement, brick and steel, 8th and Warren Sts., to Adams & McCann, Wheatland, $172,750.

Mo., St. Louis—Office and Store—T. P. Saum, 711 Chestnut St., will build 2 story and basement, 100 x 100 ft., brick and stone, Delmar Blvd., by day labor. $150,000.

Calif., Alameda—Bank and Office—Citizens Bank of Alameda, 1500 Park St., 2 story, rein.-con. addition, Park St. and Santa Clara Ave., to W. Knowles, Central Bank Bldg., Oakland, $150,000.

Calif., Los Angeles—Apartment—J. Fitch, c/o contractor, 4 story and basement, brick, Lake and 11th Sts., to Richardson Building & Eng. Co., 141 North Larchmont Blvd., $160,000. Noted June 14.

Calif., Los Angeles—Hotel and Store—[illegible] Co., c/o contractors, 5 story and basement, rein.-con., East 7th St., to Bushnell & Palmer, 517 Grosse Bldg., to exceed $150,000.

Calif., Los Angeles—Store—May Co., c/o A. C. Martin, archt., Higgins Bldg., 9 story and basement, fireproof, Hill St., to MacDonald & Kahn, Loew State Bldg., percentage basis. About $1,000,000.

Calif., Los Angeles—Store and Loft—Revolving Fund Corp., Van Nuys Bldg., 6 story and part basement, 100 x 160 ft., rein.-con. and brick, Winston and San Pedro Sts., general contract to C. L. Peck, H. W. Hellman Bldg., $150,000. Noted Aug. 2.

Calif., Sacramento—Store—Hale Bros., K and 9th Sts., 3 story, rein.-con. addtion, to W. Thelbahr, 12th St. Rd., $150,000. Noted Aug. 9.

Calif., San Francisco—Apartment—A. Driscoll, c/o S. Schnaittacher, archt., 233 Post St., 5 story, concrete and steel, Geary and Leavenworth Sts., general contract to W. Martin, 180 Jessie St., $150,000. Noted July 26.

Ont., Hamilton—Office—J. E. Lister, Old Spectator Bldg., 8 story and basement, rein.-con., brick and steel, plain foundation, James St., general contract to Pigott-Healy Constr. Co., 36 James St. S. Archts. est. $400,000. Noted June 7.

Federal Government Work

PROPOSED WORK

Wis., Sheboygan—Heating Plant—U. S. Coast Guard, plans 75 x 110 ft. heating plant, incl. boilers, at Coast Guard Station, here. G. W. Kruelle, supt.

Tex., Corpus Christi — Dredging — U. S. Engineer, Galveston, plans dredging 25 mi. ship channel from jetties at Aransas Pass to Corpus Christi. L. M. Adams, dist. engr.

Wash., Puget Sound—Radio Masts—Spec. 4897—Bureau Yards & Docks, Navy Dept., Wash., D.C., plans three 200 ft. radio masts, here.

P. I., Cavite—Reconstruction of Wharf—Spec. 4896—Bureau Yards & Docks, Navy Dept., Wash., D.C., plans reconstructing station wharf, here.

BIDS DESIRED

Tex., Galveston—Dredging—Sept. 11 at office U. S. Engineer, dredging Sabine-Neches Waterway; adv. E. N.-R. Aug. 16.

Calif., Oakland — Dredging — Sept. 6 at office U. S. Engineer, Custom House, San Francisco, dredging Area A, 475,000 yd.; B, 150,000 yd.; C, 150,000 yd., in harbor, here.

Alaska, Wrangell—Breakwater—Aug. 31, at office U. S. Engineer, Juneau, 300 ft. breakwater, here. J. G. Steese, dist. engr.

BIDS RECEIVED

Mich., Alpena—Breakwater—U. S. Engineer, 337 Federal Bldg., Detroit, furnishing and placing 11,700 ton core stone and 10,380 ton armor stone, for rubble mound breakwater, here, from T. L. Durocher, Detour, 3.47 per ton, total $76,340. Noted July 12.

California — Road — U. S. Bureau Pub. Rds., 9 Main St., San Francisco, grading and surfacing 15.5 mi. Murphy-Big Trees National Forest Highway, Calaveras Co., (1) 14 ft. roadway, 105,000 cu.yd. excav., 330 cu.yd. Class A and 340 cu.yd. Class C concrete, 34,100 lb. reinforcing, 5,040 lin.ft. corrugated metal pipe, 19,700 cu.yd. crushed rock, etc., (2) 18 ft. roadway, 157,000 cu. yd. excav., 360 cu.yd. Class A and 340 cu.yd. Class C concrete, 37,300 lb. reinforcing, 5,400 lin.ft. corrugated metal pipe, 26,300 cu.yd. crushed rock, etc., from J. P. Holland, 540 Brannan St., San Francisco, (1) $294,893 (2) $384,575.

CONTRACTS AWARDED

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing yellow pine lumber for Dam 45, Ohio River, f.o.b. Addison, to Nicola, Stone & Meyers Co., Hattiesburg, Miss., 110,000 ft. at average $36 per M., total $3,960; to H. A. Hollowell & Co., Harrison Bldg., Cincinnati, O., 68,000 ft. average $36 per M., total $2,450.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, furnishing 240,000 ft. yellow pine No. 2, common or better, for Dam 46, Ohio River, 1,760 pieces 2 x 12 in. x 22 ft., 1,100 pieces 1 x 4 in. x 12 ft. and 4,000 pieces 1 x 4 in. x 18 ft., to Allied Sales Corp., Tuscaloosa, Ala., $8,939. Noted Aug 9.

Ky., Louisville—Rods, Steel, etc.—U. S. Engineer, P. O. Box 72, furnishing 900 reinforcing bars, concrete reinforcing chairs and accessories, for power house at Dam 44, Ohio River, to Concrete Steel Co., Guard Bldg., Cleveland, O., $0.0812 per lb. Noted Aug. 2.

Tex., Rockport — Breakwater — U. S. Engineer, Galveston, rock breakwater, here, to D. M. Picton & Co., Port Arthur. Engrs. est. $50,000.

Calif., San Diego—Reod—Spec. 4844—Bureau Yards & Docks, Navy Dept., Wash., D.C., road at Training Station, Naval Base, here, to Union Constr. Co., foot of 14th St., Oakland, $5,990. (60 days). Noted Aug. 2.

Miscellaneous

PROPOSED WORK

Park Development—New Britain, Conn.—Bd. Park Comrs. plans development Willow Brook Park, inc. drainage system, fencing, etc. $85,000. L. D. Williams, city engr.

Swimming Pool and Pavilion—Pittsburgh, Pa.—Da-Swi-Di Country Club, Pittsburgh, plans 120 x 380 ft. swimming pool and 2 story, 62 x 182 ft. pavilion incl. offices, dance hall, etc. $150,000. W. Bintz, Lansing, engr.

Transmission Line—Kentucky—Kentucky Utilities Co., Marion E. Taylor Bldg., Louisville, plans 66,000 volt transmission line from Pineville to Danville, near proposed site of Dix River dam, about 95 mi. $900,000.

Levees—Wisconsin—State appropriated $50,000 to strengthen and rebuild levees on Fox and Wisconsin Rivers, Fond du Lac and Winnebago Counties. J. D. Mack, State Capitol, Madison, engr.

Spray Pond—Leavenworth, Kan.—Kansas Electric Power Co., 4th and Choctau Sts., having preliminary plans prepared 96 x 187 ft. concrete spray pond. $32,500. Private plans.

Levee—Edinburg, Tex. — Hidalgo Co. election Aug. 13, to vote on $2,600,000 bonds for levee, drainage ditches, etc. J. C. Epperson, co. judge.

Pipe Line—Rockdale, Tex.—Owens Refining & Pipe Line Co. plans pipe line extension in Rockdale oil fields. $25,000. Private plans.

Levee — Waxahachie, Tex. — Ellis Co. Impvt. Dist., 11, defeated $52,000 bonds to relaim 1,500 acres, levees on North Side Chambers Creek. Noted June 28.

Gravel Pit — Livermore, Calif. — Kaiser Paving Co., 1st Natl. Bank Bldg., Oakland, plans gravel pit. Cost incl. equipment $75,000.

Electrolier System — Taft, Calif. — Will vote on bonds for electrolier system. To exceed $25,000. E. M. Lynch, Central Bldg., Los Angeles, engr.

Electrification of Railways — British Columbia—Canadian Pacific Ry., Windsor St. Sta., Montreal, Que., having surveys made for electrification of Mountain Division, here. Work includes dams, water power, etc. J. M. R. Fairbairn, ch. engr.

BIDS DESIRED

Changes to Railroad Structure—Brooklyn, N. Y. — Aug. 23, by Transit Comn., 49 Lafayette St., New York City, making changes in railroad structure to provide for crossover, Route 8, Sect. 5, Bushwick Ave., here, Agreement "CP." G. McAneny, chn.

Heating and Ventilating Apparatus—New York, N. Y.—Aug. 23, by Park Bd., Municipal Bldg., heating and ventilating apparatus for Wings J and K of Metropolitan Museum of Art. F. D. Gallatin, pres.

Grain Elevator—Oswego, N. Y.—Sept. 11, by E. S. Walsh, supt. Pub. Wks., Albany, constructing and equipping grain elevator, here; adv. E. N.-R. Aug. 16.

Swimming Pool — Frankford (Phila. P. O.), **Pa.**—Aug. 14, by Bureau Recreation, City Hall, Phila., swimming pool at Hedge and Orthodox Sts., here, also one at 32nd and Ridge Sts. B. H. Warburton, Phila., dir. pub. welfare.

Dock and Yacht Basin—Sanford, Fla.—Aug. 27, by W. B. Williams, city mgr., dock and yacht basin. $67,000. F. T. Williams, Sanford, engr. Noted July 26.

Steam Piping—Milwaukee, Wis.—Aug. 24, by J. H. Fowles, secy. Sewerage Comn., 508 Market St., high pressure steam piping at boiler and power house on Jones Island. T. C. Hannton, c/o owner, engr.

Wharves—Houston, Tex.—Houston Port Dist. taking bids 1,720 ft. wharves north side of Turning Basin Ship Channel No. 10-11-12. $4,000 000. J. C. McVea, city engr. Howe & Wise, Houston, co. engrs.

Volt Insulators—Melbourne, Australia—Oct. 6, by R. Liddelow, secy. State Electricity Comn. of Victoria, 22-32 William St., Melbourne, Victoria, for 22,000 volt insulators for Morwell Power Scheme, Spec. 23/117; adv. this issue.

CONTRACTS AWARDED

Heating Work—Syracuse, N. Y.—G. R. Lunn, lieutenant governor, pres. State Fair Comn., 428 South Salina St., heating work for coliseum, New York State Fair Grounds, to W. George & Co., Inc., 122 North Warren St., $25,170. Noted July 26.

Swimming Pool—New Orleans, La.—New Orleans Country Club, Metarie Ridge, 40 x 120 ft. rein.-con. swimming pool, to Doullut & Williams, Inc., 816 Howard Ave., $60,000. Noted May 24.

Train Shed and Loading Platform—Cleveland, O.—Fisher Body Ohio Co., General Motors Bldg., Detroit, Mich., 1 story, 78 x 562 ft., brick and steel train shed and loading platform, East 140th St. and Coit Rd., here, to Austin Co., 16112 Euclid Ave. Archts. est. $150,000. Noted July 26.

Grand Stand—Cedarburg, Wis.—Ozaukee Co. Fair Assn., grand stand, steel frame, wooden seats, to Lakeside Bridge & Steel Co., North Milwaukee. Engrs. est. $30,000.

Golf Links, etc. — Nakoma (Madison P. O.) **Wis.**—Nakoma Golf Club, c/o F. G. Blum, secy., 1st Central Bldg., 18 hole golf course, tennis courts, baseball fields, etc., to Amer. Park Builders Co., 201 East Ontario St., Chicago. Noted Aug. 2.

Electrolier System—Fresno, Calif.—Installing electroliers in various streets, to Robinson Electric Co., 1162 Bway., $30,900. Noted July 26.

Cement—Napa, Calif.—Napa Co., 3,000 bbl. cement, to F. G. Noyes, and Napa Lumber Co., Napa, $3.11 per bbl. 1,500 bbl. to each contractor. Noted July 12.

Grain Elevator — Midland, Ont. — C. J. Smith, genl. mgr. Canadian Natl. R.R., 230 St. James St., Montreal, Que., 2,225,000 bu. rein.-con. addition to Tiffin Elevator 2, to Fegles Constr. Co., Ft. William. Noted July 5.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Aug. 23.

Completion of Office Building

PROPOSALS FOR COMPLETING OFFICE BUILDING IN CAPITOL PARK, HARRISBURG, PENNA., AS AUTHORIZED BY AN ACT APPROVED THE 18TH DAY OF JULY, 1919.

Harrisburg, Pa.

Sealed proposals will be received by the Secretary of the Department of Property and Supplies at his office in the Capitol Building, Harrisburg, Pa., until 10 o'clock A.M. standard time, Thursday, August 23rd. 1923, for completing the New South Office Building as called for in the plans and specifications prepared by Arnold W. Brunner, Architect, as follows:

Contract No. 3. Exterior Stone Balustrade and pavement for terraces. Interior cement, marble, terrazzo, cork and wood floors. Brick and hollow tile walls and partitions. Plain and ornamental plastering. Bronze and iron elevator enclosures, stairs, etc Kalemeine doors and finish; carpenter work. Painting, hardware, marble, etc.
Contract No. 4. Heating and Ventilating.
Contract No. 5. Electrical Work.
Contract No. 6. Plumbing and Drainage.
Contract No. 7. Vacuum Cleaning System.
Contract No. 8. Drinking Water Refrigeration System.
Contract No. 9. Electric Elevators and Lifts.

Plans, specifications and proposal blanks can be secured by prospective bidders by applying to the Secretary of Property and Supplies, Harrisburg, Pa., or to Arnold W. Brunner, Architect, 101 Park Avenue, New York City, and stating the contract number upon which they desire to bid and depositing $10.00 which will be returned upon the return of the plans and specifications in good order. Bidders desiring to bid on more than two numbers can secure three or more numbers by depositing $25.00.

Proposals will be publicly opened and read at 12 o'clock noon, standard time, on the day proposals are due.

Each proposal must be accompanied by a certified check in amount called for in printed form Instructions to Bidders.

The successful bidder will be required to execute and furnish to the Commonwealth of Pennsylvania a Surety Company Bond in a sum equal to fifty (50%) per cent of the contract price.

The Commonwealth of Pennsylvania reserves the right to reject any or all bids, or any items or parts of bids.

BERKEY H. BOYD, Secretary,
Department of Property and Supplies.

Bids: Sept. 5.

Sprinkler System

White Plains, N. Y.

Sealed bids or proposals for the construction of a Sprinkler System in the County Home Buildings at Eastview, N. Y., will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y. until 11 A.M. (Daylight Saving Time), Sept. 5th, 1923.

Plans, specifications, proposal sheets and all information relative to same, may be procured from Sprague & Slocum, Construction Engineers, No. 50 East 41st Street, New York City, or from Fred L. Merritt, Board of Supervisors, Court House, White Plains, New York, upon making a deposit of $25 which will be returned upon the return of plans of specifications.

Board of Supervisors,
FRED L. MERRITT, Clerk.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Building Construction, etc.

Letchworth Village, Thiells, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Completion of Assembly Hall and Industrial Building (Girls' Group), at Letchworth Village, Thiells, N. Y., will be received by Mr. Mortimer B. Patterson, President of the Board of Managers of Letchworth Village, at No. 7 Wall St., New York City, until 11 o'clock A.M. (Standard Time), Wednesday, September 5, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit, consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within (30) thirty days after official notice of award of contract, and in accordance with the terms of Specifications Nos. 4102, 4103, 4104 and 4105. The right is reserved to reject any or all bids. Drawings and specifications may be examined at Letchworth Village, Thiells, N. Y., at No. 7 Wall St., New York City; at the New York office of the Department of Architecture, 18th floor, Fuller Building, Broadway and 23rd St., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: August 2, 1923.

Bids: August 28.

Road Work

Pensacola, Fla.

Sealed proposals will be received by the Board of County Commissioners of Escambia County, Florida at Pensacola, Florida until 10 o'Clock A.M., August 28th, 1923 for constructing approximately 7 miles of reinforced concrete paved road with necessary grading and structures.

Plans and specifications may be obtained from the Circuit Clerk of Escambia County, Pensacola, Florida. A deposit of $5.00 will be required for each set of plans and specifications furnished, to be refunded on return of same.

Board of County Commissioners of
Escambia County, Florida.
WINSTON E. WHEAT,
County Engineer.

Bids: Sept. 5.

Erection of Chapel

White Plains, N. Y.

Sealed bids or proposals for the erection of a new County Chapel at Eastview, N. Y. will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 11 A.M. (Daylight Saving Time), Sept. 5th, 1923.

Plans, specifications and all information relative to the same may be procured from Walker and Gillette, Architect, No. 128 East 37th Street, New York City, or from Fred L. Merritt, Clerk of the Board of Supervisors, Court House, White Plains, N. Y.

Dated August 8, 1923.

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.

OFFICIAL PROPOSALS

Bids: Aug. 27.

Abutments and Approaches for Bridge

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Construction of new abutments and approaches for Bridge No. 43, at M. P. 100.9 on State Highway Route No. 4, over Lupatcong Creek, in the municipality of Keyport, County of Monmouth, State of New Jersey.

Bids for the above will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Monday, August 27th, 1923, at 11:30 A.M., Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond form for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad St., Newark, New Jersey. Bids not enclosed in special envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Aug. 22.

Pier

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office, Room 712, Peoples Building, until noon, August 22, 1923, and then publicly opened, for constructing Union Pier on Cooper River, Charleston, S. C. Alternate bids are invited on concrete and creosoted piles.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5, which will be refunded to depositors who submit proposals or return sets in good condition. Further information on application.

H. M. GALLAGHER,
General Manager.

CONSTRUCTION NEWS

Engineering News-Record, August 23, 1923

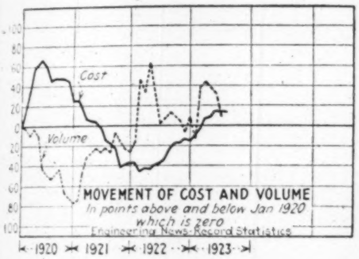
The Construction Barometer

Building Permits Heavy—Production High

CONSTRUCTION cost remains unchanged, with volume falling at a seasonable rate. Building permits were unusually high in July and S. W. Straus & Co. says: "During the past decade July has not shown an increase in volume of building over June more than three or four times, notably in 1915, 1916 and 1921." July permits were 14.5 per cent heavier than the June.

The charts show that the cement production this year has remained consistently above the 1922 curve. Pig iron output in June and July was 42,000 gross tons per day heavier than the same period in 1922.

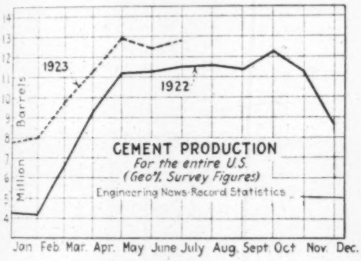
In the center tables are given the May, June and July values of large contracts let in the last three years. The *E. N.-R.* Volume Index is presented for each month from 1920 to date.



MOVEMENT OF COST AND VOLUME

In points above and below Jan 1920 which is zero

Engineering News-Record Statistics

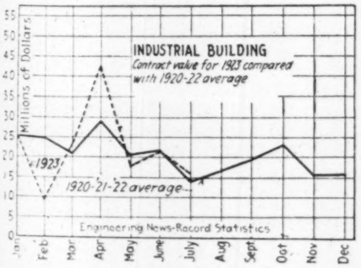


CEMENT PRODUCTION

For the entire U.S.

(Geo'l. Survey Figures)

Engineering News-Record Statistics



INDUSTRIAL BUILDING

Contract value for 1923 compared with 1920-22 average

Engineering News-Record Statistics

E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

	1921	1922	1923
July	$106,011,049	$115,671,000	$155,023,000
June	140,578,814	175,445,000	178,587,000
May	108,904,531	171,557,000	192,032,000
	$355,494,394	$463,673,000	$525,642,000

***E. N.-R.* CONSTRUCTION VOLUME INDEX NUMBER**

1913 and 1920 to 1922

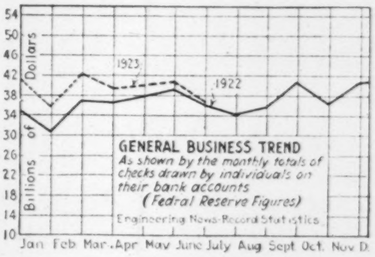
1913=100

	1923	1922	1921	1920
January	126	91	4[illegible]	*146
February	105	100	33	114
March	*195	202	*38	107
April	160	150	36	*142
May	*171	179	99	107
June	148	*187	*117	74
July	128	118	90	*85
August	....	*154	94	65
September	....	129	*114	*85
October	....	127	109	73
November	....	*122	101	51
December	....	111	*118	*58

* Taken from five issues of *Engineering News-Record* during month.

BASE PRICES UNCHANGED IN FIVE WEEK.

	Quoted On Aug. 16, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28

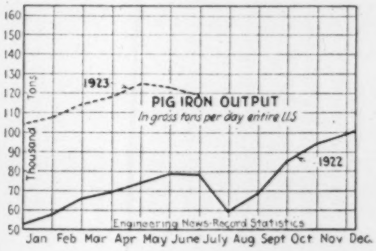


GENERAL BUSINESS TREND

As shown by the monthly totals of checks drawn by individuals on their bank accounts

(Fedral Reserve Figures)

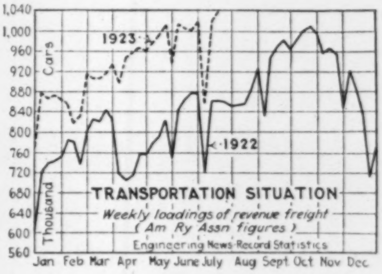
Engineering News-Record Statistics



PIG IRON OUTPUT

In gross tons per day entire U.S.

Engineering News-Record Statistics



TRANSPORTATION SITUATION

Weekly loadings of revenue freight

(Am Ry Assn figures)

Engineering News-Record Statistics

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Aug. 24	Garfield Heights (Cleveland P. O.), O.	Aug. 23
Aug. 27	San Diego, Calif.	July 26
Aug. 27	Pennington, N. J.	Aug. 16
Aug. 27	Winner, S. D	Aug. 16
Aug. 27	Portage, Wis.	Aug. 23
Aug. 27	West Conrad, Minn.	Aug. 23
Aug. 28	Black River Falls, Wis.	Aug. 9
Aug. 29	Watertown, S. D.	July 26
Aug. 28	Hutchinson, Minn.	Aug. 23
Aug. 30	Brooklyn, N. Y.	Aug. 23
Aug. 31	Germantown, O.	Aug. 23
Sept. 1	Pittsfield, Ill. Adv. Aug. 16 and 23.	Aug. 16
Sept. 4	Mount Vernon, N. Y.	Aug. 16
Sept. 4	Sleepy Eye, Minn.	Aug. 23
Sept. 5	Lewiston, Idaho Adv. Aug. 23.	Aug. 23
Sept. 6	Evansville, Ind. Adv. Aug. 23.	Aug. 23
Sept. 11	Hoboken, N. J. Adv. Aug. 9, 16 and 23.	Aug. 9

SEWERS

Bids Close		See Eng. News-Record
Aug. 27	Lyons, Kan.	Aug. 23
Aug. 27	East Orange, N. J.	Aug. 23
Aug. 28	Salt Lake City, Utah	Aug. 16
Aug. 28	Ft. Worth, Tex.	Aug. 23
Aug. 29	Sioux City, Ia. Adv. Aug. 23.	Aug. 23
Aug. 29	Hobart, Ind.	Aug. 23
Aug. 30	Grand Prairie, Tex.	Aug. 23
Aug. 31	Detroit, Mich.	Aug. 23
Sept. 3	Bradentown, Fla.	Aug. 23
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 24	St. Petersburg, Fla. Adv. Aug. 23.	Aug. 23
Nov. 1	Fort Erie, Ont.	Aug. 23

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Aug. 28	St. Louis, Mo.	Aug. 2
Sept. 4	Lakewood (Cleveland P. O.), O.	Aug. 16
Sept. 17	St. Petersburg, Fla. Adv. Aug. 23.	Aug. 23

BRIDGES

Bids Close		See Eng. News-Record
Aug. 27	New Jersey	Aug. 23
Aug. 27	Keyport, N. J.	Aug. 9
Aug. 28	Alabama	Aug. 16
Aug. 29	Illinois	Aug. 9
Aug. 29	Mohawk, N. J. Adv. Aug. 16 and 23.	Aug. 16

Bids Close		See Eng. News-Record
Aug. 29	North Carolina	Aug. 16
Sept. 4	Plainfield, N. J. Adv. Aug. 23.	Aug. 23
Sept. 5	Freehold, N. J. Adv. Aug. 16 and 23.	Aug. 16
Sept. 5	Keyport, N. J. Adv. Aug. 23.	Aug. 23
Sept. 5	Minnesota	Aug. 23
Sept. 11	New Jersey	July 26
Sept. 12	Ft. Wayne, Ind. Adv. Aug. 23.	Aug. 23
Sept. 15	Canadian, Tex.	Aug. 23
Sept. 19	Phila., Pa.	Aug. 23
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Sept. 4	California	Aug. 23

EXCAVATION, DRAINAGE, IRRIGATION

Aug. 30	New Iberia, La.	Aug. 9
Aug. 31	Council Bluffs, Ia.	Aug. 23
Sept. 4	Selma, Calif.	Aug. 23
Sept. 18	Lake Charles, La. Adv. Aug. 23.	Aug. 23

STREETS AND ROADS

Aug. 25	Minot, N. D.	Aug. 23
Aug. 27	Sheridan, Wyo.	Aug. 9
Aug. 27	Bessemer, Ala.	July 26
Aug. 27	Iola, Kan.	Aug. 2
Aug. 27	San Diego, Calif.	Aug. 9
Aug. 27	New Jersey	Aug. 9
Aug. 27	California	Aug. 16
Aug. 27	Marlow, Okla.	Aug. 16
Aug. 27	Bonham, Tex.	Aug. 16
Aug. 27	Princeton, N. J.	Aug. 23
Aug. 27	Cumberland, Md.	Aug. 23
Aug. 27	Warren, O.	Aug. 32
Aug. 27	Ft. Wayne, Ind.	Aug. 23
Aug. 27	Des Moines, Ia.	Aug. 23
Aug. 27	Buffalo, N. Y.	Aug. 23
Aug. 27	Port Dover, Ont.	Aug. 23
Aug. 28	St. Louis, Mo.	Aug. 2
Aug. 28	Louisiana	Aug. 9
Aug. 28	Eastland, Tex.	Aug. 9
Aug. 28	Pensacola, Fla.	Aug. 16
Aug. 28	Brenham, Tex.	Aug. 16
Aug. 28	Florida	Aug. 16
Aug. 28	Paris, Tex.	Aug. 16
Aug. 28	South Dakota	Aug. 16
Aug. 28	Newark, N. J.	Aug. 23
Aug. 28	Columbus, O.	Aug. 23
Aug. 28	Long Branch, N. J. Adv. Aug. 23.	Aug. 23
Aug. 28	South Dakota	Aug. 23
Aug. 28	Ft. Worth, Tex.	Aug. 23
Aug. 29	Kentucky	Aug. 9
Aug. 29	Kentucky	Aug. 2
Aug. 29	Delaware	Aug. 9
Aug. 29	Illinois	Aug. 9
Aug. 29	North Carolina Adv. Aug. 16 and 23.	Aug. 16
Aug. 29	Morristown, N. J.	Aug. 16
Aug. 29	Columbus, O.	Aug. 23
Aug. 29	Brooklyn, N. Y.	Aug. 23
Aug. 29	Illinois	Aug. 23
Aug. 29	Baltimore, Md.	Aug. 23
Aug. 29	Cleveland, O.	Aug. 23
Aug. 29	Long Island City, N. Y.	Aug. 23
Aug. 30	Long Island City, N. Y.	Aug. 23
Aug. 30	Pittsburgh, Tex.	Aug. 9
Aug. 30	Quebec	Aug. 16
Aug. 30	Aiken, S. C.	Aug. 23
Aug. 30	Michigan	Aug. 23
Aug. 31	Beaumont, Tex.	Aug. 16
Aug. 31	Garnett, Kan.	Aug. 16
Aug. 31	Dillon, S. C.	Aug. 23
Aug. 31	New York Adv. Aug. 16 and 23.	Aug. 23
Aug. 31	Michigan	Aug. 23
Sept. 1	Mt. Pleasant, Ia.	Aug. 16
Sept. 1	Tuscaloosa, Ala.	Aug. 23
Sept. 1	Lockport, N. Y.	Aug. 23
Sept. 2	Martinez, Calif.	Aug. 23
Sept. 3	Michigan	Aug. 23
Sept. 4	San Jose, Calif.	Aug. 9
Sept. 4	San Diego, Calif.	Aug. 16
Sept. 4	San Diego, Calif.	Aug. 23
Sept. 4	Stockton, Calif.	Aug. 23
Sept. 4	Buffalo, N. Y.	Aug. 23
Sept. 5	Freehold, N. J. Adv. Aug. 16 and 23.	Aug. 16
Sept. 5	Michigan	Aug. 23
Sept. 5	Marysville, Calif.	Aug. 23
Sept. 5	Minnesota	Aug. 23
Sept. 6	Gulfport, Miss.	Aug. 23
Sept. 6	Dallas, Tex	Aug. 23
Sept. 7	Michigan	Aug. 23
Sept. 10	Dallas, Tex.	Aug. 23
Sept. 10	Madison, S. D.	Aug. 23
Sept. 10	St. Paul, Minn.	Aug. 23
Sept. 11	Alabama	Aug. 16
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	San Diego, Calif.	Aug. 23
Sept. 11	Alabama	Aug. 23
Sept. 11	Decatur, Tex.	Aug. 23
Sept. 11	Austin, Tex.	Aug. 23
Sept. 11	Sonora, Tex.	Aug. 23
Sept. 12	Faribault, Minn.	Aug. 23
Sept. 26	Kentucky	Aug. 23

INDUSTRIAL WORK

Aug. 27	Cleveland, O.	Aug. 23
Aug. 28	Dunseith, N. D.	Aug. 16

BUILDINGS

Aug. 25	Ridgway, Pa.	Aug. 9
Aug. 25	Denton, Tex.	Aug. 16
Aug. 25	San Diego, Calif.	Aug. 16
Aug. 25	Baltimore, Md.	Aug. 23
Aug. 27	Murray, Ky.	Aug. 16
Aug. 27	Crownsville, Md.	Aug 23
Aug. 28	Akron, O.	Aug. 2
Aug. 28	Salisbury, Md.	Aug. 9
Aug. 28	New York, N. Y.	Aug. 9
Aug. 28	Iron River, Mich.	Aug. 16
Aug. 28	Willmar, Minn.	Aug. 23
Aug. 28	Brooklyn, N. Y.	Aug. 23
Aug. 29	San Francisco, Calif.	Aug. 23
Aug. 30	Milwaukee, Wis.	Aug. 16
Aug. 31	Mediapolis, Ia.	Aug. 23
Sept. 1	Denver, Colo.	Aug. 23
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 4	Stockton, Calif.	Aug. 23
Sept. 4	Ft. Worth, Tex.	Aug. 23
Sept. 5	Thiells, N. Y.	Aug. 9
Sept. 5	Eastview, N. Y. Adv. Aug. 16 and 23.	Aug. 16
Sept. 5	Wapakoneta, O.	Aug. 23
Sept. 5	Chillicothe, Mo.	Aug. 23
Sept. 6	Kansas City, Mo.	Aug. 23
Sept. 6	Mishawaka, Ind.	Aug. 23
Sept. 7	Detroit, Mich.	Aug. 23
Sept. 12	Geneva, O.	Aug. 23
Sept. 15	Dallas, Tex.	July 26
Sept. 15	Sedalia, Mo.	Aug. 16
Sept. 15	Proctor, Minn.	Aug. 23
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Aug. 28	Superstructure—Ludington, Mich.	July 26
Aug. 28	Repairs—Phila., Pa.	Aug. 9
Aug. 30	Pipe—Mobile, Ala. Adv. Aug. 9, 16 and 23.	Aug. 9
Aug. 30	Dredging—Boston, Mass. Adv. Aug. 2, 9, 16 and 23.	Aug. 2
Aug. 30	Dredging—Petaluma, Calif.	Aug. 9
Aug. 30	Dredging — New York, N. Y. Adv. Aug. 23.	Aug. 23
Aug. 31	Breakwater—Wrangell, Alaska	Aug. 16
Sept. 1	Dredging—Seattle, Wash.	Aug. 23
Sept. 5	Post Office — Waterloo, N. Y.	Aug. 23
Sept. 5	Storehouse—San Diego, Calif.	Aug. 23
Sept. 6	Dredging—Oakland, Calif.	Aug. 16
Sept. 10	Flooring—Boston, Mass.	Aug. 23
Sept. 11	Dredging—Galveston, Tex. Adv. Aug. 16 and 23.	Aug. 16
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
Sept 12	Pistons, etc. — Denver, Colo.	Aug. 9
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19
Sept. 17	Quarters, etc. — Rutland, Mass. Adv. Aug. 23.	Aug. 23
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23

MISCELLANEOUS

Aug. 27	Dock and Yacht Basin — Sanford, Fla.	Aug. 16
Aug. 27	Traffic Signal Electric Lights—New York, N. Y.	Aug. 23
Aug. 28	Underpass—Alabama	Aug. 9
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Sept. 4	Cement—Merced, Calif.	Aug. 23
Sept. 4	Loader, etc.—San Jose, Calif.	Aug. 23
Sept. 4	Road Grader—Onida, S. D.	Aug. 23
Sept. 4	Wharf—Sorel, Que.	Aug. 23
Sept. 11	Grain Elevator—Oswego, N. Y. Adv. Aug. 16 and 23.	Aug. 16
Sept. 12	Tunnel—Colorado	Aug. 9
Sept. 19	Lock Gates, etc.—Illinois Adv. Aug. 16 and 23.	Aug. 23
Sept. 28	Cement—Jefferson City, Mo. Adv. Aug. 23.	Aug. 23
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford — Bd. Water Comrs. plan main water extensions. $100,000. C. M. Caleb, 1026 Main St., engr.

N. Y., Ballston Spa—See "Miscellaneous."

W. Va., Parkersburg—Having plans prepared waterworks, mechanical filter or deep well system. $150,000. J. V. Dunbar, city engr.

Ky., Danville — City Council will soon buy electrically operated pumps for new municipal water plant. Pearse, Greeley & Hansen, 38 West Adams St., Chicago, engrs.

Ky., Louisville — Louisville Water Co., 435 3rd St., plans laying about 4,000 ft. 20 in. c.i. mains in Preston St. $20,000. J. Chambers, ch. engr.

O., Parma Heights (Cleveland P. O.)—Plans c.i. mains. $32,000. V. D. Croft, Old Courthouse, Cleveland, engr.

Mich., Ecorse — Having plans prepared for 48,020 ft. 4, 6 and 8 in. c.i. pipe in various streets. M. L. Brown & Son, 402 Capitol Theatre Bldg., Detroit, engrs.

Mich., Eloise—Wayne Co. having plans prepared 7,200 ft. 4, 6 and 8 in. Class B c.i. pipe from water storage reservoir south of Michigan Ave. around Eloise Institution buildings. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Mich., Ithaca—Plans to install deep well plunger pumps and fire pump unit. $11,000. Burd & Giffels, Powers Theatre Bldg., Grand Rapids, engrs.

Mich., Menominee—Aug. 31, to vote on $100,000 bonds for improving waterworks. T. R. Hasley, City Hall, engr.

Wis., La Crosse—City having plans prepared for additional water supply, incl. new artesian wells. Cost to exceed $15,000. C. C. Congdon, City Hall, city engr. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Wis., Madison — Council will vote on $50,000 bond issue for installing and equipping 2 deep wells and constructing duplicate air line for water supply. L. A. Smith, water supt. Engineer not selected.

Wis., Montfort—Plans extension to mains and additional pumping equipment. Election soon to vote on $15,000 bonds. Engineer not selected.

Mont., Laurel—Voted $55,000 bonds for waterworks. T. A. Rigney, clk.

Mo., Cameron—Making preliminary plans waterworks and light improvements. Cost to exceed $15,000. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs.

Mo., Norborne—Making preliminary plans pumping plant, reservoir, tower and distribution mains. $50,000-$60,000. Engineer not selected.

Mo., St. James—Voted $33,000 bonds for waterworks, pumping plant and distribution system, also $12,000 bonds for sewers. Engineer not selected. Noted July 26.

Tex., Dallas—Had revised plans prepared 20 in. main from here across Trinity River to Oak Cliff. $80,000. E. A. Kingsley, city engr.

Tex., Dallas—Making surveys of reservoir sites. $25,000. E. A. Kingsley, city engr. J. C. Nagle, Dallas, and T. A. Thompson, Wichita Falls, consult. engrs.

Tex., Dallas—Myers & Noyes, engrs., Central State Bank Bldg., soon takes bids improvements to waterworks, pavements, etc., in Kessler Highlands-Oak Cliff, for A. R. Thomason, Wilson Bldg. $200,000.

Tex., Ennis—Sept. 7, to vote on $50,000 bonds main extensions. H. McCandless, city engr.

Tex., Mart — Making plans reservoir, pump station, 4 mi. of 10 in. and 2½ mi. 8 in. c.i. pipe. $200,000. Koch & Fowler, Central Bank Bldg., Dallas, engrs.

Okla., Owasso—Having plans prepared complete waterworks system. Holway Eng. Co., Wright Bldg., Tulsa, engrs.

Okla., Tulsa—See "Contracts Awarded."

Ariz., Phoenix—Making plans one 5 m.g. rein.-con. standpipe, $25,000. Take bids about Sept. 1, for excavation. H. L. Ringer, City Hall, engr.

Ore., Yoncalla—Voted $35,000 bonds for municipal waterworks. Engineer not selected.

Waterworks (Continued)

Calif., Delhi—Delhi Land Settlement Colony, having plans prepared 3 pumping plants, pumps will probably be 12 in. diam. requiring 25 hp. or more motors. E. G. Fortier, Delhi, engr.

Ont., Crystal Beach—Having plans prepared waterworks system and filtration plant. To exceed $30,000. Ross & Scott, Welland, engrs.

BIDS DESIRED

N. Y., Binghamton—Bd. Contr. & Supply, City Hall, taking bids 1,000 ft. 4 in. and 4,000 ft. 6 in. Class "C" bell and spigot c.i. pipe, f.o.b. Binghamton, freight to be prepaid.

N. Y., Brooklyn—Aug. 30, by N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York, furnishing and setting fire hydrants and appurtenances on existing mains in Flatbush and Flatlans Sects., here.

O., Columbus—See "Streets and Roads."

O., Garfield Heights (Cleveland P. O.)—Aug. 24, water mains. $25,000. R. Munz, Town Hall, engr.

O., Germantown—Aug 31, by Bd. Trustees of Pub. Affairs, 4 mi. 6 in. c.i. mains, etc. $100,000. Jennings-Lawrence Co., 511 Hartman Bldg., Columbus, engrs.

Ind., Evansville—Sept. 6, by Bd. Water Trustees, City Hall, 6 m.g. addition to present water filtration plant. W. A. Bosse, secy. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, Ill., engrs.; adv. E. N.-R. Aug. 23. Noted June 7.

Wis., New London — Sept. 1, by C. J. Thompson, city clk., 200,000 gal. rein.-con. reservoir. $20,000. H. R. Albert, Court House, Green Bay, engr.

Wis., Portage—Aug. 27, by City, intake crib and submerged pipe line, 360 ft. long, in Wisconsin river near foot of Pierce St. Cost to exceed $25,000. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, engrs.

Minn., Hutchinson—Aug. 28, 1 pump, also valves, fittings and pipings. J. F. Mikulecky, city clk.

Minn., Sleepy Eye—Sept. 4, one centrifugal pump. A. J. Thomas, city rcdr.

Minn., West Concord—Aug. 27, by City, alternate bids (1) 2,240 lin.ft. mains with hydrants, valves and appurtenances, (2) 12,960 lin.ft. mains with hydrants, etc. $16,000. Toltz, King & Day, 1410 Pioneer, Bldg., St. Paul, engrs.

Idaho, Lewiston—Sept. 5 at office of J. R. Turnbull, city controller, waterworks improvements. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.; adv. this issue. Noted June 14.

CONTRACTS AWARDED

Conn., Newington—Center Fire Dist., 7 mi. c.i. pipe, various sizes, to A. Di Marco, 61 East Main St., Plainville. Engrs. est. $120,000. Noted May 24.

N. Y., New York—Bd. Water Supply, Municipal Bldg., making test borings in Boros of Bronx, Queens and Brooklyn, New York City, city of Yonkers, Westchester Co., Contr. 214, to Sprague & Henwood, Inc., Box 446, Scranton, Pa., $85,500. Noted Aug. 2.

O., Westerville—R. Biehl, city mgr., constructing filter bed, 2 contact beds and 2 units to sledge beds, 17,000 lb. reinforcing, 18 tons c.i. pipe and specials, 4,600 lin. ft. 4-30 in. pipe, etc., to R. O. Cart, Westerville. $33,605. Noted Aug. 9.

Mich., Ecorse—For 48,020 lin.ft. 4-8 in. c.i. mains, to T. C. Brooks, Jackson, $100,000. Noted Aug. 23.

Wis., Manitowoc—For 57 x 67 ft. addition to water works and light plant, 35 ft. high, brick, to T. Stark & Co., 130 Muskego Ave., Milwaukee, $17,000.

Wis., Marshfield—Additional water supply 2 m.g.d. piping, drilling 5 wells, installing mains with 85 lb. pressure, constructing pump house and equipment, to Layne-Bowler Co., 37 West Van Buren St., Chicago, $160,000. Engrs. est. $150,000.

Ill., Jerseyville—For 959 tons c.i. pipe, mostly 10 in., to U. S. Cast Iron Pipe and Fdry. Co., 520 Security Bldg., St. Louis, Mo.

Tex., Dallas—Will construct 5,000 ft. 6 in. main in Akard St., 2,200 ft. 10 in. in Trinity Heights, 3,000 ft. 12 in. Oak Cliff, by day labor. $17,038. E. A. Kingsley, city engr.

Tex., Ennis—For 14,500 ft. 10 in. Class B c.i. pipe from Waxahachie Creek to reservoir, to Winslett Eldridge Co., Dallas, $2.60 per ft.

Tex., Marlin—Filter equipment for new 1 m.g.d. filtration plant, to International Filtering Co., 333 West 25th Pl., Chicago, $15,290.

Tex., Sabinal—For 100,000 gal. steel tank and tower, to Pittsburgh Des Moines Steel Co., Praetorian Bldg., Dallas, $40,000.

Ckla., Tulsa—To De Laval Steam Turbine Co., North Clinton St. along tracks Pennsylvania R.R., two 12 m.g.d. high service steam turbine driven centrifugal pumps $84,300; to Walsh & Weidner Boiler Co., Main and Sycamore Sts., Chattanooga, Tenn., two 300 hp. water tube boilers with Green chain grate stokers $24 215. Above equipment for Mohawk pumping station (contract for which will be let about Oct. 1). Noted July 12.

B. C., Point Grey—Furnishing 5,000 ft. 4 in., 10,000 ft. 6 in., 1,000 ft. 8 in. and 1,000 ft. 10 in c.i. pipe, to Gordon & Belyea, 148 Alexander St., Vancouver, $15,750.

Sewers

PROPOSED WORK

N. Y., Binghamton—Making plans about 5 mi. of 5 ft. surface water sewer and 15 in. sanitary sewer along Trout Brook from Glenwood Creek to Chenango River. $200,000. W. E. Weller, city engr. Noted July 26.

N. J., East Orange—Plans storm water sewer, known as Elizabeth River Drain, 1 mi. long, mostly 72 in. rein.-con. pipe. $125,000. W. D. Willigerod, City Hall, engr.

Pa., Sayre—Plans 3,841 ft. sewer in Chemung, Olive, Desmond and North Wilbur Aves., $26,000.

Ga., Wrightsville—Sold $30,000 bonds for sewers. A. H. Hatcher, city clk.

Tenn., Dickson—Preliminary plans and surveys being made for general sewerage system. B. H. Klyce, 4th & 1st Natl. Bank Bldg., Nashville, consult. engr.

O., Barberton—Soon takes bids East Side Interceptor sewer. $285,000.

Mich., Springwells—Having plans completed for laterals and sewer arm in Assessment Dists. 18 to 22, 10-30 in. vitr. crock and concrete pipe. $100,000. A. Roth, 2348 Penobscot Bldg., Detroit, engr.

Mo., St. James—See "Waterworks."

Mo., University (St. Louis, P. O.)—See "Streets and Roads."

Ark., Little Rock — Having preliminary plans prepared storm and sanitary sewers, curbing and guttering, Monroe, Prospect, Lee, Jackson and Van Buren Sts. in Pulaski Heights. $50,000. Ford & MacCrea, Gazette Bldg., engrs.

Tex., Clarksville—Aug. 27, to vote on $40,000 bonds for sewage disposal plant. P. Wilson, mayor.

Tex., Ft. Worth—Making plans and takes bids about Sept. 2, 6-8 in. sanitary sewer in Sycamore Heights. $25,000. D. L. Lewis, city engr. J. B. Hawley, Cotton Exch. Bldg., consult. engr.

Tex., Stamford—City Com. will take bids after Aug. 27, for 500,000 gal. Imhoff tank, etc. $30,000. J. B. Hawley, Cotton Exch. Bldg., Ft. Worth, engr.

Ont., Crstal Beach — Takes bids about Sept. 1, extending sewers. $25,000. Ross & Scott, Welland, engrs. Noted Aug. 23.

BIDS DESIRED

N. J., East Orange—Aug. 27, Elizabeth River Drain, 1 mi. long, mostly 72 in. rein.-con. pipe. $125,000. W. D. Willigerod, City Hall, engr. Noted Aug. 15.

N. J., Newark—See "Streets and Roads."

Fla., Bradentown—Sept. 3, by Bd. Comrs. Manatee Co., constructing Cedar Hammock Drain. $25,000. R. H. Roesch, co. clk.

Fla., St. Petersburg—Sept. 24, at office H. T. Davis, dir. Finance, 138,610 ft. 6-21 in. sewers, etc.; adv. E. N.-R. Aug. 23.

O., Columbus—See "Streets and Roads."

O., Idlewood (Cleveland Heights P. O.)—Aug. 21, vitr. clay and tile storm and sanitary sewers in Washington Blvd., Sewer Dist. 1, Brockway, Cedarbrook, Farland, Tullamore, Bushnell, Fenwick, Landsdale, Venion, Westwood and Egerton Rds. To exceed $25,000. F. .. Pease Eng. Co., Marshall Blvd., Cleveland, engrs.

Ind., Hobart—Aug. 29, constructing 12-24 in. vitr. tile sewer in District Sewer 2, Impvt. 25.

Mich., Detroit—Aug. 31, by Dept. Pub. Wks., 1,251 ft. brick or monolithic concrete sewers in Liddesdale Ave., Sect. 1 in Liddesdale and Sanders Aves. from Pelham to Oakwood pumping station, 1,133 ft. 10 in. and 80 ft. 3 in. cylinder, 38 ft. of 24 in. crock bypass. J. W. Reid, city engr.

Ia., Sioux City—Aug. 29, at office F. A. Garnsey, clk., rein.-con. or rein.-brick and concrete storm water conduit; adv. this issue.

Kan., Lyons—Aug. 27, by S. L. Dinsmore, city clk., sewers in various streets 54,775 ft. 8-15 in. vitr. clay and 1,775 ft. 6-8 in. c.i. pipe, etc. $90,000. C. A. Haskins, 517 Finance Bldg., Kansas City, engr.

Mo., St. Louis—Sept. 11, by Bd. Pub. Serv., 208 City Hall, 3,760 ft. 8-27 in. vitr. clay sewer in Harlem Dist. Sewer 22, $15,250; 305 ft. 8-12 in. vitr. clay sewer in Ohio Dist. Sewer 26, $1,500. W. W. Horner, 300 City Hall, engr. Noted June 12.

Tex., Ft. Worth—Aug. 28, sanitary sewers and laterals in Sycamore Heights and Tandy Addition. To exceed $25,000. D. L. Lewis, city engr. J. B. Hawley, Cotton Exch. Bldg., consult. engr.

Tex., Grand Prairie—Aug. 30, by City Comn., sewerage system and disposal plant. $65,000. Koch & Fowler, 606 Central Bank Bldg., Dallas, engrs. Noted July 19.

Alta, Drumheller—Taking bids two electrically driven sewerage pumping units, 300 gal. per min. pumps. Haddin & Mills Ltd., Calgary, engrs.

Ont., Fort Erie—Nov. 1, by Town Council, linking up proposed Fort Erie sewerage system with Bridgeburgs. $35,000. A. E. Seaton town clk.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette Ave., New York City, Aug. 10, miscellaneous drainage and sewers in Boros of Manhattan, Brooklyn and Queens, Agreement "CO," from F. Persicano, 350 Fulton St., Brooklyn, $20,570. Noted Aug. 2.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Aug. 16, sewers in (1) Mayflower Ave. (2) Bradford Ave. (3) West 262nd St. (4) Holland Ave. (5) Randall Ave., grading and building inlets in (6) Magneta St. (7) Spuyten Duyvil Parkway (8) Lurtin Ave. (9) unnamed streets (10) Hone Ave. (11) Yates Ave. (12) Knapp St. (13) Delafield Ave., concrete culvert across (14) Ludlow Ave., from Norton Eng. & Contg. Co., (1) $2,053; J. V. Timoney Constr. Co., 220 East 201st St., (2) $10,303; A. Gregorio, (3) $3,609; M. Del Balso, 660 East 221st St., (4) $6,396 (14) $11,997; McDonald & Wilson Co., (5) $8,558; I. F. Cavaluzzo, 1538 Walton Ave., (6) $4,851 (8) $18,804 (11) $26,309; O'Connoll & Strada, Inc., 3318 Olinville Ave., (7) $20,862 (13) $131; Spadero & Turriamo Co., 3185 East Tremont Ave., (9) $619; Spadero Contg. Co., 827 East 217th St., (10) $15,133; C. Petrillo Co., Inc., (12) $1,445. Noted Aug. 9.

N. J., Bloomfield — See "Streets and Roads."

N. J., Irvington (branch of Newark)—See "Streets and Roads."

Pa., Phila.—For substructure and superstructure of Southwest sewage pumping station, 40th Ward, from W. G. I. Contg. Co., Arch and Broad Sts., $174,132. Noted Aug. 9.

Mich., Springwells — Building 3,000 ft. Chase Rd. Trunk Sewer, and 3,930 ft. Mulkey Ave. Storm Sewer, from R. Mercier, 5435 Wesson Ave., Detroit, $310,000 and $154,000, respectively; 49,800 ft. lateral sewer in Dist. 17, north of Dix Ave., from Hammen & Co., 4612 Woodward Ave., Detroit, $131,759. Noted June 14.

Calif., Lodi—Sewage disposal plant, etc., from W. H. Graham, Lodi, $53,737. Noted Aug. 2.

Calif., Long Beach—Ejector plant and sewerage system in Dist. 1, from Churchill Co., 350 Merrick St., Los Angeles, $88,820. Noted June 7.

Calif., Oakland — Sewers in portions of Jackson St., from Cambar & Garden, 969 Third St., 222 lin.ft. 12 in. vitr. pipe $1.35, 243 lin.ft. 14 in. vitr. pipe $2.90, 528 lin.ft. 18 in. vitr. pipe $3.50, 312 lin.ft. 21 in. vitr. pipe $4.10, 1,131 lin.ft. 30 in. concrete pipe $6.20, 400 ft. 10 in. pipe conduit $1.30, etc. Noted July 12.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to J. J. Guinan Contg. Co., 2314 Gravesend Ave., sewers in East 3rd St., 96% engrs. est. ($8,433); to Tomassetti & Co., Inc., 1133 60th St., Mansfield Pl., 82.95% ($5,601), 73rd St. 92.92% ($4,429), East 52nd St. 88.88% ($4,395), Ocean Ave. 94% ($3,226), 79th St. 94.94% ($28,134), 58th St. 98.98% ($3,808); to B. Peconi & Sons, Lenox Rd., 90% ($5,301); to Nazzaro & Querriero, 81st St., 99.96% ($3,971), Ave. T 101% ($14,178), Ave. L 86% ($12,469); to S. Ambrosio, 1016 60th St., 7th Ave. 98% ($2,998); to Manmill Constr. Co., 2035 Douglas St., 20th Ave. 110% ($2,894), 82nd St. 98% ($2,339), Fort Hamilton Parkway 119% ($895), Lott Ave. 93.5% ($1,644);

Sewers (Continued)

to C. F. Vacharas, 645 40th St., Fort Hamilton Parkway, 111% ($1,313); to F. Meridino, 540 17th St., Sheffield Ave. 125% ($4,400). Noted Aug 9.

N. Y., Oneida—Sewage disposal plant, to Rock Bros. and Griffin, Antwerp, $54,990. Noted Feb. 1.

N. J., Bloomfield—J. C. Johnson, town clk., Aug. 6, laying sidewalks and paving State St., 2 in. bituminous concrete on 6 in. concrete, from Standard Bitulithic Co., 30 Church St., New York City, $9,140; bluestone curbing and paving 2,500 sq.yd. Race St., asphalt penetration telford, also 300 sq.ft. new bluestone sidewalk, grading and relaying 5,000 sq.ft. bluestone sidewalk on Watsessing Ave., from Marvaro & Tempesta, 396 Glen Ridge Ave., Montclair, $9,006 and $2,157; 1,000 ft. storm sewer in East Passaic Ave., from J. R. Frisco, Montclair, $2,887. No bids received bluestone curbing 1,300 ft. Bay Ave. Noted Aug. 2.

Pa., Erie—West side interceptor sewer from 4th and Cranberry Sts. to Rosemount Ave in Kahkwa Park, to W. Bancroft, Erie, $123,000.

Pa., Phila.—For Northeast sewage treatment works, Wheatsheaf Lane east of Richmond St., to M. and J. B. McHugh, 802 Markoe St., $76,331.

Ky., Ashland—Sewerage system to J. H. Sluss Constr. Co., Graham, Va., $270,626. Noted Aug. 2.

Wis., Marshfield—For 2,105 lin.ft. concrete trunk sewers, etc., in various streets, to Pastoret Constr. Co., 506 Sellwood Bldg., Duluth, Minn. $28,367. Noted Aug. 2.

Wis., Milwaukee—Sewerage Comn., 508 Market St., low level sewers in various streets tc Wenzel & Henoch Co., 498 27th St., $108,955. Noted Aug. 8.

Wis., Thorp—Sewer extensions and sewage disposal plant, to E. C. Munson, Withee. Noted June 21.

Mo., Richmond Heights (St. Louis, P. O.)—For 17,500 ft. 6-30 in. vitr. clay and 33-60 in. segmental block sewers, to R. D. Clark, Cape Girardeau. Engrs. est. $69,000. Noted Aug. 2.

Mo., Salisbury—Sanitary sewerage system, to Ray & Son, Baxter Springs, Kan., $45,000. Noted July 19.

Wash., Hoquiam—City Comn., sanitary sewers in East Hoquiam Dist., 28th St., to Keasel Constr. Co., Tacoma, $29,270. Engrs. est. $27,000.

Calif., Los Angeles—City, furnishing submarine rein.-con. pipe for Sect. 1, north outfall sewer, to J. Balch, 696 12th St., San Pedro, $147,000; laying pipe to Merritt-Chapman & Scott Corp., 17 Battery Pl., New York City, $496,000.

Calif., Los Angeles—For Sect. 10, outfall sewer, 1,440 lin.ft. 6 ft. and 6,127 lin.ft. 8 ft. 6 in. pre-cast pipe, etc., to Smith Bros. Inc. and Callahan Constr. Co., Detwiler Bldg., $214,443. Noted June 21.

Calif., Pasadena—Constructing steel and rein.-con. storm drain sewers in portions Walnut and Bway. Sts., to P. H. Ehlers, 1959 North Raymond Ave., $44,900.

Waste Disposal

BIDS DESIRED

Fla., St. Petersburg—Sept. 17, at office H. T. Davis, dir. finance, garbage incinerator; adv. E. N.-R. Aug. 23.

Ont., Crystal Beach—Taking bids garbage incinerator.

BIDS RECEIVED

Calif., Sacramento—Constructing 150 ton incinerator, from F. L. De Carie, Portland, Ore., $195,000. Noted May 31.

Bridges

PROPOSED WORK

Vermont — State Hy. Dept., Montpelier, plans 41 ft. span concrete bridge, incl. 0.11 mi. graveled surface approach, in Chester, Federal Aid Project 46; 70 ft. steel span bridge with 0.09 mi. graveled surface approach in Bloomfield, Federal Aid Project 47; 45 ft. concrete bridge with 0.15 mi. graveled surface approach, in Ferdinand, Federal Aid Project 44; 82 ft. span plate girder bridge with 0.21 mi. graveled surface approach in Woodford, Federal Aid Project 48. T. W. Dix, ch. engr.

Kan., Winfield—Crowley Co. plans election soon to vote on $500,000 bonds to rebuild bridges recently destroyed by flood. W. S. Ruggles, Jr., Arkansas City, engr.

S. D., Edgemont—State Hy. Dept., Pierre, takes bids in fall for six 60 ft. rein.-con. deck girder bridge, on Federal Aid Project 159, Fall River Co., here. $41,418. F. D. Hudgings, state engr.

Tex., Beaumont—B. B. Johnson, judge Jefferson Co., rejected bids for 3,214 ft. concrete and steel bridge, over Neches River. Will readvertise. $503,900. A. C. Love, co. engr. Noted July 5.

Tex., Cameron—See "Streets and Roads."

Tex., Halletsville — See "Streets and Roads."

Tex., Marlin—See "Streets and Roads."

BIDS DESIRED

New Jersey—Aug. 27, by Joint Bridge Com. of Essex and Hudson Counties, Court House (Newark), repairing and repaving bridge over Passaic River, Jackson St., concrete and wood block. $60,000. W. H. Stickler, Court House, Newark, and F. Radigan, Jersey City, engrs. Noted July 19.

N. J., Keyport—Sept. 5, by Bd. Freeholders, Monmouth Co. (Freehold), constructing new timber floor and repairs and additions to steel trusses of Bridge R-1, here. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.; adv. E. N.-R. Aug. 23.

N. J., Plainfield—Sept. 4, by Common Council, concrete and steel railroad trestle, with retaining wall about 60 ft. long and 15 ft. high. A. W. Vars, City Hall, city engr.; adv. E. N.-R. Aug. 23.

Pa., Phila.—Sept. 19, for wire cables for bridge across Delaware River connecting Phila., Pa., and Camden, N. J. Former bids rejected. Noted Aug. 20.

Ind., Ft. Wayne—Sept. 12, by Bd. Comrs. Allen Co., bridge over Maumee River, at Columbia, here. J. H. Johnson, co. aud.; adv. E. N.-R. Aug. 23.

Minnesota—Sept. 5, by State Hy. Dept., St. Paul, Bridge 4090, on State Project 3-39, Federal Aid Project 327, over Clearwater River, Wabasha Co., five 75 ft. truss spans, $30,000; Bridge 4138, on State Project 59-23, Federal Aid Project 335, over Zumbro River, in Rochester, Olmsted Co., three 65 ft. low truss spans, $25,000. J. T. Ellison, ch. bridge engr.

South Dakota—See "Streets & Roads."

South Dakota—See "Streets & Roads."

Ark., Pine Bluff—See "Streets and Roads."

Tex., Canadian—Sept. 15, by Hemphill Co. concrete bridge, over Washita River, on D C D highway. $30,000. G. W. Wicklin, Austin, engr.

Calif., Helm—See "Excavation, Drainage, Irrigation."

Calif., Ventura — Supervs. Ventura Co. receiving bids repairing Montalvo Bridge, 263,874 ft. timber in floor system, 19,620 ft. timber in railing, 11,200 ft. new timber in truss members, 29,696 sq.ft. pavement.

BIDS RECEIVED

New Jersey—State Hy. Comn., Trenton, Aug. 13, steel and concrete bridge, two 73 ft. spans, 30 ft. roadway, rein.-con. slab approaches, over Crosswicks Creek, Burlington and Mercer Counties, from A. L. Primpe, 202 State Trust Bldg., Plainfield, $80,400. Noted July 26.

S. C., Charleston—Charleston Co., 1,733 ft. bridge over Ashley River, 43 ft. wide, steel structure from Hardaway Constr. Co., 909 Elizabeth Ave., Charlotte, N. C., $995,188; concrete, from Sanford & Brooks, 24 Commerce St., Baltimore, Md., $1,067,465. Noted July 5.

O., Cincinnati—See "Streets and Roads."

Mich., Marine City — State Hy. Dept., Lansing, 135 ft. swing bridge No. 770901, here, 320,000 lb. steel, from Wisconsin Bridge & Iron Co., North Milwaukee, Wis., $51,473. Noted June 14.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing bridges, **c g means concrete girder, c s concrete slab, c c concrete culvert, super superstructure, sub substructure, 1 c g 12-20B Clinton, means (1 concrete girder, Route 12, Sect. 20B, Clinton Co.)**, 1 c g 12-10B Clay and 2 c g 12-11B Clay, from Zimmerly Bridge Co., Paris, $13,840, $10,166 and $14,089 respectively; 2 c g 1-22B Crawford and 1 c s, 1 c g and 1 c c, 1-23B Crawford, from C. Newton, Hudsonville, $19,093 and $23,244 respectively; 1 sub for steel 1-24B Clark, 1 c g 1-43 and 1 c g 1-144 Vermilion, from M. & P. Contg. Co., Rockport, Ind., $6,664, $11,987 and $6,417 respectively; super for steel 1-24C Clark from Vincennes Bridge Co., Vincennes, Ind., $12,958; 2 c g and 1 c s 2-19B Shelby-Christian from D. W. Carmine, Sullivan, $20,451; 1 c g, 1 sub for steel and 3 c s 9-17 B Ford from I. D. Lain, Bloomington, $18,125; 1 c g and 1 c c 2-46B and 1 c g and 1 c s 2-47B Shelby from General Constr. Co., Decatur, $5,393 and $6,479 respectively; 1 c g 2-20B Fayette-Shelby from L. C. Kesler, Edwardsville, $7,308; 1 super for steel 9-17C Ford from Continental Bridge Co., Monadnock Blk., Chicago, $5,971; 2 c s 9-44B, 2 c g and 1 sub for steel 9-45B and 1 super for steel 9-45C Peoria, from M. R. Deyo & Co., 1126 West Washington St., Peoria, $4,926, $22,118 and $6,335 respectively; 4 c s and 1 c c 38-4B Calhoun from Gaines Bros. Co., $15,171; 2 c g and 2 c s 38-5B Calhoun from Public Works Constr Co., St. Louis, Mo., $28,861; 2 c s 19-29B McHenry from Button Bros., $13,920; 3 c c 23-21B McHenry and 1 c s 9-31B Cook from F. M. Hughes, Dixon, $5,409 and $7,499. Noted Aug. 2.

Wash., Easton—State Hy. Comn., Olympia, Aug. 7, rein.-con. bridge over Yakima River on Sunset Highway, near here, Kittitas Co., from Union Bridge Co., Central Bldg., Seattle, $36,750.

California—State Hy. Comn., Sacramento, bridge over Whitewater River, near Whitewater, Riverside Co., eight 54 ft. rein.-con. girder spans with concrete piers, abutments and wing walls, etc., from Gibbons & Reed Co., 905 South Olive St., Los Angeles, $120,132. Noted July 19.

Calif., Ventura — Supervs. Ventura Co., rein.-con. bridge with seven 30 ft. spans, concrete pile piers and abutments, timber pile foundation, over Conejo Creek, from J. Short, 420 South Beaudry Ave., Los Angeles, $23,900. Noted July 26.

CONTRACT AWARDED

New York—Committee on Bridges at office of C. MacDonald, engr. Westchester Co. Court House, White Plains, completing Van Cortlandt Bridge over Croton River, on Albany Post Rd. between towns of Cortlandt and Ossining, to Eltonwood Constr. Co., 60 East 96th St., New York City, $120,848. Noted July 26.

Pa., Waynesburg — Comrs. Greene Co. Court House, 132 ft. concrete bridge, 2 spans, one coffer dam, 4 mi. east of Pratt Bridge, to Lippencott Bros., Waynesburg, $28,440.

Tennessee—State Hy. Dept., Nashville, bridges over 20 ft. span on Federal Aid Project 94, to Little & Dean, Memphis, $13,496; bridges over 20 ft. span on Federal Aid Project 96, to Luten Bridge Co., 405 East 4th Ave., Knoxville, $32,810; 2 bridges on State Project 129, Hickman Co., to F. H. Crow & Co., 42nd Ave. N., Nashville, $37,245; rein.-con. bridge over Drake Creek, Federal Aid Project 63 E, Sumner Co., and bridge over Stones River, Federal Aid Project 89, Rutherford Co., to Clayton Paving Co., 44 Noel Blk., Nashville, $18,624 and $27,001 respectively. Noted July 26 under "Streets and Roads."

Indiana—State Hy. Comn., Indianapolis, constructing bridges, **s t means steel truss, super. superstructure, sub. substructure, r c g rein.-con. girder, r c s rein.-con. slab, r c b rein.-con. box, F A Federal Aid, S A State Aid; s t sub., F A 21A, 1-E, Jackson, means steel truss substructure, Federal Aid 21A, State Rd. 1-E, Jackson Co.**; to F. K. Vaughn Bldg. Co., Coke Otto, Hamilton, O., 3 s t sub., F A 21A, 1-E, Jackson, s t sub., F A 21C, 1-B, and r c g, F A 21C, 1-B, Clark, s t sub., F A 21D, 1-C, s t sub., F A 21E, 1-D, and extension to slab, F A 21D, 1-C, Scott Co., total $44,261, engrs. est. $45,764; to Bryant & Smelser, Plymouth, r c b, F A 10B, 1-X, St. Joseph, $7,080, $7,917; to International Steel & Iron Co., Evansville, s t, super., F A 36, 10-A, Vanderburgh, $19,986, $20,922; to M and P Contract Co., Rockport, r c s, s t and r c g, all F A 36, 10-A, Vanderburgh, $19,793, $20,600; to R. Spurgeon, Ligonier, s t, F A 44A, 2-M, Allen, $7,558, $7,901; to Vincennes Bridge Co., Vincennes, s t, F A 49A, 25-D, Steuben, $10,514, $10,715, s t, S A 5A, 5-A, Knox, $4,659, $4,937; to Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis, s t, F A 53, 9-I, Clay, $86,863, $89,322; to Schroeter Bros., Hammond, r c s, S A 2C, 2-C, Porter, $3,150, $3,452; to J. E. Sweet & Sons, Woodburn, s t, S A 8B, 8-B, Jasper, $4,047, $4,355; to Black & Bowman, Knightstown, r c g, S A 11D, 11-D, Madison, $4,347, $5,609; r c g, S A 12G, 12-G, Owen and r c g, S A 32C, 32-C, Putnam, $7,487, $8,663; to J. L. Hamilton, Greencastle; to Lewis & Spoor, Knox, r c b, S A 15, 15-E, r c b, S A 15E, 15-E, r c s S A 50C, 50-C, and s t, S A 50C, 50-C, all in Starke Co., $14,649, $15,872, also s t, S A 50D, 50-D, Marshall, $6,816, $7,598; to McCartney & Davidson, Saratoga, s t, S A 21F, 21-F, Randolph, $7,297, $7,768; to Consumers Coal & Supply Co., Urbana, s t and r c s, S A 27A, 27-A, Wabash, $7,962, $9,900. Noted July 12.

Ia., Waterloo—Black Hawk Co., 1 steel and concrete bridge with three 130 ft. spans,

Bridges (Continued)

and 13 small concrete bridges on Primary Rd. 40, to Parsons & Meyers Co., Dyersville, $48,955.

Minn., Carlton—State Hy. Dept., St. Paul, Bridge 4004, three 162 ft. spans, steel and concrete, here, State Project 1-42, Federal Aid Project 325, to L. E. Baum, 2305 Ogden Ave., Superior, Wis., $49,812. Noted July 12, under "Streets and Roads." Minnesota.

Wyo., Alcova—State Hy. Dept., Cheyenne, steel truss bridge, two 161 ft. spans, over North Platte River, near here, Natrona Co., to Missouri Valley Bridge & Iron Works, 319 Idaho Bldg., Boise, Idaho, $48,342. Noted Aug. 2.

Washington—State Hy. Dept., Olympia, Indian Timothy Memorial Bridge, 200 ft., over Alpowa Creek, Asotin Co., to Colonial Building Co., Hutton Bldg., Spokane, 218 cu.yd. Class A rein.-con. $34, 270 cu.yd. Class B $35, 170 cu.yd. Class C $30, 80 cu. yd. Class E $30, 97,000 lb. reinforcing $0.08, etc., total $35,120; 1,200 ft. rein.-con. bridge over south fork of Lewis River at La Center, Clarke Co., to H. C. Goerig, Portland, Ore., 1,900 cu.yd. Class A rein.-con. $20, 1,360 cu.yd. Class B $19, 400 cu.yd. Class C $25, 530,000 lb. reinforcing $0.05, 2,400 lin.ft. wooden piling $0.70, etc., total $180,072, engrs. est. $200,000; 221 ft. rein.-con. bridge across Salmon Creek south of Toledo, to Union Bridge Co., Central Bldg., Seattle, $25,727.

Dams

PROPOSED WORK

N. Y., Hornell—See "Miscellaneous."

Wis., Iron River—Iron River Water & Light Co., plans to rebuild rein.-con. and earth dam recently washed out, 5 ft., base, 1 ft. top. $25,000-$30,000. T. F. MacMiller, pres. Engineer not selected.

Mo., Stockton—See "Industrial Works."

CONTRACTS AWARDED

Calif., Merced—Merced Irrigation Dist. rejected bids and will construct Exchequer Dam, by day labor. Noted Aug. 16.

Railways

PROPOSED WORK

Connecticut—Connecticut Co., 127 State St., Hartford, plans laying 3,000 ft. double tracks on Park St. from Zion to Laurel Sts. To exceed $25,000.

North Carolina—Wellington & Powellsville R.R., 617 Bd. of Trade Bldg., Norfolk, Va., having plans prepared changing narrow gage to standard gage and extending same from Windsor to Roanoke River, about 7 mi., also building branch line about 19 mi. long from Ahoskie to Pendleton via Union and Murfreesboro. W. M. Corwin, Ahoskie, supt.

Illinois—See "Industrial Works."

BIDS DESIRED

California—Sept. 4, by A. L. Cowell, secy. Merced Irrigation Dist., Merced, relocation of Yosemite Valley R.R. (approximately 16 mi.), bids may be submitted for complete project or for (1) grading (2) tunneling (3) trestles and placing culverts (4) tracklaying and ballasting. Starr-Thebo-Anderton, Sharon Bldg., San Francisco, engrs.

CONTRACTS AWARDED

Louisiana—Alexandria & Western Ry., Alexandria, 5 mi. road bed between McFarland and Alexandria to List & Gifford, Merchants-Laclede Bldg., St. Louis, Mo., $55,000. Noted July 12.

Excavation, Drainage Irrigation

PROPOSED WORK

N. Y., Hornell—See "Miscellaneous."

Wis., Belleville—Dane Co. Drainage Bd. making plans 15,900 ft. 6-15 in. vitr. tile drain. $25,000. P. H. Hintze, Court House, Madison, engr.

Wis., Vienna—Catfish River Drainage Bd., c/o F. Bell, 2 South Carroll St., Madison, having plans prepared for drainage system, 1,500 acres, open ditch and tile drain, 12, 16 and 18 in. vitr. tile, in Dane Co. P. H. Hintze, Court House, Madison, engr.

Calif., Bishop—Owens Valley Irrigation Dist. voted $1,650,000 bonds for irrigation works.

BIDS DESIRED

La., Lake Charles—Sept. 18, by Police Jury Calcasieu Parish, constructing sections of Navigation Canal 30 ft. deep, 125 ft. wide from here to Sabine River. F. Shutts, parish engr.; adv. E. N.-R. Aug. 23.

Ia., Council Bluffs—Aug. 31, by Pottawattamie Co., drainage improvements for Pony Creek D. D. 23, incl. main ditch and 5 laterals, 239,600 cu.yd. excav., etc. G. B. Sparks, aud.

Mich., Detroit—P. T. Cret and Zantzinger, Bowie & Medary, 112 South 16th St., Phila., Pa., taking bids for Contract 2 incl. excav., grading, foundation work, footings and underground drainage, etc., for 2 story and basement, 95x148 ft., 95x290 ft. and 112 x 148 ft., rein.-con., brick and stone art institution, plain foundation, Woodward Ave., here, for Detroit Institute of Art, 704 East Jefferson St.

Calif., Helm—Sept. 4, by R. M. Bostwick, secy. Stinson Irrigation Dist., irrigation improvements as follows (1) 10-20 vertical shaft induction motors, etc. (2) 3-6 horizontal shaft induction motors, etc. (3) 3-6 deep well turbine or propeller pumps, etc. (4) 10-14 deep well turbine or propeller pumps, etc. (5) drilling 3-6 wells, cased with 14 in. double No. 12 gauge stove pipe casing, 400-800 ft. deep, etc., alternative drilling 3-6 wells, cased with 14 in. double No. 12 gauge casing to depth of 100 ft. and then with 12 in. double No. 12 gauge casing to total depth from surface of from 400 to 900 ft. deep, etc. (6) furnishing material (except cement) and constructing 14-20 pump houses, derricks, etc. (7) material only (except cement) for foregoing pump houses (8) 15-20 deep well pumps and motors, etc. (9) 15-20 Dayton couplings for steel pipe, etc. (10) 2-4 carloads cement at Burrel or Helm (11) 4-8 carloads gravel and 2-4 carloads sand at Burrel or Helm (12) 2,000-2,500 ft. 18-36 in. cement pipe (13) 148 more or less cement turnout boxes (14) 148 more or less, 20 in. diameter metal gates, etc. (15) 150,000 cu.yd. more or less earth work, etc. (16) 15,000 sq.ft. more or less reinforcing steel (17) 41 bridges across canals and laterals (18) 20 more or less headgates, 20 more or less checks in laterals, 7 checks in canals (19) 15 more or less syphons across sloughs (20) hauling cement, gravel, sand, lumber, etc., from Helm or Burrel to various locations in Dist. Quinton, Code & Hill, 1106 Hollingsworth Bldg., Los Angeles, consult. engrs.

Calif., Paradise—Aug. 22, by Directors Paradise Irrigation Dist., plans trenching and raising dam, (a) digging trench 19,095 ft. 14 x 22 in. and backfill; (b) digging trench 5,100 ft. 18 x 24 in. and backfill; (c) furnishing 780 ft. 2 in., 10,345 ft. 3 in. and 8,720 ft. 4 in. standard black (or similar) pipe; (d) furnishing 5,100 ft. soil-proof riveted steel pipe 5, 6 and 7 in. (e) hauling pipe and fittings, (f) laying pipe and fittings, etc. J. E. Alley, supt.

Calif., Selma—Sept. 4, by I. H Teilman, ch. engr., Consolidated Irrigation Dist., rein.-con. intake at Diversion Dam on Kings River, one for Centerville and Kingsbury Canal, and one for Fowler Switch canal, also rein.-con. outlet for China Slough.

BIDS RECEIVED

New Jersey—Bd. Commerce & Navigation, Trenton, dredging section of proposed inland waterway connecting Barnegat Bay with Manasquan River, Ocean Co., from J. M. Taylor, New York City, (1) $0.455 (2) $0.445. Noted Aug. 2.

Wis., La Crosse—Dredging, from La Crosse Dredging Co., P. O. Box 357, Muscatine, Ia., 60,000 cu.yd. in channel in Isle La Plume slough $0.235 per cu.yd., 56,760 cu.yd. Black River $0.24, 86,370 cu.yd. at Pettibone Park Beach, incl. 2,630 cu.yd. earth excav. $0.205, beach at Copeland Park $190 per 11 hr. shift.

Calif., Chico—Butte Creek D. D. cleaning out Butte Creek, from California Dredging Co., Hobart Bldg., San Francisco, 80,000 yd. excav. in outlet drains at $0.20 per yd., 20,000 yd. excav. in drainage canal $0.25.

CONTRACTS AWARDED

Iowa—Story Co. (Nevada) and Boone Co. (Boone), 41,603 lin.ft. 6-36 in. tile and relaying 1,300 ft. 18 in. tile in D. D. 10, to McHose Sand & Tile Co., Boone, for tile, $36,584; to C. Haugsted, Nevada, for labor, $16,400. Noted Aug. 9 under Nevada, Ia.

Ind., Gary—City, reclaiming 20,000 acres swamp in Little Calumet River, known as Burns Ditch, south of here, to Walb Constr. Co., LaGrange, $283,569.

Tex., Harlingen — Cameron Co. Water Impvt. Dist. 1, 300,000 cu.yd. excav., to J. Ballinger, San Benito, $37,590; structures, to Card & Metcalf, Mission, $22,915. Noted July 26.

Calif., Newport—Parkinson Syndicate Interests, dredging channel in vicinity of county turning basin, to Los Angeles Dredging Co., Seaside Park, Long Beach, $500,000.

Streets and Roads

PROPOSED WORK

Vermont — State Hy. Dept., Montpelier, plans paving 2.35 mi. Williamstown-Bennington Rd., in Pownal, Federal Aid Project 42, and 1.54 mi. Munson Flats Rd., in Colchester, Federal Aid Project 41, concrete; 2.02 mi. Boston Rd., in Clarendon, Federal Aid Project 45, 1.43 mi. Whitmore Rd., in Milton, Federal Aid Project 36, and 0.16 mi. approach to Richmond Overpass, Federal Aid Project 43, gravel. T. W. Dix, ch. engr.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, rejected bids Aug. 1, repaving 41st St., asphalt, and grading, curbing and flagging Lenox Rd. Noted Aug. 9.

N. Y., Dansville—City and State Hy. Dept., Albany, plan improving 1.1 mi. road from Dansville to Ossian, 18 ft., concrete. $60,000.

N. Y., Penn Yan—Yates Co. plans improving 4 mi. road connecting Penn Yan-Potter with Rushville-Potter Rds. 18 ft. with possible inclusion of 1½ mi. additional to connect Yates with Schuyler Rds. Yates Co. will appropriate $100,100, State $114,563 and Federal Government $71,338 toward cost. Bids will be opened by Supervs. Yates Co.

New Jersey—State Hy. Dept., Trenton, plans improving 1¼ mi. Mile Hollow cut-off Rd., Burlington Co., concrete. W. G. Sloan, Mechanic Bldg., Trenton, engr.

Pa., Waynesburg—Greene Co. election Sept. 18, to vote on $2,000,000 bonds for road work. T. B. Dinsmore, co. engr.

W. Va., Parkersburg—City Council soon takes bids vitr. brick paving 3 mi. Market St., etc. $150,000. B. Woodyard, city engr.

N. C., Greensboro — Plans widening Greene St. from Buchanan to Bellemeade Sts. and extending same from Bellemead St. to Battleground Ave., extending Depot St. from Elm to Greene Sts., paving East Lee St. from Ashboro to Martin Sts. P. C. Painter, city mgr.

Fla., Arcadia—Sept. 3, to vote on $50,000 bonds 10,700 sq.yd. vitr. brick pavement, 9,900 sq.yd. 6 in. limestone base. Cravens & Kimmel, Arcadia, engrs.

Fla., Clearwater—Pinellas Co. election Sept. 11, to vote on $252,000 bonds hard-surfacing roads and bridges. J. N. Brown, co. clk.

Fla., Tavares—Lake Co. returned bids unopened grading and sand-clay surfacing 19½ mi. Rds. 8 to 13 inclusive, $29,250; 17.3 mi. Rds. 4, 5, 6 and 7, $26,000; 25.1 mi. Rds. 1 B, 2 and 3, $37,500. G. E. Heller, Tavares, engr. Noted July 26.

Miss., Crystal Springs—Voted $30,000 bonds to complete sewerage system.

Tennessee—State Dept. Hys. and Pub. Wks., Nashville, had surveys made constructing 14 mi. highway between Brownsville and Tipton Co. line, Haywood Co., 18 ft. J. G. Creveling, Nashville, comr. Noted Aug. 16.

Tennessee—State Hy. Dept., Nashville, rejected bids constructing 5 mi. road between White Co. line and Pleasant Hill, State Project 130, Cumberland Co. Will readvertise.

Tenn., Memphis—City plans asphalt paving several blocks Jefferson Ave. from Lauderdale to Neeley Sts. $131,519. W. B. Fowler, city engr.

Kentucky—State Hy. Dept., Frankfort, plans grading 11.529 mi. Salyersville-West Liberty Rd., 24 and 28 ft., Morgan Co.; 10.941 mi. Ravenna-Lee Co. line Rd., State Project 29, Sect. B, 24 and 28 ft., Estill Co., 158,280 cu.yd. earth, 94,186 cu.yd. solid rock, 1,986 cu.yd. loose rock and 22,945 cu.yd. borrow excav., 41,302 yd. sta. overhaul, etc. J. S. Boggs, state highway engr.

O., Akron—S. Porter, clk Summit Co., rejected bids Aug. 30, grading and paving 4.12 mi. Cleveland-East Liverpool Rd. 12, 16 ft., bituminous concrete or bitoslag. $150,269. Noted July 26.

O., Canton—Stark Co. takes bids in fall paving 2 mi. Canton-Massillon Rd., 20 ft., brick. State will appropriate $25,875 and County $52,625 toward cost; 2 mi. Massillon-Wooster Rd., 20 ft., State will appropriate $23,000 and County $41,000. G. Sickafoose, Court House, engr.

O., Dayton—Plans paving Illinois Ave., brick on concrete, $12,305; Kilmer St., brick or sheet asphalt on concrete, $21,006. Work involves 1,200 lin.ft. concrete curb and gutter, 8,000 sq.yd. vitr. brick. I. E. Houk, city engr.

Michigan — State Hy. Dept., Lansing, soon takes bid grading and gravel surfacing 3 mi. State Trunk Line Rd. 55-10, Roscom-

Streets and Roads (Continued)

mon Co., 9 mi. Federal Aid Project 105, Sect. A, Iron.; grading and surfacing with concrete 1 mi. State Trunk Line Rd. 11-57, Ottawa Co. F. F. Rogers, state comr.

Michigan—State Hy. Dept., rejected bids grading and surfacing 1.25 mi. Federal Aid Project 68, Sect. C, Clinton Co., 1,786 cu.yd. excav., 13,200 sq.yd. concrete. F. F. Rogers, state comr. Noted Aug. 16.

Michigan—State Hy Dept., Lansing, soon takes bids improving roads, (S. T. L. Rd. 95-1, Presque Isle, means State Trunk Line Rd. 95-1, Presque Isle Co.) gravel surfacing 5 mi. S. T. L. Rd. 95-1, Presque Isle, 5 mi. S. T. L. Rd. 18-24. Gladwin, 3½ mi. S. T. L. Rd. 15-12, Sect. B, Menominee, 3 mi. S. T. L. Rd. 33-4, Sect. A, and 4 mi. S. T. L. Rd. 33-3, Sect. B, Oscoda. F. F. Rogers, state comr.

Ill., Astoria—Making revised plans paving 2 mi. Bway and Main St., rein.-con., 30 ft. $60,000-$75,000. W. A. Fuller, 1917 Ry. Exch. Bldg., St. Louis, Mo., engr. Noted Feb. 8.

Ill., East St. Louis—Making plans grading and rein.-con. paving 6 mi. State St., parkway for street cars in center, 5 ft. sidewalks, street 66 ft. wide. $375,000-$425,000. W. McK. Brown, City Hall, engr.

Wis., Wausau — Plans concrete paving and grading Adams St. from 9th to 10th Sts., Bridge St. from 3rd to 6th Sts., and Chicago Ave. from 3rd to 6th Sts. $25,000. B. C. Gowen, City Hall, engr.

Minn., Pine City—Pine Co. voted to issue $140,000 bonds for trunk highway improvements. State Highway Dept., 1246 University Ave., St. Paul, engrs.

Kan., Bronson—Bourbon Co. (Ft. Scott) soon takes bids grading and surfacing 1.076 mi. portions of Bay, Clay, Spruce and Line Sts., 18-45 ft., concrete, Federal Aid Project 118, here. B. Boyle, Ft. Scott, co. engr.

Kan., Marysville—Soon takes bids paving 15 blocks, various types. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, Mo., engrs.

South Dakota—State Hy. Dept., Pierre, takes bids in fall graveling 12,000 cu.yd. Federal Aid Project 156, Hughes and Hyde Counties. $44,380. F. D. Hudgins, state engr.

S. D., Yankton—Plans to pave 12 blocks West 8th St. $42,000. J. W. Summers, city aud.

Wyo., Cheyenne—Making plans grading, paving and curbing 4,000 ft. 18th St., 40 and 50 ft. $65,000. J. A. Bruce, Cheyenne, engr.

Missouri—State Hy. Dept., Jefferson City, plans grading roads in St. Louis and Howard Counties, 14,969 cu.yd. earth excav. and 95,261 cu.yd. borrow; concrete paving 23,354 sq.yd. Federal Aid Project 205 C, Buchanan Co. B. H. Piepmeier, state highway engr.

Missouri — State Hy. Dept., Jefferson City, plans grading roads in Boone and Cooper Counties, 161,150 cu.yd. earth and 18,462 cu.yd. rock excav., 59,278 cu.yd. borrow; concrete paving 44,369 sq.yd. Federal Aid Project 205B, Buchanan Co. B. H. Piepmeier, state highway engr.

Mo., Clayton—St. Louis Co. received no bids July 18, grading and paving Chambers, Old Florissant, McKelvey and Creve Coeur Rds., 45,738 cu.yd. earth excav., 252.15 cu. yd. concrete, 3,681.81 squares macadam. $76,289. Will readvertise. W. Elbring, Court House, engr. Noted July 12.

Mo., University (St. Louis, P. O.)—Davis Realty & Development Co. purchased 90 acres land on Ferguson and Pennsylvania Aves. north of Olive Blvd. subdivision, and plans grading, installing streets, 6-36 in. sewers, sidewalks, etc. $250,000. Engineer not announced.

Ark., Little Rock—Having preliminary plans prepared paving 9,800 ft in Paving Dist. 356, incl. East 2nd St. from Main to Byrd Sts., Cumberland, Rock, Sherman, Ferry, Byrd and Collins Sts. from Markham to 3rd Sts. $100,000; grading and paving 15 blocks in Impvt. Dist. 360 East 21st St. from Cumberland to Barber Sts., Rock St. from 20th to 22nd Sts., portions East 20th and East 22nd Sts., from Cumberland to Rock Sts., $55,000; grading and probably rein.-con. paving 25 blocks in Impvt. Dist. 351, State St. from 10th to 20th Sts. and portions of intersecting streets, $90,000. W. T. Field, Gazette Bldg., engr.

Tex., Alpine—Brewster Co. making plans grading and gravel and caliche surfacing 8.5 mi. State Highway 12, 18 ft. $48,500. A. L. White, co. engr.

Tex., Breckenridge—Stephens Co. making plans grading, etc., with 2 in. asphaltic concrete top, modified Topeka mix, 15.8 mi. Bankhead Highway, 18 ft. $222,325. Nagle Witt Rollins Eng. Co., c/o A. G. Rollins, Breckenridge, engrs.

Tex., Cameron—Milam Co. making plans grading and gravel surfacing 10.5 mi. State Highway 43, 18 ft., also bridge over Little River. $175,000. A. F. Mitchell, co. engr.

Tex., Cleburne — Johnson Co. making plans grading and gravel surfacing 4.8 mi. State Highway 10 A, 16 ft. $29,625. R. E. Keller, co. engr.

Tex., Dallas—See "Waterworks."

Tex., Floresville — Wilson Co. voted $100,000 bonds supplemented by $200,000 Federal Aid, improving 16 mi. San Antonio-Corpus Christi Rd., 18 ft. Noted July 19.

Tex., Halletsville — Lavaca Co. making plans grading and bridging 14.2 mi. State Highway 3 A, 24 ft. $125,000. W. H. Koether, co. engr.

Tex., Hemphill—Sabine Co. making plans grading and gravel surfacing 8.4 mi. State Highway 8, 18 ft. $60,000. W. A. French, San Augustine, co. engr.

Tex., Jefferson—Marion Co. making plans grading and gravel surfacing 14.8 mi. Avinger Rd., 16 ft. $150,000. T. B. Warden, co. engr.

Tex., Kerrville—Kerr Co. making plans grading, surfacing with macadam base and bituminous topping 5.9 mi. State Highway 41, 18 ft. $61,500. W. E. Simpson, Natl. Bank of Commerce Bldg., San Antonio, engr.

Tex., Marlin — Falls Co. making plans grading, gravel or macadam surfacing and bridging 14 mi. State Highway 44, 18 ft. $200,000. J. P. Wehrung, Lott, co. engr.

Tex., Palo Pinto—Palo Pinto Co. making plans grading and surfacing with macadam base and bituminous topping 5 mi. Salesville Rd., 18 ft. $100,000. G. W. Courter, co. engr.

Tex., Roscoe—Nolan Co. making plans paving Bankhead Highway and Main St., 20 and 30 ft., concrete or bituminous. $30,000. Montgomery-Ward Co., Wichita Falls, engrs.

Tex., Sierra Blanca—Hudspeth Co. making plans grading and gravel surfacing 9 mi. State Highway 1, 18 ft. $36,000. J. W. Carter, Courthouse, El Paso, engr.

Tex., Wichita Falls—Wichita and Baylor Counties plan hard surfacing Wichita Falls Seymour Rd. $322,000 available. J. M. Isbell, Wichita Falls, engr.

Tex., Wichita Falls—Wichita Co. plans paving with rein.-con. 6 mi. state Highway 28, 18 ft. $180,000. J. M. Isbell, co. engr.

Okla., Sand Springs—Having plans prepared paving 12 blocks. Holway Eng. Co., Wright Bldg., Tulsa, engrs.

Washington—State Hy. Comn., Olympia, rejected bid opened July 31, grading and gravel surfacing 6.08 mi. Olympic Highway, Quianult-Queets Sect., Grays Harbor Co. J. Allen, state highway engr. Noted July 19.

Wash., Everett—Plans paving and grading Virginia St. et. al. $60,486. F. Fegtmeier, Everett, engr.

Calif., Bakersfield — Kern Co. having plans prepared resurfacing with 3 to 5 in asphaltic concrete 38 mi. various highways, also constructing 3 mi. highway, 6 in. asphaltic concrete, 2 courses. $1,000,000. W. S. Farley, Monadnock Bldg., San Francisco, consult, engr.

Calif., El Cerrito—Had plans prepared improving Potrero Ave., 14,234 sq.ft. concrete walks, 2,982 lin.ft. concrete curb, 7,470 sq.ft. concrete gutter, 30,551 sq.ft. 8 in. oil macadam, etc. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Calif., Fresno—Fresno Co. plans paving 6 mi. road, North Fresno Dist. $500,000. C. P. Jensen, co. surv.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving highway between Palmdale and Pallett Creek, incl. 10.7 mi. 6 in. asphaltic concrete pavement, 16 ft., 8.1 mi. disintegrated granite pavement, 16 ft., and 2.3 mi. graded roadway, 24 ft., to exceed $425,000; improving 1.7 mi. Washington St. from east boundary of Culver City to Los Angeles west city limits, 24,905 sq.ft. excav., 42,069 sq.yd. sub-base, 67,062 sq.yd. asphaltic concrete on concrete, 10,879 sq.ft. walks, etc., to exceed $250,000.

Calif., Los Angeles—Supervs. Los Angeles Co. authorized paving 13 streets and roads. $700,000. Work will begin about Oct.

Calif., Marysville — City appropriated $25,000 paving street intersections and streets fronting city property. J. O. Wanzer, city mgr.

Calif., Marysville—Supervs. Yuba Co. voted to construct 5½ mi. gravel road to Bear River, and 7 mi. permanent highway through Arboga Dist. to Plumas Lake Sect. J. R. Meek, co. surv.

Calif., Monterey—Plans grading, curbing, guttering and gravel surfacing streets in New Monterey Sect. To exceed $25,000. H. D. Severance, city engr.

Calif., Oakland—Alameda Co. plans paving East 14th St. $100,000. G. A. Posey, co. surv.

Calif., San Francisco—Had plans prepared improving Rhode Island St. 40,000 sq.ft. concrete, 14,052 sq.ft. asphaltic concrete, etc., $17,350; concrete parapet roadway in Sutro Heights Park. $10,000. M. M. O'Shaughnessy, city engr.

Calif., Santa Barbara— Santa Barbara Co voted $300,000 bonds paving with 6 in. oil macadam 25 mi. in Santa Ynez Valley, 18 ft. O. H. O'Neill, co. surv. Noted July 12.

Calif., Sausalito—Having plans prepared curbing, guttering and paving with concrete and bituminous macadam Pine, Johnson and Filbert Sts., etc. To exceed $25,000. Howe & Peters, 24 California St., San Francisco, engrs.

Calif., Woodland—Yolo Co. had plans prepared paving Prefix 3, Sect. C, 16,680 sq.ft. 5 in. asphaltic concrete, 2 course, or 6 in. concrete pavement, increasing to 7½ in. on outside 2 ft.; Prefix 5, Sect. A, 6,300 cu.yd. excav., 127,664 sq.ft 6 in. Class A concrete increasing to 7½ in. on outside 2 ft., or 5 in. Class A asphaltic concrete, 2 course, or 5 in. Class B asphaltic concrete, 1 course, or 5 in. Class C asphaltic concrete, 2 course; 9,400 ft. Prefix 7, 3,230 tons 2 to 3 in. minimum asphaltic concrete or minimum willite; Prefix 8, Sect. B, 128,000 sq. ft. 6 in. Class A concrete increasing to 7½ in. on outside 2 ft., or 5 in. Class A asphaltic concrete, 2 course, or 5 in. Class B, asphaltic concrete, 1 course or 5 in. asphaltic concrete, 2 course, having plans prepared county highway through town of Davis, to exceed $25,000. A. G. Proctor, co. surv.

Que., Montreal—Voted $950,450 bonds for road work. E. Gauthier, asst. city clk.

Que., Sherbrooke—Voted $300,000 bonds for road work. A. Thomas, city engr.

BIDS DESIRED

New York — Aug. 31, by F. S. Greene, comr. highways, Albany, constructing, reconstructing and completing highways in Albany, Cattaraugus, Dutchess, Fulton, Genesee, Jefferson, Oneida, Orange, Orange-Ulster, Steuben, Sullivan, Seneca, Otsego and St. Lawrence Counties. W. A. Patton, secy.; adv. E. N.-R. Aug. 23.

N. Y., Brooklyn—Aug. 29, by E. Riegelmann, boro pres., Boro Hall, resurfacing with bituminous macadam Delamere Pl. and Gravesend Neck Rd.; grading, curbing and asphalt paving Sheepshead Bay Rd.; resurfacing Ave. N and 67th St.; repaving Bergen Pl., 42nd, Furman, Prospect and 79th Sts., Division, Flushing and Prospect Aves.

N. Y., Buffalo—Aug. 27, by A. W. Kreinheder, comr. Pub. Wks., paving and repaving various streets, vitr. brick or asphalt on 6 in. concrete. To exceed $25,000. C. E. P. Babcock, city engr.

N. Y., Buffalo—Sept. 4, by Supervs. Erie Co., constructing Long Rd. in Grand Island, and Darien St. in Colden and Holland, concrete and waterbound macadam. To exceed $30,000. G. C. Diehl, 577 Ellicott Square Bldg., engr.

N. Y., Lockport—Sept. 1, by Supt. Highways, Niagara Co., improving 1.113 mi. River Rd. north of North Tonawanda, 20 ft., rein.-con., $61,217. T. J. Brennan, co. engr.

N. Y., Long Island City—Aug. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., paving with sheet asphalt or granite block on concrete, Fresh Pond Rd. from Metropolitan Ave. to Woodbine St., and from Mt. Olivet Ave. to Metropolitan Ave.

N. Y., Long Island City—Aug. 30, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., repaving Astoria Ave., sheet asphalt on concrete; paving with sheet asphalt on concrete Ditmars Ave.; grading, curbing, laying sidewalks, etc., Graham and Woodside Aves.; grading, curbing, laying sidewalks and paving Weirfield Ave.; grading roadway and paving with sheet asphalt on concrete, from Evergreen Branch Long Island R.R. to Wycoff Ave.; regrading easterly sidewalk space and laying sidewalks 16th Ave.; grading Queens Blvd.

N. J., Long Branch—Aug. 28, by Bd. City Comrs. paving Branchport, 4th, Union, 2nd, Rockwell and Central Aves., asphalt on concrete. J. W. Seaman, city engr.; adv. E. N.-R. Aug. 23.

Streets and Roads (Continued)

N. J., Newark—Aug. 28, by G. C. Bergen, purch. agt. Essex Co. paving 21,055 ft. Mt. Pleasant Ave., 2½ ft. penetration macadam shoulder on both sides of existing pavement, $25,000; grading and paving 16,000 ft. Campbell Ave. in Caldwell, 2 in. asphaltic concrete on 6 in. concrete, $26,000; concrete sewers in 5,000 ft. Harrison Ave., $15,000. W. A. Stickel, Court House, engr. Noted Aug. 9.

N. J., Princeton—Aug. 27, by Princeton Twp. Com., Branch Bldg., improving 15,982 sq.yd. Mt. Lucas Rd., Princeton Twp., near here, bituminous treated surface on old macadam. Sincerbeaux & Moore, Mechanic Bldg., Trenton, engr.

Pa., North Braddock—Taking bids paving Jones Ave., 6,500 sq.yd. vitr. brick, 3,000 lin.ft. concrete curb and 8,000 cu.yd. excav. $37,000. G. Siefer, Municipal Bldg., engr.

Pa., Pittsburgh — Taking bids repaving East Carson St., 4,700 sq.yd. clipped block and 8,665 sq.yd. sheet asphalt. $76,000. F. W. Lyon, City County Bldg., engr.

Md., Baltimore—Aug. 29, by Bd. Awards, paving with sheet asphalt on concrete and cement concrete streets listed in Contr. 242-NA, 14,000 sq.yd. asphalt, $50,000; streets listed in Contr. 243-NA, 22,000 sq.yd. asphalt, $60,000. R. K. Compton, chn. Paving Comn.

Md., Cumberland—Aug. 27, by Mayor and City Council, improving Gephart Dr. and Fayette St., 4,480 ft. concrete curb, 6,290 sq.yd. brick or concrete paving. R. L. Rizer, city engr.

S. C., Aiken—Aug. 30, by Comrs. Aiken Co., constructing 8.23 mi. State Route 39, Federal Aid Project 182 B, 35,923 cu.yd. common excav., 20,273 cu.yd. sand clay surfacing, etc.

S. C., Dillon—Aug. 31, by Comrs. Dillon Co., improving 6.92 mi. road between here and North Carolina line, State Route 23, Federal Aid Project 209, 54,000 cu.yd. excav., 16,800 cu.yd. sand-clay, creosoted timber bridge on above road twenty-two 14 ft. spans, etc. J. M. Martin, Florence, engr.

Alabama—Sept. 11, by State Hy. Comn., Montgomery, surfacing 12,265 mi. road between Ephram Branch and Pineapple, 24 ft. roadway, 18 ft. surfacing, Federal Aid Project 94, Wilcox Co., alternate types on surfacing (1) spreading 6 in. local crushed rock, which will be rolled and bonded and then spread with 6 in. gravel, (2) local and shipped gravel spread to loose depth of 9 in. W. S. Keller, state highway engr.

Ala., Tuscaloosa—Sept. 1, by Tuscaloosa Co., grading and concrete paving 1 mi. extension of Northport Rd., 20 ft. $35,000.

Miss., Gulfport—Sept. 6, by Bd. Supervs. Harrison Co., surfacing with asphalt and pea gravel 3 mi. North-and-South, Beach and Pass Christian Rds., 18 ft. $30,000. E. McManus, clk.

Kentucky—Sept. 26, by State Hy. Dept., Frankfort, surfacing with bank gravel or water bound madamam 11 mi. Louisville-Paducah Highway, 16 ft. State Project 8, Sect. D, Hancock Co., 14.42 mi. Owenton-Carrolton Rd., 18 ft. State Project 59, Sect. A, Owen Co., 6.48 mi. Mt. Sterling-Owingsville Rd., 18 ft., State Project 47, Sect. A, Bath Co.; grading 5.067 mi. Whitesburg-Hazard Rd., 24 and 28 ft., State Project 4, Sect. A, Letcher Co. J. S. Boggs, state highway engr.

Kentucky—Sept. 26, by State Hy. Dept., Frankfort, grading 13 mi. Pineville-Harlan Rd., State Project 6, Sect. A, 24 and 28 ft., Bell Co.; 14 mi. Lookout Mountain Air Line Rd. State Project 22, Sect. D, 24 and 28 ft., McCreary Co. J. S. Boggs, state highway engr.

O., Cleveland—Aug. 29, by Cuyahoga Co., grading West 54th St. and Wallings Rd. $50,021. F. R. Lander, co. engr.

O., Columbus—Aug. 28, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 684 ft. Lynn St., 21 ft., 748 ft. Washington Ave., 20 ft., 948 ft. Milton and Neff Aves., 24 ft., brick or asphalt; 633 ft. alley west of Hamlet St., 20 ft., 636 ft. alley west of 4th St., 15 and 16 ft., 2,323 ft. alley north of 18th Aves., and alley west of Summit St. 15 ft. brick or concrete.

O., Columbus—Aug. 29, by Franklin Co. grading, bridging and paving 1.93 mi. Rose Hill Rd., 16 ft., Truro and Jefferson Twps., waterbound macadam. $40,835. C. C. Lattimer, co. surv.

O., Warren—Aug. 27, by Comrs. Trumbull Co., improving 4.4 mi. Youngstown Ave. Rd., brick or concrete, $216,000; 2.6 mi. Greene Rd, 20 ft., concrete $110,000; improving 1.25 mi. Cortland Rd., 20 ft., $46,000.

Ind., Ft. Wayne—Aug. 27, by Allen Co. at office of J. H. Johnson, co. aud., grading and stone paving 2.51 mi. Moore Rd., Jackson Twp., $37,239. Noted Aug. 9.

Michigan—Aug. 30, by State Hy. Dept., Lansing, grading and surfacing 3.53 mi. State Trunk Line Rd. 57-1, Sect. C, Charlevoix Co., 33,132 sq.yd. gravel, also 4.448 mi. State Trunk Line Rd. 15-12, Sect. B, Menominee Co., 35,398 cu.yd. excav., 42,086 sq.yd. gravel, F. F. Rogers, state comr.

Michigan—Aug. 31, by State Hy. Dept., Lansing, grading 4.152 mi. Federal Aid Project 82, Sect. A, Wayne Co., 29,514 cu.yd. excav., F. F. Rogers, state comr.

Michigan—Sept. 3, by State Hy. Dept., Lansing, grading and surfacing 4.988 mi. State Trunk Line Rd. 18-24, Gladwin Co., 47,127 cu.yd. excav., 46,883 sq.yd gravel. F. F. Rogers, state comr.

Michigan—Sept. 5, by State Hy. Dept., Lansing, grading and surfacing 5.14 mi. State Trunk Line Rd. 95-1, Presque Isle Co., 25,401 cu.yd. excav., 48,249 sq.yd. gravel. F. F. Rogers, state comr.

Michigan—Sept. 7, by State Hy. Dept., Lansing, grading and surfacing 2.993 mi. State Trunk Line Rd. 33-4, Sect. A, Oscoda Co., 20,739 cu.yd. excav., 27,929 sq.yd. gravel; 4.146 mi. State Trunk Line Rd. 33/3, Sect. B, Oscoda Co., 23,943 cu.yd. excav., 38,851 sq.yd. gravel. F. F. Rogers, state comr. Noted Aug. 23.

Illinois—**Aug.** 29, Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 3.11 mi. either concrete, 4 in. monolithic, 4 in. bituminous filled brick, bituminous concrete with and without binder course. Cement will be furnished. Grading 44.27 mi. involving 1,133,916 cu.yd. excav. and 4,389 cu.yd. concrete. C. H. Older, ch. highway, engr.

Ia., Des Moines—Aug. 27, paving 9,075 sq.yd. more or less Chamberlain Ave., 1481 sq.yd. more or less North and South Alleys, (alternate bids on various types); gravel surfacing 2 blocks Elizabeth Ave., and repaving 3,366 sq.yd. more or less Southwest 9th St. A. E. McGlothen, clk.

Minnesota—Sept. 5, by State Hy. Dept., St. Paul, 7.3 mi. State Project 3-44, Federal Aid Project 328, between St. Cloud and St. Joseph, 102,000 cu.yd. excav., 77,600 sq.yd. concrete paving, one 130 ft. high truss span Bridge 4145, $210,000; 11.2 mi. State Project 3-39, Federal Aid Project 327, between Kellogg and Minneiska, 296,000 cu.yd. excav., one 75 ft. truss span Bridge 4091, one 50 ft. truss span Bridge 4094, 3 concrete spillways, etc., $85,000; 20.3 mi. State Project 10-46, Federal Aid Project 313, between Benson and Kerkhoven, 259,000 cu.yd. excav., one 40 ft. deck girder Bridge 4048, $38,000; 5 mi. State Project 44-22, Federal Aid Project 329, Sect. 1, between Prosper and Mabel, 80,000 cu.yd. excav., 4 beam span bridge, etc., $27,000; 8 mi. State Project 44-22, Federal Aid 330, Sect. 2, between Mabel and Spring Cove, 125,000 cu.yd. excav., 50 ft. truss span Bridge 4147, $33,000; 10 mi. State Project 44-22, Federal Aid Project 331, Sect. 3, between Spring Grove and Caledonia, 130,000 cu.yd. excav., etc., $30,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., Faribault—Sept. 12, by F. M. Kaisersatt, aud. Rice Co., grading, etc. Job 2310, State Rd. 33, along Rice-Scott Co. line, 150,860 cu.yd. earth excav., 2,400 cu.yd. loose and 652 cu.yd. solid rock excav., 199,737 cu.yd. overhaul, etc. J. E. McElherne, Faribault, engr.

Minn., St. Paul—Sept. 10, by Ramsey Co., paving Centerville Rd., 40,700 sq.yd. one course concrete or asphaltic concrete, 40,700 sq.yd. excav., 194,000 cu.yd. overhaul, 1,355 lin.ft. corrugated metal culverts, 3,715 lin.ft. integral curb. $100,000. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Kan., Topeka—Shawnee Co. taking bids grading and paving Federal Aid Project No. 106, 13,495 cu.yd. excav. and 6,500 sq.yd. concrete.

South Dakota—Aug. 28, by State Hy. Comn., Pierre, improving roads (F.A.P.73, Campbell means Federal Aid Project 73, Campbell Co.), graveling 9.34 mi. F.A.P. 73, Campbell, 14,010 cu.yd. gravel, 12.35 mi. F.A.P.61 C, Aurora, 18,525 cu.yd. gravel, 17.52 mi. F.A.P.28, Chas. Mix, 26,280 cu.yd. gravel, 18.01 mi. F.A.P.78, Tripp, 27,015 cu.yd. gravel, also one 40 ft. viaduct on F.A.P.142, Brown. F. D. Hudgins, state engr.

South Dakota—Aug. 28, by State Dept., Pierre, grading 11.05 mi. Federal Aid Project 143, Marshall Co., 89,320 cu.yd. excav.; graveling 8 mi. State Aid Project 49, Pennington Co., 12,000 cu.yd. gravel, 2 concrete viaducts one on Federal Aid Project 143 and one on Federal Aid Project 100. F. D. Hudgins, state engr.

S. D., Madison—Sept. 10, paving 7,500 sq.yd. on various streets, creosoted wood block, concrete, sheet asphalt, asphaltic concrete, and bitulithic. $26,000 to $36,000. W. Rae, city aud.

N. D., Minot—**Aug.** 25, by Ward Co., graveling 12 mi. road north and south of Foxholm. $25,000. R. W. Kannard, co. aud.

Wyo., Sheridan—Aug. 27, paving in Dist. 23, 2 in. Warrenite bitulithic on concrete or bituminous cement, portland cement concrete, sheet asphalt or asphaltic concrete. A. L. Helf, clk.

Mo., St. Louis — Sept. 11, by Bd. Pub. Serv., 208 City Hall, grading, granite curbing and bitulithic paving 30,480 sq.yd. Thomas, Dayton, California and Dickson Sts., $164,859; resurfacing with granite block and granite curbing 4,410 sq.yd. Madison St., $38,500; reconstructing with refined asphalt and granite curbing 3,900 ft. Hamilton St., 30 ft., $27,500. W. W. Torner, 300 City Hall, engr.

Tex., Austin—Sept. 11, by G. S. Matthews, judge Travis Co., grading, etc. 7.92 mi. State Highway 20 A, 24 ft., 512 cu.yd. 1:2:4 concrete, 49,775 lb. reinforcing, 36,383 cu.yd. roadway, 44,028 cu.yd. borrow, 3,079 cu.yd. loose and 4,023 cu.yd. solid rock excav. $38,470. O. Leonard, co. engr.

Tex., Breckenridge — Comrs. Court Stephens Co. taking bids surfacing 157,000 sq.yd. Caddo Rd., 2 in. asphaltic concrete. $130,000. Nagle Witt & Rollins, Court House, Dallas, engrs.

Tex., Dallas—Sept. 6, by Dallas Co., paving 12.7 mi. Richardson Rd., 18-20 ft., concrete, bitulithic Uvalde rock asphalt, asphaltic concrete on concrete and Macadam, 3 in. brick on concrete. $500,000. Nagle, Witt & Rollins, Court House, engrs.

Tex., Dallas—Sept. 10, by Comrs. Dallas Co. paving ½ mi. Belt Line, three test sections of special types of concrete cost to exceed $25,000. Nagle Witt & Rollins, Court House, co engrs.

Tex., Decatur—Sept. 11, by S. M. Ward, judge Wise Co., grading and gravel surfacing 10.3 mi. road from Chico to Montague Co. line, 16 ft., 98,700 cu.yd. earth, 1,675 cu.yd. solid rock and 2,040 cu.yd. loose rock excav., 54,200 lb. reinforcing and 32,600 lbs. structural steel, etc. $80,000. H. R. Smith, co. engr.

Tex., Ft. Worth—Aug. 28, by City Comn., curbing, guttering and paving 5,000 sq.yd. Belmont St., 3,600 sq.yd. West 10th St., 600 sq.yd. Terrell St. and 3,100 sq.yd. Greene St., amesite, rock asphalt, bitulithic or vertical fibre brick. $50,000. D. L. Lewis, city engr.

Tex., Sonora—Sept. 11, by A. Johnson, judge Sutton Co., grading 21.29 mi. State Highway 4, Federal Aid Project 379, 16 and 24 ft., and gravel surfacing 1.4 mi., 3,224 cu.yd. gravel, 84,315 cu.yd. roadway, 74,061 cu.yd. borrow, 1,849 cu.yd. loose and 10,707 cu.yd. rock excav., 1,564 cu.yd. 1:2:4, 357 cu.yd. 1:2½:5 and 682 cu.yd. 1:2:3½ concrete, $144,750. H. P. Stockton, Jr., Sonora, engr.

Calif., Fresno — City Council receiving bids improving McKinley Ave., 182,530 sq.ft. grading, 144,798 sq.ft. asphalt, 12,958 ft. gutter, 6,898 ft. concrete curb, 25,142 sq.ft. walks, etc. W. Stranahan, city engr.

Calif., Martinez—Sept. 2, by Supervs. Contra Costa Co., improving Marsh Creek Rd., 3,800 cu.yd. embankment, 2,090 cu.yd. concrete. To exceed $25,000. R. R. Arnold, co. surv.

Calif., Marysville—Sept. 5, by Supervs. Yuba Co., grading and gravel surfacing 5 mi. road extending from state highway on Jaynes Ranch to new road of Yuba Development Co. J. R. Meek, co. surv.

Calif., Oakland—City receiving bids improving Madison St., 75,066 sq.ft. grading, 72,455 sq.ft. asphaltic concrete, etc. W. W. Harmon, city engr. Noted Aug. 16.

Calif., San Diego—Sept. 4, by A. H. Wright, city clk., improving Elm St. between Columbia St. and Balboa Park, 81,257 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc.; Ash St. between 5th and Atlantic Sts., 145,042 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous, 5,799 sq.ft. concrete sidewalk, etc. F. A. Rhodes, city engr. Noted June 28 and July 26.

Calif., San Diego—Sept. 11, by A. H. Wright, city clk., improving Beech St. between 5th and Atlantic Sts., 141,234 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous, 6,799 sq.ft. concrete sidewalk, etc. F. A. Rhodes, city engr.

Calif., Stockton—Sept. 4, by Supervs. San Joaquin Co., grading and surfacing Lower Sacramento Rd., 1,000 cu.yd. grading, 2,700 tons asphaltic concrete, 300 tons gravel, etc. F. E. Quail, co. surv.

Streets and Roads (Continued)

Calif., Ventura—See "Bridges."

Ont., Kincardine—Taking bids concrete pavements. $33,000. A. Magwood, mayor.

Ont., Port Dover—Aug. 27, by J. Sloan, town clk., 14,000 yd. tarvia macadam pavement, 2,000 lin ft. curbs and gutter. $30,000. G. R. Marsten, Simcoe, engr.

BIDS RECEIVED

Rhode Island—State Bd. Pub. Wks., Providence, July 25, surfacing 1 mi. Tiverton-Stafford Rd., 18 ft., waterbound macadam, Contr. 2306, from D'Aoia & McCarthy, Woonsocket, $16,884; 1 mi. Little Compton-Adamsville Rd., 18 ft., gravel, Contr. 2307, from G. E. Snell, Tiverton, $15,275. Noted July 26.

New York—F. S. Greene, comr. of highways, Albany, Aug. 10, constructing and reconstructing **3.42 mi. Repair Contr. 3057, Columbia and Rensselaer Counties**, from C. B. Lindholm, 53 North St., Pittsfield, Mass., $125,272, engrs. est. $128,8094 **1.94 mi. Repair Contr. 3058, Greene Co.**, from L. Mayersohn, 89 South Mann Blvd., Albany, $72,323. $74,261; **2.14 mi. Highway 1675, Orange Co.**, from H. Hull, Highland Mills, $95,880. $96,185; **0.33 mi. Repair Contr. 1382, Westchester Co.**, from Petrillo Bros., Inc., 434 North High St., Mt. Vernon, $20,581, $22,658; **2.64 mi. Repair Contr. 3059, Rensselaer Co.**, and **2.94 mi. Highway 1663, Chautauque Co.**, from E. J. Bailey, Brocton, $130,876 and $129 427 respectively, engrs. ests. $138,219 and $138,157 respectively; **3.97 mi. Highway 8154, Steuben Co.**, from J. F. Gill Co., North Water Gap, Pa., $153,436, $176,622; **7.7 mi. Highway 8155, Tioga and Tompkins Counties**, also **6.78 mi. Highway 1676, Tompkins Co.**, from Cleveland & Sons Co., Adams St., Brockport, $296,454 and $238,669 respectively, $329,147 and $253,563 respectively; **4.29 mi. Repair Contr. 3056, Tompkins Co.**, from C. D. Murray, 701 Westcott St., Syracuse, $150,893, $165,966; **4.7 mi. Repair Contr. 1373, Genesee Co.**, from H. W. Patterson, Hornell, $158,374, $179.969; 2.34 mi. Highway 1658, St. Lawrence Co., from J. M. McCarthy, Potsdam, $81,353, $83,147. Noted July 26.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Aug. 15, paving **(1)** Chester St. **(2)** Douglas St. **(3)** East 15th St., repaving **(4)** Hancock St. **(5)** Meserole Ave., all above asphalt, curbing and asphalt paving **(6)** Westminster Rd., grading, curbing and flagging, **(7)** Kingshighway, **(8)** Lenox Rd., from Uvalde Asphalt Paving Co., 1 Bway., New York, **(1)** $6,939 **(2)** $12,241 **(3)** $3,981 **(4)** $22,101 **(5)** $6,804 **(6)** $6,858; Castle Bros., Inc., Johnson Pl., **(7)** $95,311; W. J. McHale Contg. Co., 1250 Jefferson St., **(8)** $1,068. Noted Aug. 9.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Aug. 14, grading, curbing, and laying sidewalks on **(1)** Park Lane **(2)** Van Alst Ave. **(3)** Graham Ave. **(4)** 45th St. **(5)** 87th St. **(6)** 89th St. **(7)** 127th St. **(8)** Beach 92nd St., grading and asphalt paving **(9)** 29th Ave., asphalt paving **(10)** Jackson Ave. **(11)** 89th St. **(12)** 127th St., sheet asphalt repaving **(13)** Metropolitan Ave. **(14)** Sheridan Blvd., from H. E. Kordes Co., 2577 Cooper St., Brooklyn, **(1a)** $18,920; Welsh Bros. Contg Co., 32 Queens St., Astoria, **(1b)** $19,988; Leonard Paving Co., 233 Bway., New York City, **(2)** $38,385; Uvalde Asphalt Paving Co., 1 Bway., New York, **(3)** $26,149 **(8)** $27,445; R. A. Hess, Inc., 14 Queens St., Astoria, **(4)** $12,524; Kennedy & Smith, Inc., 93 Amity St., Flushing, **(5)** $28,521 **(6)** $13,277; J. J. O'Brien, Jr., William St., Jamaica, **(7)** $5,271; W. P. McDonald Constr. Co., 17 West 42nd St., New York, **(9)** $21,682; Cleveland Trinidad Paving Co., Flushing, **(10)** $21,418; Cranford Co., 52 9th St., Brooklyn, **(11)** $24,670 **(12)** $8,328; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, **(13)** $46,910; Sicilian Asphalt Paving Co., 41 Park Row, New York, **(14)** $29,950. Noted Aug. 9.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing and laying sidewalks on **(1)** West 171st St. **(2)** Muliner Ave. **(3)** Montgomery Pl. **(4)** Wythe Pl., repaving **(5)** Park Ave. W., **(6)** Fordham Rd. **(7)** Gun Hill Rd., granite block, paving **(8)** Mosholu Parkway **(9)** River Ave., both sheet asphalt, from M. Del Balso, 660 East 221st St., **(1)** $5,990; I. F. Cavaluzo, 1538 Walton Ave., **(2)** $20,027 **(4)** $7,331; Burnside Contg. Co., 270 Burnside Ave., **(3)** $3,720; Astoria Contg. Co., 169 Hunter Ave., Long Island City, **(5)** $86,869 **(7)** $40,031; P. J. Kearns Contg. Co., 2306 Creston Ave., **(6)** $36,861; Brusstar Constr. Co., Harlem River and 150th St., **(8)** $8,702. Noted Aug. 9.

N. J., Bloomfield—J. C. Johnson, town clk., sanitary sewers in Myrtle Ave. and Parkway W., to Paterson Contg. Co., Paterson, $12,225 and $815 respectively; sanitary sewer in Mill St., bluestone curbing and paving 1,700 sq yd. Fulton St., also paving 700 sq.yd. Fontaine Ave., asphalt penetration telford, to A. Lamparillo, 67 Glen Ridge Ave., Montclair, $4,795, $5,859 and $1,421 respectively; paving 600 sq.yd. Vesper Pl., 860 sq.yd. Orchard Pl., and 900 sq.yd. Farrandale Ave., all asphalt penetration telford, to J. R. Frisco, Montclair, $1,218, $1 624 and $2,043 respectively. Noted Aug. 2

N. J., Irvington (branch of Newark) Bd. Town Comrs. Aug. 8, curbing, laying sewer connections and paving 4,600 sq.yd. Madison Ave., also recurbing, laying sewer connections and paving Smalley Terrace, rein.-con., from J. Dover, 644 Nye Ave., $18,734 and $8,664 respectively; grading and paving Mill Rd., rein.-con., also widening, etc., west side of Washington Ave., from A. J. Milmoe, 83 Littleton Ave., Newark, $28,365 and $9,055 respectively; 3,349 lin.ft. 8 in sanitary sewer in Woolsey, Berkshire and Campfield Sts., from M. De Cicco, Hilton, $4,156. Noted Aug. 2.

Maryland—State Rds. Comn., Baltimore, concrete paving roads in Howard Co., 9,000 sq.yd. Contr. Ho-40, and 9,400 sq.yd. Contr. Ho-41, from M. J. Grove Lime Co., Lime Kiln, $31,308 and $35.149 respectively; 9,100 sq.yd. Contr. Ho-42, from Continental Contg. Co., Knickerbocker Bldg., Baltimore, $39,448. Noted Aug 2.

Md., Baltimore—Bd. Awards, Aug. 15, paving with sheet asphalt Orleans and Lexington Sts., from Amer. Paving Co., Montebello, $53,859. Noted Aug. 9.

Md., Hagerstown—Repaving South Potomac St., 3 in sheet asphalt on 6 in. concrete, from Bester & Long, Hagerstown, $61,628.

O., Akron—W F. Peters, dir. Pub. Serv., Aug. 13, grading, laying sidewalks and paving **(1)** 8,250 sq yd. Auldfarm Allotment **(2)** 1,075 ft. Rentschuler Court and Power St., 22 ft. **(3)** 2,700 ft. Johnston St., 30 ft., with **(a)** asphalt **(b)** brick **(c)** willite, from T. E. McShaffrey Constr. Co., 171 South Forge St., **(1a)** $53,296, engrs. est. $62,523 **(2a)** $26,629, $26,606; McAlonan Bros., 197 West Buchtel Ave., **(2b)** $32,912, $27,411; Columbus Asphalt Paving Co., 304 Buckeye Bldg., **(3a)** $64,874, $75,370 **(3c)** $66,396, $75,370. Noted July 26.

O., Cincinnati—Hamilton Co. grading and paving 7,900 sq.yd. Benson St., concrete, from Byrnes Conway Co., 32 Bodman Bldg., $26,465. Engrs. est. $29,070. Noted Aug. 2.

O., Cincinnati—Hamilton Co., Aug. 3, grading, bridging and paving 5.18 mi. Sheed Rd., 16 ft., from W. S. Nugent, Mt. Hope Rd., Harrison. $101,641. Noted July 26.

Michigan — State Hy. Dept., Lansing, grading 4.83 mi. Federal Aid Project 119, Ottawa Co., 50,863 sq.yd. concrete, from H. A. Hoxie, 1426 4th St., Grand Rapids, $87,018.

Mich., Springwells—Concrete curbing and paving 9,040 sq.yd. Eagle Ave. and 7,465 sq.yd. Culver Ave., from C. L. Lincoln, Springwells, $32,449 and $27,369 respectively.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving **8.04 mi. & White which means (8.04 mi. State Aid Route 1, Sect. 5, White Co.)** and **6.04 mi. Edwards-White** from Madison Constr. Co., Edwardsville, $131,606 and $102,551 respectively, **3.49 mi. 12-6 Richland** from Wabash Constr. Co., Vincennes, Ind., $68,591 less 1 per cent, **4.5 mi. 1-7 Edwards** and **4.71 mi. 1-14 Lawrence** from French Constr. Co., Fairfield, $87,039 and $100,244 respectively, **1.61 mi. 3-40 Knox** from L. S. Kuhn, Bloomington, $34,635, **5.67 mi. 9-44 Fulton and Peoria** and **5.61 mi. 9.45 Peoria**, from Cameron, Joyce & Co., Keokuk, Ia., $145,972 and $133 104 respectively, **7.29 mi. 9-17 Ford** from Bishop & Curdie Constr. Co., Danville, $139,892 less 1 per cent, **2.94 mi. 9-43 Fulton** from List & Gifford Constr. Co., Ry. Exch. Bldg., Kansas City, Mo., $71,850, **5.76 mi. 12-21 Clinton** from W. C. Johnson, 512 South High St., Belleville, $123,622, **3.86 mi. 17-17 Livingston** from Booth & Gilchrist, Gardner $79,169, **5.37 mi. 19.28** and **8.01 mi. 19-29 McHenry** from F. Daugherty, Milwaukee, Wis., $91,416 and $187,596 respectively, **4.7 mi. 23-21 McHenry** from States Impvt. Co., 10 South La Salle St. Chicago, $101,759; grading **1-22A Crawford**, 22,878 cu.yd. excav., 54 cu.yd. concrete, and **1-23A Crawford**, 32.791 cu.yd. excav., 118 cu.yd. concrete, from J. F. Keegan, Terre Haute, Ind., $12,342 and $16,989 respectively, **1-24A Clark**, 26,532 cu.yd. excav., 340 cu.yd. concrete, and **2-22A Fayette**, 101,802 cu.yd. excav., 462 cu.yd. concrete from T. J. Harrington, St. Louis, Mo., $15,114 and $58,7[illegible] respectfully, **2-19A Shelby-Christian** 38,427 cu.yd. excav., 340 cu.yd. concrete, **2-20A Fayette**, 24,580 cu.yd. excav., 121 cu.yd. concrete and **2-21A Fayette**, 36,902 cu.yd. excav., 367 cu.yd. concrete, from E. M. McGuire, Indianapolis, Ind., $24,008, $13,458 and $23,693 respectively, **2-37A Ogle**, 118,747 cu.yd. excav., 712 cu.yd. concrete from Anderson Bros., 219 15th Ave., Rockford, $88,595, **5-26A Jo Daviess**, 26,215 cu.yd. excav., 31 cu.yd. concrete, from J. S. Burd, Madison, Wis., $26,481, **2-46A Shelby**, 8,655 cu.yd. excav. and **2-47A Macon**, 10,163 cu.yd. excav., from J. T. May, $3,686 and $4,715 respectively, **5-24A Jo Daviess**, 45,699 cu.yd. excav., 290 cu. yd. concrete, from Finley Bros., Janesville, Wis., $28,669, **5-25A Jo Daviess**, 87,026 cu.yd. excav., 393 cu.yd. concrete, from Lord & Talbot, Monmouth. $50,735, **12-10A Clay**, 7,631 cu.yd. excav., from M. Frazier, Louisville, $3.571, **12-11A Clay**, 24,913 cu.yd. excav., 96 cu.yd. concrete, from H. Olthoff, $12,884, **14-7A Franklin-Hamilton** 75,022 cu.yd. excav., 416 cu.yd. concrete, from Laird & Fleeman, Ewing. $42,417, **14-8A Hamilton**, 40,507 cu.yd. excav., 367 cu.yd. concrete and **33-1A Crawford**, 39,638 cu.yd. excav, 40 cu.yd. concrete, from R. Meyers, Milwaukee, Wis., $27,480 and $19,107 respectively. **33-4A, Jasper**, 209,088 cu.yd. excav., 806 cu.yd. concrete from Dees Bros., Oblong. $102,100, **38-4A Calhoun**, 100,987 cu.yd. excav., 275 cu.yd. concrete, and **38-5A Calhoun**, 77,834 cu.yd. excav., 88 cu.yd. concrete, from Scott & White, Merchants Laclede Bldg., St. Louis, Mo., $42,916 and $29,349 respectively. Noted Aug. 2.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., improving following schools **(1)** Benjamin Franklin **(2)** Patrick Henry **(3)** Lincoln High **(4)** John Adams, **(a)** grading **(b)** masonry **(c)** landscaping, from V. Q. Galier, Builders Exch., **(1a)** $12,236 **(2a)** $2,346 **(3a)** $4,659 **(4a)** $4,995; A. MacDougall Co., Irene Ave., **(1b)** $17,423 **(3b)** $1,525 **(4b)** $6,616; T. Lionte, 14500 Sylvia Ave., **(1c)** $12,240 **(3c)** $4,940; Independence Nurseries Co., Independence, **(3c)** $3,254 **(4c)** $7,108. Noted July 26.

O., Cleveland—Grading, curbing and paving Montclair Ave., from Fischer & Williams, Lorain Rd., $20,040, Thames Ave., from E. Gedney, 905 Parkway Ave., $48,225, Lenecrave Ave., also East 112th St. and Corbus Rd., from O. J. Leach, 774 Eddy Rd., $39,967 and $9,246 respectively, above streets involve 14,600 lin.ft. stone curb and 4 in. tile gutter, 11,185 cu.yd. earth excav., 22,575 sq.yd. vitr. brick on concrete; 9,815 sq.yd. Mt. Auburn Ave., vitr. brick, from Garland Bros., 5806 Franklin Ave., $61,362.

Michigan—State Hy Dept., Lansing, improving roads **(F.A.P. 67, E-1 and E-2 Washtenaw means Federal Aid Project 67, Sects. E-1 and E-2, Washtenaw Co.**, grading 10,605 mi. F.A.P. 67, E-1 and E-2, Washtenaw, 80,437 cu.yd. excav., from Pickitt, Armintrout & Goodman Bros., Pullman, $47,027; 13,981 mi. F.A.P. 95, D, Lenawee, 187,310 cu.yd. excav., from J. H. Lowe, Kalamazoo, $104,719; grading and surfacing 8.739 mi. F.A.P. 108 Marquette, 8,626 cu.yd. excav., 93,799 sq.yd. concrete, from Labb & Bell, Negaunee, $154,528; **(S.T.L. Rd. 46-20, Sanilac means State Trunk Line Rd. 46-20, Sanilac Co.)** grading and surfacing 6.983 mi. S.T.L. Rd. 46-20, Sanilac, 31,723 cu.yd. excav., 65,339 sq.yd. gravel, and 10.686 mi. S.T.L. Rd. 27-12 A and C, Sanilac, 47,915 cu.yd. excav., 101,111 sq.yd. gravel, from A. McDonald, Omer, $88,418 and $131,748 respectively; 1.466 mi. S.T.L. Rd. 11-9, B. Muskegon, 7,873 cu.yd. excav., 16,279 sq.yd. concrete from Whitlow & Nelson, 216 Rosen Blk., Muskegon, $34,525; 8.619 mi. S.T.L. Rd. 26-8, B. Gogebic, 6,000 cu.yd. excav., 80,860 sq.yd. gravel, from McDonald & Macabee, Ironwood, $58,265.

Wis., North Milwaukee—For 16,798 sq.yd. paving and 10,281 cu.yd. grading on 40th, 41st, 38th, 34th and 29th St. and 3 alleys from Kroening Constr. Co., 39th Ave. and Mitchell St., Milwaukee, one course concrete $2.99, vibrolithic concrete $3.07, grading $1.15. Noted July 26.

Wash., Seattle—Paving 4th Ave. S. and Spokane St., 7,500 sq.yd. brick block, 400 sq.yd. 7 in. concrete replaced, 500 cu.yd. subgrade, from C. L. Creelman, 1079 25th St. N., $42,323.

Wash., Seattle—Bd. Pub. Wks., paving 21st Ave. N. E. et al., from J. L. Smith, Pioneer Bldg., 10,520 sq.yd. 6 in. concrete $1.70, 750 ft. asphaltic concrete curb $0.60, 6,200 ft. concrete curb $0.35, 2,700 cu.yd. subgrade $0.70, total $34,998. Engrs. est. $35,893.

California—State Hy. Comn., Sacramento, grading and gravel surfacing 4.5 mi. road between 5 mi. east of Gilroy and San Felipe, Santa Clara Co., from J. P. Holland,

Streets and Roads (Continued)

540 Brannan St., San Francisco, $83,104. Noted July 26.

California—State Hy. Dept., Sacramento, grading and gravel surfacing 11.5 mi. highway between Beltane and Schellville, Federal Aid Project 123, Sonoma Co., from W. D. Ellis Co., 766 Euclid St., Berkeley, 46,000 cu.yd. embankment (without classification) at $1.37 per cu.yd., 91,000 sta.yd. overhaul $0.02, 2,000 cu.yd. structure excav. (without classification) $2, 3,500 cu.yd. gravel in sub-base, $3.25, 29,200 cu.yd. gravel surface $3.48, 1,525 cu.yd. concrete $35, etc., total $238,888; from Pacific States Constr. Co., Call Bldg., San Francisco, paving with concrete shoulders and asphaltic concrete, 3.4 mi. Rd. between San Bruno and San Mateo, Federal Aid Project 125, San Mateo Co., 2,700 tons gravel or stone in sub-base $2.68, 8,100 cu.yd. concrete $14.91, 7,000 tons asphaltic mixture $9.40, etc., total $207,782. Noted July 26.

Calif., Fresno—Improving Carmen Ave. and Lucerne Lane, 86,150 sq.ft. grading, 78,187 ft. 1½ in. warrenite on 3½ in. asphaltic concrete, 2,935 ft. concrete curb, 7,989 ft. concrete gutter, 12,245 ft. walks, etc., from Thompson Bros., Divisadero and G Sts., $30,672. Noted July 12.

Calif., Fresno — Improving E St., from California Road & Street Improvement Co., Bank of Italy Bldg., 100,700 ft. grading at $0.055, 93,950 sq.ft. asphalt $0.218, 6,120 ft. concrete gutter $0.33, 3,370 ft. concrete curb $0.62, 18,645 ft. sidewalks $0.235 sq.ft. concrete $0.30, etc., total $36,500. Noted July 26.

Calif., Los Angeles—Improving Oakwood Ave., from Griffith Co., Railway Bldg., total for grading $3,900, 9,879 sq.ft. concrete pavement $0.22, 87,257 sq.ft. bituminous pavement $0.155, 1,729 sq.ft. oil and roll $0.10, 1,243 ft. curb $0.70, 4,979 sq.ft. walks $0.21, 4,561 sq.ft. gutter $0.28.

Calif., Oakland—From Hutchinson Co., Hutchinson Bldg., improving 22nd Ave., 89,960 ft. grading at $0.03 per ft., 2,874 ft. concrete curb $0.70, 5,757 ft. concrete gutter $0.25, 43,855 ft. oil macadam $0.105, 17,566 ft. cement walks $0.16, etc.; Main St., 1,813 cu.yd. excav. $0.65, 1,744 lin.ft. concrete curb $0.70, 3,660 sq.ft. concrete gutter $0.25, 23,638 sq.ft. oil macadam $0.105, 9,065 sq.ft. cement walks $0.15, etc.; Georgia St., 4,745 cu.yd. excav. $0.55, 2,107 lin.ft. concrete curb $0.70, 4,330 sq.ft. concrete gutter $0.25, 30,206 sq.ft. oil macadam $0.105, 13,046 sq.ft. cement walks $0.16, etc.

Calif., Santa Barbara — Santa Barbara Co., paving Santa Maria-Suey Crossing Rd., from A. B. Cook, Santa Barbara, willite pavement $36,400, willite and asphalt base $35,600, plain asphalt $33,100.

Calif., Yreka—Siskiyou Co. grading Forest Mountain House Rd., from Siskiyou Constr. Co., Yreka, 36,000 cu.yd. excav. at $1.125 per cu.yd., etc. Noted July 26.

CONTRACTS AWARDED

New York—Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, paving Bronx River Parkway Dr. between Tuckahoe Rd., Tuckahoe, and Harney Rd., Scarsdale, foundation to Spadaro Contg. Co., 827 East 217th St., New York City, $148,450; asphalt block surface pavement to Hastings Pavement Co., 25 Broad St., New York City, $121,875. Noted July 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Dumont Ave., repaving Ocean Ave., and recurbing and paving Lincoln Ave., all asphalt, to Borough Asphalt Co., 1301 Metropolitan Ave., $2,875, $41,722 and $9,927 respectively; paving East New York Ave. and Ave. I, asphalt, to Cleveland Trinidad Paving Co., Flushing, $46,768 and $37,873; paving East 36th, East 37th and 53rd Sts., repaving Franklin Ave., curbing and paving East 26th St. and Ave. I, asphalt, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $8,773, $6,569, $7,536, $34,975 $4,506 and $17,493 respectively; paving Rutland Rd., paving and repaving Troutman St., and repaving Miller Ave., asphalt, to Uvalde Asphalt Paving Co., 1 Bway., New York, $7,734, $19,525 and $26,979 respectively; repaving Atlantic Ave., asphalt, to Sicilian Asphalt Paving Co., 41 Park Row, New York, $32,835; resurfacing Clermont Ave., asphalt, to Cranford Contg. Co., 52 9th St., $60,628; grading, curbing and flagging East 36th and East 37th Sts., to Galecor Contg. Co., 507 Greenwich St., New York, $4,562 and $2,463 respectively; East 27th St., to F. Persicano, 350 Fulton St., $7,900. Noted Aug. 9.

N. J., Trenton — Hamilton Twp. Com., Greenwood School, concrete gutters and sidewalks, etc., on 72,000 ft. streets, to R. S. Mullen, 402 Samuel St., $17,561 and Grant & Driver, 51 Spring St., $7,275. Engrs. est. $25,840. Noted Aug. 2.

Pa., Monongahela—L. E. Flint, city controller, grading, paving and curbing Main St., 7,888 sq.yd. vitr. brick, 2,936 cu.yd. excav., etc., to McCrady Bros., Braddock, $44,565.

Pa., Waynesburg—Greene Co., rein.-con. pavement on 3,758 ft. Pursley Creek Rd., 16 ft., to M. J. O'Loughlin, Masontown, $43,670.

Maryland—State Rds. Comn., Baltimore, gravel surfacing .99 mi. highway in Anne Arundel Co., Contr. AA-33, to T. Mullan, 3945 Greenmouth Ave., Baltimore, $25,288. Noted Aug. 9.

W. Va., Charleston—Kanawha Co. resurfacing 2 mi. Ferry Branch Rd., Loudon Dist., Project 114, to G. T. Fogle Co., Virginia Land Bank Bldg., Charleston, $38,884; vitr. brick paving 1 mi. Dry Branch of Davis Creek Rd., Loudon Dist., Project 107, to Greybill & Bruce, Charleston, $36,634, 1.7 mi. Little Sand Creek Rd., Elk Dist., Project 115, to K. E. Reed Co., Charleston, $44,128.

W. Va., Clarksburg—Paving Fairmount and Clarksburg Pike and Jackson St., to P. S. Hornor Co., Clarksburg, $28,384.

W. Va., Fayetteville—Fayette Co. vitr. brick paving 3 mi. Lookout-Lansing Rd., Nuttall Dist., to J. E. Dougher & Sons, Charleston, $99,500.

North Carolina — State Hy. Comn., Releigh, grading and reconstructing broken stone base course on 9.92 mi. State Project 295, Wilson Co., to Highway Eng. Constr. Co., Selbyville, Del., $98,892; grading, reconstructing broken stone base course and bituminous penetration surfacing 4.31 mi. State Project 541, Guilford Co., to Hagedorn Constr. Co., Lexington, $108,608. Noted July 26.

N. C., Charlotte—Mecklenburg Co. paving 7 mi. Dixie Rd., 10 ft., 2 in. asphalt on old macadam, to Noll Constr. Co., Charlotte, $50,000.

N. C., Troy—Hardsurfacing various streets to W. F. Bowe, Jr., Augusta, Ga., $175,000. Noted July 5.

Fla., South Jacksonville (Jacksonville, P. O.)—City will construct sidewalks on 30 streets, coquina gravel, by day labor. $25,000.

Miss., Grenada — Paving 35,300 sq.yd. with sheet asphalt on 5 in. concrete, curbing, guttering, etc., to Independent Paving Co., Amer. Trust Bldg., Birmingham, Ala., $117,000.

Miss., Gulfport—Harrison Co. surfacing, etc. 1.543 mi. beach road west of Biloxi, 18 ft., Federal Aid Project 155, to J. F. Morgan Paving Co., Woodward Bldg., Birmingham, Ala., 15,395 sq.yd. warrenite bitulithic $1 37 per sq.yd., 16,300 sq.yd. concrete base $1.60, total $52,297. Noted July 26.

Louisiana — State Hy. Comn., Baton Rouge, graveling 9 mi. Abbeville-Jennings Highway, Vermillion Parish, to Martin & Cody, Lake Charles, $87,173; also 9 mi. Burnside-Hope Villa Highway, Ascension Parish, to Banta & Mutersbaugh, Lake Charles, $59,168.

Tennessee—State Hy. Dept., Nashville, surfacing 7.99 mi. Federal Aid Project 94, Benton Co., to Little & Dean, Memphis, $154,570; 11.02 mi. Federal Aid Project 96, Bedford Co., bituminous macadam, to Boyd Williams, Murfreesboro, $22,258; 7.53 mi. State Project 115, Lewis Co., chert, to C. & G. Constr. Co., Hohenwald, $57,161; 10.78 mi. State Project 126, Sumner Co., rock asphalt, to Rhodes-Carr Co., Nashville, $162,074; 12.3 mi. State Project 127, Sumner Co., gravel, to S. W. Brown Sons Co., Westmoreland, $111,150. Noted July 26.

Tenn., Newport—Paving various streets, asphalt on concrete, to Murray Constr. Co., Holston Natl. Bank Bldg., Knoxville, $130,000. Engrs. est. $150,000.

Kentucky—State Hy. Comn., Frankfort, cleaning surface and applying bituminous material and spreading cover material to Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, 2.8 mi. road in Boyle Co. $1,914, 1.5 mi. Greenup Co. $1,223, 4 8 mi. Hardin and Jefferson Counties $3,268, 10.17 mi. Madison Co. $7,860; to R. B. Tyler Co., 114 South 4th St., Louisville, 8.32 mi. Fayette Co. $8,715, 6.67 mi. Hart Co. $4,054, 8.272 mi. Larue and Hart Counties $6 051, 6.9 mi. 17 F, Scott Co. $5,863; Eaton Oil Wks., Sterrett and Louisville & Nashville R.R. Co., Cincinnati, O., 9.6 mi. Harrison Co. $6,570, 4.3 mi. Nicholas Co. $1,893, 3.2 mi. 58½ A Scott Co. $1,972, 4.34 mi. Todd Co., $3,195; Kentucky Road Oil Co., Frankfort, 16 mi. Owen Co. $7,354. Noted July 5.

Kentucky—State Hy. Dept., Frankfort, grading and waterbound macadam paving using corrugated metal pipe 4.284 mi. Albany-Monticello Rd., State Project 27, Sect. A, Clinton Co., to Huff & Smith, Albany, $51,465. Noted Aug. 2.

Ky., Whitesburg—Paving about 12,000 sq.yd. Webb Ave., Main and Railroad Sts., to Municipal Paving & Eng. Co., Hazard. Engrs. est. $25,000.

Ohio — Dept Highways and Pub. Wks., Columbus, concrete arch bridge, on Sect. "B-2" Mt. Vernon-Newark Rd., Knox Co., to Stout & Stout, Stoutsville, $27,220. Noted Aug. 9.

O., Mingo — Repaving Commercial St., vitr. brick, to Rosser & Maloney, Bellaire, $27,000.

O., St. Clairsville—Paving Woodrow Ave., vitr. brick, to Miller & Fletcher, St. Clairsville, $30,000.

Michigan—State Hy. Dept., Lansing, improving roads, **(S. T. L. Rd. 37-5, Barry means State Trunk Line Rd. 37-5, Barry Co.)** grading and surfacing **2.285 mi. S. T. L. Rd. 37-5, Barry**, 11,451 cu.yd. excav., 26,011 sq.yd. concrete, to W. Neale & Son, 117 Catherine St., Kalamazoo, $37,470; **1.467 mi. S. T. L. Rd. 65-2, Washtenaw**, to Ann Arbor Asphalt & Constr. Co., Ann Arbor, 6,731 cu.yd. excav., $0.70, 17,447 sq.yd. 7 in. concrete pavement, $1.50, total $42,119; **8.619 mi. S. T. L. Rd. 26-7, Sect. B, Gogebic**, to McDonald & McAbee, Ironwood, 6,000 cu.yd. excav., $0.60, 80,859 sq. yd. gravel, $0.56, total $58,265; **1.466 mi. S. T. L. Rd. 11-9, Sect. B, Muskegon**, 7,873 cu.yd. excav., 16,279 sq.yd. concrete, to Whitlow & Nelson, 216 Rosen Blk., Muskegon, $34,525; **(F. A. P. 125, Gratiot means Federal Aid Project 125, Gratiot Co.) 5.38 mi. F. A. P. 125, Gratiot**, to Holmes, Crane & Bartling, Alma, 22,268 cu.yd. excav., $0.65, 3,700 sq.yd. 8 in. special concrete pavement, $1.85, 53,030 sq.yd. 8 in. rein.-con. pavement, $1.58, total $123,962; **6.531 mi. F. A. P. 49, Sect. A, Cass**, to Lenderink & Baker, 501 Natl. Bank Bldg., Kalamazoo, 68,061 sq.yd. 8 in. concrete pavement, $1.10, total $102,464; **2.007 mi. F. A. P. 45, Sect. B-1, Ingham**, to W. H. Ryan, 404 Van Buren St., Jackson, 10,274 cu.yd. excav., $0.70, 20,901 sq.yd. 8 in. concrete pavement, $1.67, total $47,887; **13.981 mi. F. A. P. 95, Sect. D, Lenawee**, to J. H. Lowe, Kalamazoo, 187,310 cu.yd. excav., $0.48, total $104,520; **8.739 mi. F. A. P. 108, Marquette**, to S. J. Groves & Son Co., Newberry, 7,626 cu.yd. excav., $0.60, 93,798 sq.yd. 8 in. rein.-con. pavement, $1.54, total $162,709.

Ill., Glence—For 3,100 sq.yd. one course rein.-con. paving, 2,460 cu.yd. excav., 325 lin.ft. 8 in., 450 lin.ft. 10 in. and 565 ft. 12 in. tile sewer pipe, 4,500 sq.yd. parkways leveled, etc., to H. H. Goelitz & Co., 810 North Blvd., Oak Park. Engrs. est. $25,000.

Wis., Edgerton—Paving various streets with plain concrete, also 4,000 sq.yd. vibrolithic concrete, to Hayes, Fountain & Hayes, 211 Hayes Blk., Janesville, Wis., $53,279. Noted July 5.

Ia., Waterloo—Blackhawk Co. grading Primary Rd. 40 from here to Janesville, to J. A. Dunkel, Webster City, roadwork $0.275 per cu.yd., channel excav. $0.375. Engrs. est. $60,000.

Minnesota—State Hy. Dept., St. Paul, highways **(S. P. 1-26, F.A.P. 321 means State Project 1-26, Federal Aid Project 321), 17 mi. S. P. 1-26, F.A.P. 321**, between Owatonna and Ellendale, 166,000 cu.yd. excav., to Nelson, Fulton & Nelson, Plymouth Bldg., Minneapolis. $69,055, two bridges and culverts to W. T. Baxter, Webster City, Ia., $16,967; **8.6 mi. S. P. 1-42, F.A.P. 325**, between Carlton and St. Louis county line, 90,000 sq.yd. concrete paving to Johnson, Drake & Piper, 809 1st Natl.-Soo Line Bldg., Minneapolis, $244,541 37,000 cu.yd. excav., to Siems, Helmers & Schaffner, 514 Guardian Life Bldg., St. Paul, $105,298, 1 bridge and all culverts to Chernus Constr. Co., 604 Boston Bl., Minneapolis, $16,293; **17 mi. S. P. 3-3, F.A.P. 283**, between Lake City and Red Wing, 342,000 cu.yd. excav. to G. W. Humphrey, Aberdeen, S. D., $79,894, bridge and culverts (A and B) to A. Beckman & Co., Lake City, $15 108, C culverts to C. W. Johnson, Red Wing, $2,109, 2 bridges to W. T. Baxter, Webster City, Ia., $7,300; **9 mi. S. P. 9-33, F.A.P. 311**, between Welcome and Fairmont, 125,000 cu.yd. excav., to C. Weaver, Anoka, $44,216, one 40 ft. deck girder bridge to F. D. Gould, Fairmont, $8,473; **9 mi. S. P. 12-23, F.A.P. 284**, between Chaska and Excelsior, 256,000 cu.yd. excav., to Nelson, Fulton & Nelson, Plymouth Bldg., Minneapolis, $106,240, culverts to C. W. Johnson, Red Wing, $11,501, Bridge 4069, 85 ft. beam span, to Adams Constr. Co., 927 Andrus Bldg., Minneapolis, $7,925; **10 mi. S. P. 22-23, F.A.P. 324**, between St. Peter and Norseland, 125,000

Streets and Roads (Continued)

cu.yd. excav., to Cameron, Joyce & Co., Keokuk, Ia., $46,531, bridge to C. W. Johnson, Red Wing, $5,985, culverts to W. T. Baxter, Webster City, Ia., $818; **21 mi. S. P. 22-24, F.A.P. 254,** between Greenleaf and Eden Valley, 272,000 cu.yd. excav., to C. Weaver, Anoka, $93,511, culverts to Chernus Constr. Co., 604 Boston Bl., Minneapolis, $8,630; **2 mi S. P. 55-21, F.A.P. 229,** between Cloquet and Scanlan, 24,327 sq.yd. concrete paving to Johnson, Drake & Piper, 809 1st Natl.-Soo Line Bldg., Minneapolis, $64,297, 22,000 cu.yd. excav. culverts to C. R. McLean, 307 1st Natl. Bank Bldg., Duluth, $37,026, bridge to Guaranty Constr. Co., 305 Essex Bldg., Minneapolis $3,420. Noted July 12.

Kan., Humbolt—Paving various streets with 18,540 sq.yd. rein.-con., 16,700 lin.ft. curbing and gutter, 6,300 cu.yd. earth and 2,200 cu.yd. rock excav. to Cook & Stucker, Ottawa, $65,917. Engrs. est. $75,000.

Kan., Independence — Montgomery Co. will improve 3.885 mi. Cherryvale-Morehead Rd., Federal Aid Project 79, Sect. A, 18 ft. and surface 4.08 mi. Cherryvale Morehead Rd., Federal Aid Project 79, Sect. B, bituminous macadam, by day labor. H. K. Hibbard, co. engr.

Kan., Wichita—Sedgwick Co. will grade and sand clay surface 2.759 mi. Hillside Ave. Rd., 18 ft., by day labor. M. Roseberry, co. engr.

Kan., Yates Center — Paving various streets with 6,972 sq.yd. 3 in. vitrified brick, 3,762 lin.ft. curbing and gutter, 1,955 cu.yd. earth and 175 sq.ft. rock excav., to J. K. Shinn, Independence, $28,447. Engrs. est. $30,000.

Wyoming — State Hy. Dept., Cheyenne, grading and surfacing 3.9 mi. Federal Aid Project 153, Lincoln Highway from Laramie east, Albany Co., 24 ft., to Ames Braisted Constr. Co., Laramie, $42,225; one 20 ft. skew concrete span on above to H. C. Lallier Eng. Constr. Co., Hudson, Colo., $9,514; 7.1 mi. Federal Aid Project 145, near Cowley, Big Horn Co., to Taggart & Tebbs, Constr. Co., Cowley, $44,689; 40 ft. span concrete bridge over Coal Creek near Kirby, on Yellowstone Highway, Federal Aid Project 141, Hot Springs Co., to C. M. Smith, Thermopolis, $7,425. Noted Aug. 2.

Mont., Missoula—Grading, building culverts, etc., on 7 mi. Lolo Pass Sect., Lewis and Clark Highway, from Lolo Hot Springs to Idaho-Montana Line, Missoula Co., to E. A. Webster & Co., Spokane, Wash., $91,995.

Mo., Richmond Heights (St. Louis, P. O.)—Grading and asphalt paving 17,600 sq.yd. Bellevue Ave., to R. D. Clark, Cape Girardeau. Engrs. est. $65,000. Noted Aug. 2.

Tex., Beaumont—Uvalde Rock asphalt paving, Neches, Park, Forrest and Hazel Sts., to Uvalde Rock Asphalt Co., Beaumont, $26,043.

Tex., Ft. Worth—Paving 6th St., 3 in. vertical fibre brick on 5 in. concrete and resurfacing 10,300 sq.yd. 3rd St., 1½ in. Amiesite, to J. F. Wills, 115 Bryan St., $3.25 and $1.45 per sq.yd. respectively, total $35,558.

Tex., Johnson City—Blanco Co. improving 7.19 mi. Highway 20-A, to H. J. Evans, 500 West 15th St., Austin, $53,428; 14.08 mi. Highway 46 and 5.53 mi. Highway 20 A, to Ruby & Co. $16,684 and $22,864 respectively. Noted Aug. 9.

Okla., Fairfax—Grading and paving 14 blocks Main, Mulberry and Elm Sts., to L. R. Moran, Okmulgee, 29,110 sq.yd. vertical fibre brick at $3.95 per sq.yd, 9,800 lin.ft. concrete curb and 11,000 lin.ft. concrete gutter $1.60, 9,980 cu.yd. earth excav. $0.90, 140 cu.yd. rock excav. $2.90, total $158,913. Engrs. est. $160,946. Noted Aug. 9.

Okla., Sayre—Grading and concrete paving Cedar, Walnut and 2nd Sts., to Pearce Constr. Co., Edmond, 7,200 sq.yd. concrete at $3.20, 3,700 lin.ft. curbing $0.90, 2,300 cu.yd. excav. $0.75, total $35,006. Noted Aug. 2.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 4.48 mi. North Bank Highway, Skamania Co., to Moore & Anderson, Tacoma, 62,000 cu.yd. earth excav. $0.55, 44,730 cu.yd. common excav. $0.50, 3,300 cu.yd. loose rock excav. $0.80, etc., total $123,479; 11.6 mi. Permanent Highway 9, Husum-Trout Lake Rd., Klickitat Co., to G. Wilson, Sunnyside; grading and surfacing with gravel or crushed rock 4.63 mi. Chelan-Okanogan Highway from Brewster Flat north, Okanogan Co., to Payne & Hewitt, Spokane, $29,879 for crushed rock, $22,405 for crushed gravel; surfacing with crushed rock 12.47 Inland Empire Highway from Ellensburg to Indio, Kittitas Co., to Carlson & Nyberg, Mitchell, $62,124. Noted July 19 and 26.

Wash., Seattle—Paving 15th Ave. W., to Olympic Constr. Co., 1326 Northlake Ave., 18,100 sq.yd. 8 in. concrete $2.20 per sq.yd., 1,725 sq.yd. 7 in. concrete $1.90, 815 ft. asphaltic concrete curb $0.70, 5,400 ft. concrete curb $0.45, 2,580 ft. special concrete gutter $0.70, 6,060 ft. concrete header $0.45, 49,000 cu.yd. excav. $0.50, total $112,672. Engrs. est. $115,817.

Wash., Seattle—King Co., concrete paving East 65th St., to J. L. Smith, Pioneer Bldg., $29,900. Engrs. est. $30,180.

Calif., Calistoga — Town Trustees, improving various streets 508,900 sq.ft. grading, 474,900 sq.ft. 5 in. concrete, 28,370 lin.ft. concrete curb, etc., to J. F. Knapp, P. O. Box 595, Ontario, $136,026.

Calif., Glendale — Improving Windsor, Garfield Sts., etc., to W. J. Curren, P. O. Box 159, 5,335 lin.ft. grading at $0.80 per lin.ft., 8,365 ft. curb $0.50, 7,473 sq.ft. 5 in. concrete gutter $0.22, 156,320 sq.ft. 3 in. oil macadam $0.10, etc., total $36,300.

Calif., Huntington Beach — Improving Ocean Ave., 711,300 sq.ft. 2 in. willite plastic compacted surface on 4 in. asphaltic concrete, 23,800 cu.yd. excav. for pavement, 1,395 cu.yd. excav. for sewers, etc., to G. M. Souter, Los Angeles, $238,900.

Calif., Los Angeles—Improving Windsor St. between Rosewood and Beverly Sts., to G. H. Oswald, 366 East 58th St., total for grading $6,300, 154,559 sq.ft. warrenite bitulithie at $0.317, 6 ft. curb $1, 9,283 sq.ft. warrenite bitulithic $0.317.

Calif., Monterey—To S. Ruthven, Monterey, paving Munras Ave., 2 in. asphaltic concrete on 5½ in. macadam, etc., $12,500; grading, curbing, sidewalks and paving Pacific and El Dorado Sts., 3½ in. asphaltic concrete surfacing, $63,000. Noted July 12.

Calif., Oakland—Alameda Co., grading and paving Livermore-Pleasanton Rd., to Kaiser Paving Co., 1st Savings Bank Bldg., $175,006. Noted Aug. 9.

Calif., Redwood City—Grading, curbing and concrete paving Jefferson Ave., to W. A. Dontanville, Salinas, $38,385.

Calif., Richmond—Concrete curbing, guttering, sidewalks and paving portions Stege Ave., et al., to Hutchinson Co., Hutchinson Bldg., Oakland, $37,724. Noted Aug. 9.

Calif., San Mateo—Concrete curbing and 5 in. concrete paving 545,000 sq.ft. Tilton Ave., to Downer & Mero, 2234 Macdonald Ave., Richmond, $164,000. Noted Aug. 2.

Calif., San Mateo—Improving portions 1st, 2nd, 3rd and 4th Aves., etc., 323,000 sq.ft. 5 in. concrete, 14,500 ft. concrete curb, etc., to Galbraith & Janes, Yuba City, $85,000. Noted Aug. 16.

Calif., Santa Paula—Improving Santa Parbara Ave., to Southwest Paving Co., Washington Bldg., Los Angeles, 753,000 sq.ft. 4 in. asphalt at $0.155, 82,760 sq.ft. 4 in. conerete $0.165, 16,000 sq.ft. 4 in. walks $0.15, 7,200 lin.ft. 15 in. curb $0.75, etc.; improving Pleasant St., to J. T. Cornwall, Santa Barbara, 398,180 sq.ft. 4 in. concrete pavement $0.1575, 9,620 sq.ft. 4 in. concrete walks $0.165, 2,760 lin.ft. 15 in concrete curb $0.18, etc., total $65,723. Noted Aug. 9.

Calif., Ventura—Ventura Co. will surface Briggs Rd., 96,000 sq.ft. asphalt macadam, 6,000 lin.ft. shaping and rolling, by force account, under supervision of C. Pettit, engr., Ventura.

British Columbia—State Hy. Dept., Victoria, grading and gravel surfacing 1½ mi. Golden-Yoho Park Highway, to W. P. Turney & Co., 924 Nicola St., Vancouver, $45,000.

Industrial Works

PROPOSED WORK

Conn., Hartford—Hartford Empire Co., Homestead Ave., having plans prepared by Buck & Sheldon, Inc., archts. and engrs., 60 Prospect St., two 1 story, 36 x 50 ft. factories, brick, plain foundation, Homestead Ave. $50,000.

Conn., Wethersfield—State Prison Comn. having plans prepared by Buck & Sheldon, archts. and engrs., 60 Prospect St., Hartford, 2 story, 50 x 100 ft. factory, brick and steel, plain foundation. $40,000.

N. Y., Albany—International Harvester Co. of America, 960 Bway., having plans prepared 2 story, 50 x 210 ft., rein.-con. garage and service station, plain foundation. $75,000. Private plans.

N. Y., Albany—Albany Garage Co., 28 Howard St., having plans prepared by T. L. Gleason, archt. and engr., 45 Maiden Lane, razing old building and constructing 5 story, 75 x 120 ft., rein.-con. and steel garage, plain foundation. $300,000.

N. Y., Buffalo—E. H. Close Realty Co., 734-50 Main St., having plans prepared 6 story, store and garage, brick, Main St. $125,000-$175,000.

N. Y., Buffalo—Amer. Lithograph Co., 111 Swan St., plans 1 story, 200 x 400 ft., rein.-con. and brick factory, Elmwood Ave. and Amherst St. To exceed $500,000. Engineer and architects name withheld.

N. Y., Buffalo—Honde Eng. Corp., 1392 West Ave., plans rein.-con., brick and steel factory, Northland Ave. To exceed $75,000.

N. Y., Rochester—Eastman Kodak Co., Kodak Park, plans 5 story and basement, 87 x 196 ft., rein.-con. warehouse, State and Brown Sts. $200,000.

Pa., Phila.—H. S. and L. S. Levy having plans prepared 3 story, 80 x 100 ft. concrete factory, Wayne and Berkley Sts. $80,000. Engineer and architect not announced.

Pa., Pittsburgh — Pittsburgh Malleable Iron Co., 34th and Smallman Sts., having plans prepared by P. Dietz, Lyceum Bldg., 1 story, brick and corrugated iron mill, 34th St. $150,000.

Pa., Sharpsburg—Natl. Eng. & Machine Co., 19th St. and Pennsylvania R.R., plans addition to factory, 19th St. $50,000. A. Weeks, c/o owner, engr.

N. C., Archdale — E. A. Smith, Latta Arcade, Charlotte, J. Smith, Kings Mountain, et al., plan large cotton mill, here, along tracks Southern Ry. between Kings Mountain and Grover.

N. C., Greensboro — City Council authorized $160,000 bonds for abattoir and fire houses. P. S. Painter, city mgr.

La., Shreveport—Kansas City Southern Ry., 11th and Wyandotte Sts., Kansas City, Mo., plans 1 story, car repair shop, to replace one recently destroyed by fire. $175,000. A. N. Reese, ch. engr.

Tenn., Martin—Kentucky Dark Tobacco Growers Co-operative Assn., Hopkinsville, Ky., having plans prepared by Manly & Young, Knoxville, 125 x 125 ft. warehouse, here. $40,000.

O., Cleveland—J. Rutkowski of Cleveland Structural Steel Co., 6600 Park Ave., had plans prepared 1 story, 100 x 120 ft., brick, steel and concrete factory, East 49th St. and Harvard Ave. $60,000. Private plans.

O., Dayton—Monarch Marking System Co., 216 South Torrence St., plans 3 story and basement, 80 x 175 ft., rein.-con. and brick factory, plain foundation, Torrence St. $100,000. Engineer and architect not selected.

Ill., East St. Louis—Baltimore & Ohio R.R. Co., Baltimore and Charles Sts., Baltimore, Md., soon takes bids round house, machine and car repair shops, several miles storage yards on 219 acre tract near here. $2,000,000. H. A. Lane, ch. engr.

Wis., Hartford — Spaeth Packing Co. plans to rebuild 1 story, 32 x 250 ft., brick and concrete or brick plant, plain foundation, recently destroyed by fire. $50,000. Engineer and architect not selected.

Wis., Madison — Silver Spring Bottling Co., 932 Emerald St., plans 2 story and basement, 60 x 85 ft., rein.-con., brick and steel bottling plant, plain foundation. $40,000. W. Sinaiko, prop. Architect not selected.

Wis., Watertown — Jaeger Milling Co. plans 2 or 3 story flour mill, brick and wood, plain foundation. $50,000. A. C. Jaeger, 514 1st St., pres. Engineer and architect not selected.

Wis., Milwaukee—Journal Co., 182 4th St., having plans prepared by D. F. Chase, Inc., engr. and archt., 645 North Michigan Ave., Chicago, 5 story and basement, 150 x 200 ft., newspaper plant, brick and concrete, plain and wood pile foundation. $40,000. Contract for foundation, including piling and excav., to W. W. Oeflin, 86 Michigan St., Milwaukee.

Ia., Riceville—Riceville Oil Co. having plans prepared by G. L. Lockhart, 1353 University Ave., St. Paul, Minn., 1 story, 36 x 154 ft. garage, tile and stucco. $45,000.

Minn., St. Paul—Sudie Bakery Co., 925 Payne Ave., had plans prepared by Hausler & Kerr, 548 Hamn Bldg., and soon takes bids 3 story and basement, 125 x 125 ft. bakery, brick and concrete, 12-20 Sims St. $125,000.

S. D., East Sioux Falls (Sioux Falls P. O.)—Natl. Crushed Stone Co., Sioux Falls, having plans prepared concrete and brick factory, to replace one recently destroyed by fire. $40,000.

Mo., Springfield—Lipscomb Grain & Seed Co., 540 Wall St., soon takes bids 2 story and basement, 53 x 100 ft. warehouse with 6 tanks 76 ft. high, 13 grain bins and 28 x 32 ft. elevator, 132 ft. high, rein.-con. and steel. $150,000. Southwest Eng. Co., Woodruff Bldg., engrs. Noted May 31.

Mo., Stockton—Stockton Light & Power Co., plans 1 story, 25 x 40 ft. power plant, concrete spillway 130 ft. long, 10 ft. high, dam and 18 mi. transmission line from Stockton to Fairplay, etc. Private plant. $60,000.

Mo., St. Louis—Roxana Petroleum Co., Arcade Bldg., had plans prepared 40 gasoline service stations, 2 large supply houses and necessary storage tanks, etc.

Industrial Works (Continued)

$350,000-$1,000,000. Five stations each to cost $3,500 will be started immediately and 3 costing $6,000 will be done by day labor. Private plans.

Tex., Dallas—Texas Corrugated Box Co., Dallas Co. Bank Bldg., c/o W. Liebman, making plans plant in Love Field Industrial Dist. Cost incl. equipment $100,000. Private plans.

Tex., Jacksonville—Dupont Fibre Silk Corp., Wilmington, Del., plans silk plant on site of old Hickory powder plant, here. $4,000,000. Private plans.

Tex., Orange—R. S. Manley making plans creosoting plant, along Sabine River. $450,000. Private plans.

Tex., San Angelo—R. P. Amacher soon takes bids 2 story, 100 x 190 ft., rein.-con. and brick garage. $115,000. J. H. Martling, 517 Massachusetts Bldg., Kansas City, Mo., archt.

Calif., Davis—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $95,000 for additions to truck repair plant, new roads and yard improvements, here. Private plans.

Calif., Fresno—Maisler Bros., 2244 Railroad Ave., plan 1 story warehouse, fireproof, California St. and Van Ness Ave. $40,000. Engineer and architect not selected.

Calif., Los Angeles—California Tire & Tube Co., Detwiler Bldg., plans factory. To exceed $750,000.

Calif., Los Angeles—Electric Corp., 836 South Los Angeles St., having plans prepared by J. M. Cooper, Marsh-Strong Bldg., 4 story warehouse and loft, rein.-con., 11th and Santee Sts. To exceed $90,000.

Calif., Los Angeles—Federal Refrigerating Co., having preliminary sketches made by F. D. Chase, Inc., 533 Title Insurance Bldg., 6 story and basement, 200 x 400 ft., ice and cold storage plant, rein.-con., Downey Rd. $2,000,000.

Calif., Oakland—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared 2 story, 75 x 100 ft., rein.-con. and steel substation, 21st St., here. $280,000. Private plans.

Calif., Oakland—L. A. Young Industries, Inc., 9200 Russell St., Detroit, Mich., plans group of 2 story factory buildings, 73rd Ave., here, to exceed $75,000.

Calif., Pittsburg—Truscon Steel Co., 709 Mission St., San Francisco, plans factory, here. To exceed $40,000.

Calif., San Francisco — Pacific Gas & Electric Co., 445 Sutter St., having plans prepared electric sub-station, concrete and steel. To exceed $50,000. Private plans.

Ont., Eastview—Beeby Range Co., Ottawa, soon takes bids factory on Montreal Rd., here. $100,000.

BIDS DESIRED

Conn., Bloomfield—R. G. Miller receiving bids and opens same about Aug. 21, 2 story, 50 x 80 ft. creamery, brick, plain foundation, Barbour and Earl Sts. $60,000. W. D Johnson Co., 174 Bond St., Hartford, archts.

La., Shreveport—Roesse & Olschner, archts. and engrs., Ardis Bldg., taking bids 2 story, 80 x 294 ft. concrete and brick warehouse, plain foundation, Texas and Van Loan Sts. for W. H. Booth, c/o Archts., to exceed $75,000.

O., Cleveland—Aug. 27, by Miller-Becker Co., 6411 Central Ave., 2 story and basement, 50 x 135 ft., brick and steel garage, Central Ave. and 63rd St. $50,000. A. F. Janowitz, Permanent Bldg., archt.

Mich., Marquette—N. A. Nelson, archt., Ironwood, taking bids 2 story, 70x124 ft. concrete and brick garage, plain foundation, for E. W. Cork, Marquette. $65,000.

Wis., La Crosse—O. J. and R. E. Sorenson, archts., 216 Main St., taking bids 1 story and basement, 42 x 100 ft., tile and concrete warehouse, plain foundation, for A. Grams & Son, 222 South Front St. $40,000.

Calif., Lodi—Gloria Ice Cream Co., Oak and Aurora Sts., will build 1st unit of ice cream plant, refrigerator unit, Central and Railroad Aves., by separate contracts under supervision of J. F. Watson, archt., 403 East Pine St. $50,000. Noted June 14.

Calif., Sacramento — Woollett & Lamb, archts., Mull Bldg., receiving bids 1 story and basement, 80 x 160 ft., warehouse and store, brick, 5th and R Sts., for C. Ohmura (Sacramento Growers Market), c/o architects. $40,000.

Calif., San Francisco — Eng. Dept. of Pacific Gas & Electric Co., 445 Sutter St., taking bids on steel and mechanical equipment for 1 story, 75 x 100 ft. steam plant, rein.-con. and steel, Stevenson St. between 5th and 6th Sts. $250,000. Noted July 26.

Calif., San Francisco — Weeks & Day, archts., 315 Montgomery St., receiving bids 5 story and basement, 100 x 180 ft., rein.-con. warehouse, Brannan and 9th Sts., for Standard Sanitary Mfg. Co., 149 Bluxome St.

Calif., San Francisco—Meyer & Johnson, archts., Bankers Investment Bldg., receiving bids 1 story, 90x160 ft. laundry, rein.-con., Howard and Falmouth Sts., for Hotel Owners Assn., c/o architects. $40,000. Noted July 12.

BIDS RECEIVED

N. Y., West New Brighton—J. A. Lynch, pres. Richmond Boro, City Hall, Aug. 16, repair shop and garage, Clove Rd. south of Castleton Ave., here, from Anderson Constr. Co., $49,490.

CONTRACTS AWARDED

Conn., Waterbury — Bristol Co., Platts Mills, 1 story, 50 x 100 ft. factory, brick and steel, plain foundation, to Clark Constr. Co., 168 Grand St. Archts. est. $50,000. Noted Aug. 2.

N. Y., Brooklyn—Murray & Mauceri, c/o A. Goldberg, archt. and engr., 164 Montague St., will build 1 story, rein.-con., brick and steel garage, plain foundation, Knickerbocker Ave., by day labor. $50,000.

N. Y., Brooklyn—Sterling Constr. Co., c/o M. Klein, archt. and engr., 37 Graham Ave., will build 1 story, rein.-con., brick and steel, plain foundation, 54th St., by day labor. $50,000.

N. Y., Eastview—F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, White Plains, central heating plant for buildings, here, to Martin Corp., White Plains, $75,000. Noted July 26.

Pa., Phila.—Bd. Trustees University of Pennsylvania, 34th and Woodland Aves., boiler plant for university buildings and hospital to McClellan & Junkersfeld Inc., 45 Williams St., New York City.

Pa., Phila.—Colonial Knitting Mills Inc., B and Clearfield Sts., 3 story, 86 x 170 ft. and 1 story, 45 x 110 ft. brick and stone plant, B and Clearfield Sts., to Austin Co., Jefferson Bldg., $245,000.

La., Shreveport — Southwestern Gas & Electric Co., 2 story, 60 x 150 ft. brick, stone and terra cotta warehouse, Travis and Marshall Sts., to W. H. Werner, Shreveport, $95,742. Noted Aug. 2.

O., Cleveland—Lees-Bradner Co., 6210 Carnegie Ave., 1 story, 55 x 100 ft. machine shop and 1 story, 30 x 100 ft. storage plant, both brick and steel, to G. W. Warmald, 1617 Eddy Rd. Archts. est. $50,000. Noted July 12.

O., Cleveland—Malbin Realty Co. c/o S. Malbin, 2741 East 34th St., 5 story and basement, 115 x 145 ft. rein.-con. and brick warehouse, East 35th St., to P. Kirschner Co., 2914 East 75th St. Archts. est. $150,000. Atlantic & Pacific Co., 1200 West 9th St., lessee. Noted July 19.

Mich., Detroit—F. E. Bromley, 2642 East Grand Blvd., 1 story, 120 x 340 ft., brick and steel factory, plain foundation, Christopher Ave., to E. Winters Co., 751 Book Bldg.

Mich., Detroit—Hudson Motor Co., Jefferson Ave., 1 story, 65 x 280 ft., brick and steel factory addition, plain foundation, Connors Ave., to Brayton Eng. Co., 6500 Epworth Blvd. Noted Aug. 2.

Ill., Chicago—P. C. Winn, 1107 Albion Ave., 2 story, 161 x 171 ft. garage, fireproof, 1217-31 Morse Ave., to Schmidt Bros. Constr. Co., 22 East Huron St. Archts. est. $60,000. Noted July 19.

Wis., Janesville — Chevrolet Motor Car Co. will build 1 story, 90x288 ft., rein.-con., brick and steel factory, plain foundation, by day labor. $100,000. T. E. Wilson, c/o owner, engr. Noted July 13.

Wis., Janesville — Hough Shade Corp., 1059 McKey Blvd., 1 story, 50 x 90 ft., brick and rein.-con. factory, steel frame, plain foundation, to W. J. Fitzgerald, Hook Bros. Bldg., Beloit.

Wis., Kenosha—Kenosha Evening News, 261 Wisconsin St., remodeling and building 2 story, 37 x 70 ft., brick and concrete addition to plant, plain foundation, to G. Lindermann, 237 Lake Ave. Archts. est. $40,000. Noted Aug. 2.

Kan., Bonner Springs—International Cement Corp. plans addition to cement plant, most of work to be done by day labor; kilns to Heine Co., 30 Church St., New York City, $35,000. Total $1,000,000. Tuttle, Ayres & Woodard, 305 Reliance Bldg., Kansas City, Mo., engrs.

S. D., Sioux Falls — Skoug Candy Co., 126 West 9th St., 2 story and basement, 66 x 80 ft. rein.-con. and brick addition to factory, 1001 East 8th St., to Sioux Falls Constr. Co., Sioux Falls, $60,000.

Tex., Corsicana—Navarro Ice Co. 1 story, 90 x 150 ft. ice plant, brick and concrete, 12th St. along tracks Cotton Belt R.R., by day labor. Noted Aug. 16.

Tex., Dallas—Smith Bros. Constr. Co., Sumpter Bldg., will build concrete mixing plant, South Dallas St., by day labor. $30,000. Private plans.

Tex., Ft. Worth—Dunn-Locke Mfg. Co., Lake and Dagget Sts., 1 story and basement, brick, plain foundation, to H. Friedman, First Natl. Bank Bldg., $40,000. Noted June 21.

Tex., Ft. Worth—Trinity Portland Cement Co., Commonwealth Bldg., Dallas, will build 2,500 bbl. cement plant, by day labor. $1,000,000. R. L. Humphrey, Harrison Bldg., Phila., engr. Noted July 26.

Tex., Houston—A. Sprunt Co., Ship Channel, concrete warehouse, to Southwestern Constr. Co., West Bldg., $275,000.

Tex., Nashville—Chevrolet Nashville Co., 109 3rd Ave., N., 1 story, 100 x 150 ft., brick and concrete garage and salesroom, 5th and Broad Sts., to Summer Constr. Co., Broad St., $50,000.

Tex., San Antonio—J. Steves, 509 King William St., 1 story, brick and timber garage, South Alamo St., to L. W. Tyler, Builders Exch. Bldg., $51,969.

Calif., Los Angeles—Acme White Lead & Color Wks., 345 East 3rd St., 1 story factory, brick, Alosta St., to H. M. Baruch, 441 I. W. Hellman Bldg., $70,000. Noted July 12.

Calif., Los Angeles—Southern California Gas Co., 950 South Bway., 4 story and basement, 140 x 250 ft. industrial building, rein.-con., 7th St. and Santa Fe Ave., to Foundation Co., Higgins Bldg., $280,000.

Calif., Menlo Park—M. Dioze and P. Darracq, County Rd., 2 story, laundry, timber, to J. McBain, Menlo Park, $40,000.

Calif., Oakland—W. E. Travis, 366 14th St., 1 story, concrete shop and garage, Market St. near 21st St., to G. P. W. Jensen, 520 Market St., San Francisco, $65,000.

Calif., San Francisco — J. Pasqualetti, 785 Market St., 2 story and basement, garage, concrete, Bush St. near Franklin St., to Amer. Concrete Co., Humboldt Bank Bldg., $40,000.

Calif., San Francisco—Hale Bros., 5th and Market Sts., 8 story and basement, warehouse and lofts, rein.-con., Stevenson and 5th Sts., to Macdonald & Kahn, 132 Montgomery St., $100,000. Noted Aug. 16.

Ont., Oshawa—General Motors Corp. of Canada, Ltd., 2 story, 100 x 600 ft., rein.-con., brick and steel plant, Division St., to W. J. Trick & Co., 25 Albert St. Engrs. est. $300,000. Noted Aug. 9.

Buildings

PROPOSED WORK

Conn., Hartford—Apartment—W. Greenberg, Bellevue St., rejected bids 3 story, 120 x 120 ft., rein.-con. and brick, plain foundation, Westland and Windsor Aves., $200,000. Will readvertise. Golden-Storrs & Co., 1127 Main St., archts. Noted June 28.

Conn., New London—Office—Connecticut Power Co., 33 Union St., plans 3 story, brick and steel, plain foundation, Meridian St. $200,000 S. W. Denholrn, genl. supt. Private plans.

Conn., New London—Office—F. W. Mercer, 64 Huntington St., plans 3 story, brick, plain foundation, Meridian St. $150,000. Engineer and architect not selected.

N. Y., Buffalo—Church—St. Vincent de Paul Parish, 15 Eastwood Pl., having plans prepared 75x175 ft., rein.-con., brick and stone, Eastwood Pl., $160,000. Engineer and architect's name withheld.

N. Y., Flushing—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone, plain foundation, 45th St., 27th and 28th Aves., here. $200,000.

N. Y., New York — Hospital—Bronx Municipal Hospital, Dept. Pub. Welfare, Municipal Bldg., having plans prepared brick, steel and stone, plain foundation, East 167th St. between Walton and Gerard Aves. $450,000.

N. Y., New York — Apartment — H. H. Uris, c/o A. C. Bossom, archt. and engr., 680 5th Ave., having plans prepared 12 story, brick, steel and stone, plain foundation, Park Ave.

N. Y., New York—Loft—M. Feuer, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., having plans prepared brick, steel and stone, plain foundation, 150 West 36th St. $175,000.

N. Y., Port Richmond — School — Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone addition to P. S. 16, plain foundation, here. $200,000.

N. Y., Troy—Church—Church of Sacred Heart, had plans prepared by T. L. Gleason, archt. and engr., 45 Maiden Lane, Albany, 3 story, 90 x 220 ft., rein. con.,

Buildings (Continued)

steel, stone and Indiana limestone, plain foundation, Pawling Ave. $500,000.

N. J., New Brunswick—College—State College Comn., Trenton, plans 3 story, 78 x 158 ft., rein.-con., brick and steel, here. $250,000. A. B. Mills, State Office Bldg., Trenton, archt.

Pa., Avalon—High School—Bd. Educ. having plans prepared by M. C. Kressley Co., 13 4th St., Harrisburg, 2 story and basement, 96 x 113 ft. rein.-con., brick and steel, California Ave. $180,000.

Pa., Johnstown—Temple—Masonic Temple Assn., Alma Hall, plans 3 story and basement, 140 x 200 ft. brick, steel and stone, Valley Pike and Linton Sts. $500,000.

Pa., Phila.—Hotel—L. H. Cahan & Son, 1324 Walnut St., having plans prepared by H. E. Kennedy, 1324 Walnut St., 25 story or more, brick, steel, terra cotta and stone, Broad and Locust Sts. $10,000,000.

Pa., Sharon—Temple—Sharon Lodge 282, L. O. O. M., having plans prepared by W. H. Crosby, Masonic Bldg., Oil City, 2 story and basement, 88 x 220 ft. brick, steel and stone, State and South Main Sts. $175,000.

Pa., Warren—Home—Warren Co., City Hall, having plans prepared 3-4 story brick, Market St. $125,000 to $150,000. A. Rogers, city engr.

Pa., Williamsport—Exchange—Bell Telephone Co., 206 North 3rd St., Harrisburg, plans 3 story and basement, 123 x 200 ft. brick and steel, 4th and Elmira Sts., here. $275,000.

Md., Baltimore—Police—Mayor and City Council plan 6 story, 90 x 370 ft., Fallsway, Lexington, Harrison and Fayette Sts. Election in November to vote on $700,000 bonds Engineer and architect not selected.

Md., Baltimore—Schools—Mayor and City Council, City Hall, plan 4 or 5 story, Pulaski Ave., $1,000,000, J. E. Sperry, Calvert Bldg., archt.; three 4 story, at Hamilton, Walbrook and Arlington, $450,000 each, C. N. Friz, Lexington Bldg., archt.; 4 story, at Canton, Project 2, $500,000, Wyatt & Nolting, Keyser Bldg., archts.; 4 story, at Roland Park, Project 4, $500,000, E. L. Palmer, Jr., 513 North Charles St., archt.; 4 story, at Rognel Heights, $450,000, W. G. Beecher, 12 East Pleasant St., archt.; 3 story, at Irvington, Project 6, $400,000, H. Sill, 12 East Pleasant St., archt.; 3 story addition to School 70, Warren Ave., Project 8, $300,000, O. G. Simonson, Inc., Hearst Tower, archts.; 3 story addition to School 13, Patterson Park Ave. and McElderry St., Project 9, $300,000, R. P. Allen, 3 East Lexington St., archt.; 3 story addition to School, Pimlico Rd., Project 7, 300,000, J. E. Laferty, 13 West Mulberry St., archt. All foregoing concrete and brick, plain foundations. Engineers not selected.

Fla., St. Augustine—Schools—St. Johns Co. voted $300,000 bonds for schools. D. D. Corbett, supt. Pub. Institutions. Noted July 26.

Miss., Jackson — Office — Sanguinett, Staats & Hedrick, archts., First Natl. Bank, Ft. Worth, and N. W. Overstreet, archt., Jacksonville, takes bids in September, 10 story and basement, 80 x 148 ft., brick, stone and concrete, plain foundation, for Lomar Life Insurance Co., Jacksonville. $500,000.

La., New Orleans — Hospital — Presbyterian Hospital, 719 Carondelet St., having plans prepared by DeBuys & Armstrong, Hibernia Bank Bldg., 10 story, Baronne and Girod Sts. $1,250,000.

La., New Orleans — Schools — Orleans Parish School Bd. having plans prepared by A. Christy, school archt., for boys' school on Nashville and South Claiborne Aves., Hurtsville and Story Sts. Plan to build girl's school in upper part of city.

La., New Orleans — Theatre — Saenger Amusement Co., Tulane and Liberty Sts., having plans prepared by E. Weil, Whitney Annex Bank Bldg., theatre on Canal and North Rampart Sts. $1,000,000.

Tenn., Memphis — Library — Cossitt Library had revised plans prepared by E. L. Harrison, U and P Bldg., 2 story, sandstone, etc., South Front and Monroe Sts. $150,000. Noted July 26.

Tenn., Memphis—Store—Snowden Estate had plans prepared by Hanker & Cairns, Scimitar Bldg., and E. Weil, Whitney Annex, New Orleans, La., 8 story, 148 x 148 ft., terra cotta, rein.-con., etc. $1,250,000. B. Lowenstein Bros., Inc., Main and Court Sts., lessee.

O., Attica—School—Town Bd. plans 2 story, brick. $150,000.

O., Cincinnati—Exchange—Cincinnati & Suburban Bell Telephone Co., Telephone Bldg., plans 2 story, 55 x 109 ft., Harrison and Epworth Aves. $250,000. H. Hake, Telephone Bldg., archt.

O., Cleveland—Apartment—I. B. Rabb, 203 Ulmer Bldg., having plans prepared by Braverman & Havermaet, Ulmer Bldg., 4 story and basement, 105 x 175 ft., brick and timber, East 77th St. near Hough Ave. $300,000.

O., Cleveland—Commercial and Apartment—E. A. Curtis (archt. and owner), Ulmer Bldg., prepared plans two 3 story and basement, 47 x 132 ft., brick and timber, East 156th St. and Corsica Ave. $150,000. Private plans.

O., Cleveland—Commercial and Apartment—Lake Shore Land & Development Co., c/o S. H. Kleinman, Natl. City Bldg., plans 8 story and basement, 126 x 148 ft., brick, steel and concrete, East 93rd St. and Carnegie Ave. $500,000. Engineer and architect not selected.

O., Lakewood (Cleveland, P. O.)—Apartment—Lerman & Libman, 3219 East 117th St. Cleveland, having preliminary plans prepared by Braverman & Havermaet, Ulmer Bldg., Cleveland, 3 story and basement, 114 x 170 ft., brick and steel, Clifton Blvd., here. $300,000.

O., Sandusky — Commercial Hotel — M. Moskowitz, 2179 East 83rd St., Cleveland, interested in company now being formed which plans 8 story and basement, 130 x 130 ft., brick, steel and concrete, here. $1,000,000. J. H. Graham & Co., 8201 Cedar Ave., Cleveland, archts.

O., Springfield—Hospital—Clark Co. plans tuberculosis hospital, 5 buildings, rein.-con. and brick, plain foundations. $375,000. L. W. Hall, c/o Hall & Lethly, 806 Fairbanks St., archt.

Mich., Owosso—Temple—B. P. O. E. having plans prepared by Verner, Wilhelm & Molby, 602 Book Bldg., Detroit, 2 story and basement, 90 x 125 ft. rein.-con., brick steel and stone, plain foundation. $150,000.

Ill., Chicago — Apartment — A. Ingram, c/o R. Huszagh, archt., 105 North Clark St., plans 3 story, 53 x 282 ft., fireproof, Eastlake Terrace and Rogers Ave. $500,000.

Ill., Chicago—Apartment—E. A. Thoreson, 2051 North Spaulding St., soon receives bids 3 story and basement, 100 x 173 ft., fireproof, Berteau and North Keystone Sts. $200,000. R. F. France, 155 North Clark St., archt.

Ill., Chicago—Bank and Office—Cottage Grove State Bank, 7452 Cottage Grove Ave., plans 2 story, 50 x 125 ft., fireproof, Cottage Grove Ave. between 75th and 76th Sts. $175,000. A. M. Schwartz, 165 East Erie St., archt.

Ill., Chicago — Club — Shattuck & Layer, archts., 19 South La Salle St., soon receive bids 3 and 4 story, fireproof, Madison St. near Cicero Ave., for Columbus West Side Building Corp., c/o architects. $700,000.

Ill., Marion—High School—Bd. Educ. having plans prepared by W. J. Brown, Amer. Trust Bldg., Cedar Rapids, Ia., 3 story and basement, rein.-con., brick and stone. $150,000. E. Miller, secy.

Wis., Madison — School — Bd. Educ., c/o E. B. Skinner, pres., plans 2 story and basement, brick, rein.-con. and steel addition, plain foundation, Spooner St. $200,000. Engineer and architect not selected.

Wis., Milwaukee — Medical, etc. — Marquette University, c/o H. Banzhaf, business mgr., 1115 Grand Ave., plans medical building, teaching hospital, nurses home and addition to dental building, brick, tile and concrete, plain foundation. $500,000. Engineer and architect not selected.

Wis., Neenah—High School, etc.—Bd. Educ., c/o G. W. Brunside, secy., 145 Wisconsin Ave., having plans prepared by J. D. Chubb, 109 North Dearborn St., Chicago, 3 story and basement, 100 x 150 ft., brick, rein.-con. and steel, plain foundation. $280,000.

Wis., Taylor—High School—Union High School Dist, c/o E. J. Smith, clk., plans 3 story and basement, 60 x 120 ft., brick, rein.-con. and steel, plain foundation. Engineer and architect not selected.

Ia., Marion — School — Voted $150,000 bonds for 3 story and basement, rein.-con., brick and stone, for Bd. Educ. $150,000. W. J. Brown, 201 Amer. Trust Bldg., Cedar Rapids, archt. Noted July 19.

Ia., Tipton — School — Defeated $235,000 bond issue for school. Miller, secy. School Bd. W. Gordon, 527 West 17th St., Des Moines, archt.

Minn., Willmar—Hospital—State Bd. of Control, Capitol, St. Paul, having plans prepared by C. H. Johnston, 715 Capital Bank Bldg., St. Paul, two 2 story and basement, 55 x 120 ft., rein.-con., brick and tile, at State Hospital for Insane. $150,000.

Kan., Leavenworth—City Hall—Making preliminary plans 2 story and basement, 90 x 125 ft. $200,000. Private plans.

Kan., Manhattan—Church—First Methodist Episcopal Church, c/o G. H. Parkinson, pastor, soon takes bids 1 story, 50 x 80 ft., brick and rein.-con. $150,000. T. W. Williamson & Co., Central Natl. Bank Bldg., Topeka, Kan, archts.

Kan., Wichita—Office—W. G. Price, c/o Price Auto Service Co., 301 South Topeka St., plans 7 story and basement, brick and rein.-con., plain foundation, Emporia St. $175,000. Engineer and architect not selected.

Mo., St. Louis—Infirmary—Dept. Pub. Welfare had preliminary plans prepared altering infirmary and west wing of Isolation hospital, Arsenal St., $200,000. L. R. Brown, 301 City Hall, archt. and engr.

Mo., St. Louis — Theater, etc. — Local Syndicate, c/o J. S. Carr, Chippewa Bank having preliminary plans prepared 4 story, 125-150 x 200 ft., rein.-con. and brick, plain foundation, Bway. $350,000 up. Private plans.

Ark., Paragould—Church—First Methodist Church having preliminary plans prepared by J. P. Almand, archt., Parks Bldg., Little Rock, 2 story, brick, concrete and stone. $175,000.

Ark., Texarkana—Hotel—Local Syndicate, c/o Chamber of Commerce, plans hotel, probably 10 story, 200 room. $750,000.

Wash., Tacoma — Apartment — F. F. Travis and A. I. Maltby having plans prepared by F. F. Travis, Tacoma, 6 story, concrete and brick, Tacoma Ave. and North 2nd St. $200,000.

Calif., Alameda — High School — City having preliminary plans prepared by C. Werner, Santa Fe Bldg., San Francisco, high school, rein.-con. or hollow tile. To exceed $150,000.

Calif., Belmont—Hospital—C. S. Howard, 2801 Bway., San Francisco, plans hospital here. $150,000. Engineer and architect not selected.

Calif., Compton—Bank, Store and Office—Bank of Compton, c/o E. P. and C. E. Norberg, archts., Union Bank Bldg., Los Angeles, had plans prepared 3 story, 60 x 115 ft. fireproof, Main St., here.

Calif., Fresno—College—Sisters of Holy Cross, 2811 Mariposa St., plans group of college buildings, probably fireproof. To exceed $250,000. Engineer and architect not selected.

Calif., Hollywood—Church—H. Patterson, archt., Johnson Bldg., Los Angeles, soon takes bids church, for Hollywood First Presbyterian Church, $150,000. Noted July 26.

Calif., Long Beach — Auditorium — City having plans prepared by Wright & Gentry Marine Bank Bldg., memorial auditorium, fireproof. $2,000,000 or more.

Calif., Los Angeles—Apartment—Ardmore Corp., c/o Walker & Eisen, archts., Pacific Finance Bldg., had plans prepared 4 story and basement, brick, Ardmore Ave. $150,000.

Calif., Los Angeles—Church—St. Vincents Parish, having plans prepared by A. C. Martin, 430 Higgins Bldg., rein.-con., with 150 ft. tower and 40 ft. dome. Adams and Figueroa Sts. $500,000.

Calif., Los Angeles—Hotel—H. Fidroeff and S. W. Fisher, having plans prepared by W. F Bowen, 813 Union League Bldg., 10 story and basement, 80 x 200 ft., brick and steel, Hollywood Blvd. and Serrano Ave. $750,000.

Calif., Los Angeles—Hotel and Store—Hartfield & Paulis, c/o L. A. Smith, archt., 3rd St. and Western Ave., had plans prepared 5 story and basement, rein.-con. and brick, Temple and Bway. Sts. To exceed $200,000.

Calif., Los Angeles—Schools—City having plans prepared by Architectural Dept. Bd. Educ., Security Bldg., additions to following schools, Harbor City School $24,000; Soto St. $48,000; Santa Monica Blvd. $24,000; 14th St. school (new building). $85,000.

Calif., Los Angeles—Store and Office—Cahn-McCabe, 716 South Spring St., plans about 12 story, 50 x 80 ft., brick and steel. 7th and Spring Sts.

Calif., Oakland—Store, Office and Theatre—M. I. Diggs, (owner and archt.), 1901 Telegraph Ave., preparing plans 8 story and basement, fireproof, 19th St. and Telegraph Ave. $500,000.

Calif., Palo Alto—High School—Palo Alto Union High School Dist. having plans prepared by B. M. Clark, 600 Embarcadero Rd., brick and concrete addition. $150,000.

Calif., Patton — Hospital — State had plans prepared by G. B. McDougall, Forum Bldg., Sacramento, hospital cottage building on hospital grounds, here. $200,000.

Calif., San Bernardino—School—City to vote on $300,000 bonds for junior high school.

Calif., San Mateo—Theatre and Hotel—H. L. Stevens, archt., 433 California St., San Francisco, preparing preliminary plans theatre and hotel, 125 rooms, A St. and 3rd Ave. $150,000 or more. Owner's name withheld.

Calif., Stockton — College — College of Pacific, c/o Davis-Heller-Pearce Co., Delta Bldg., takes bids after Sept. 1, science building, Losekann & Clowdsley, Elks Bldg., archts.; dining hall and gymnasium.

Buildings (**Continued**)

Stoner & Warner, Belding Bldg., archts.; auditorium, Mayo, Cowell & Bissell, 24 South San Joaquin St., archts.; boys dormitory and girls dormitory, power house and stadium, Davis-Heller-Pearce Co., Delta Bldg., archts., all 2 story. $600,000. Last named architects will act as managers of construction for entire project. Noted Apr. 4.

B. C., Vancouver—Library—University of British Columbia, Point Grey, having plans prepared by Sharp & Thompson, 708 London Bldg., for 3 story, 100 x 120 ft. brick, on campus. $350,000.

BIDS DESIRED

N. Y., Brooklyn—School—Aug. 28, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 196, Bushwick Ave. between Scholes and Meserole Sts. Noted Mar. 29.

Md., Baltimore—Apartment—Aug. 25, by J. E. Moxley, Jr., archt., Equitable Bldg., 4 story, 75 x 84 ft., brick, plain foundation, St. Paul and 25th Sts., for N. J. Myerberg, 210 North Calvert St. $150,000. Noted Aug. 9.

Md., Crownsville—Dormitory—Aug. 27, by H. P. Hopkins, archt., 347 North Charles St., Baltimore, 3 story and basement, 102 x 110 ft., brick, plain foundation, for Crownsville State Hospital, 330 North Charles St., Baltimore. $150,000. Noted June 7.

N. C., Newton—Court House—City receiving bids 4 story, 60x140 ft. $200,000. W. G. Rodgers, 206 Latona Blvd., Charlotte, archt.

Fla., Miami—Bank—Bank of Bay Biscayne, 12th St. and Ave. D, receiving bids 12 story, 140 x 140 ft., steel. $800,000. Weary & Alford Co., 1923 Calumet Ave., Chicago, engrs. Pfeifer & O'Reilly, Miami, archts. Noted June 14.

Ky., Louisville—Temple, etc.—A. A. O. & N. M. S., receiving bids 7 story, 200x216 ft., temple, hotel, office, etc. $1,500,000. Joseph & Joseph, Francis Bldg., archts. and engrs.

O., Geneva—School—Sept. 12, by W. H. King, clk. Bd. Educ., 2 story and basement, 78 x 159 ft., with auditorium and gymnasium. $200,000. F. L. Packard, 16 East Broad St., Columbus, archt. Noted Jan. 18.

O., Wapakoneta—High School—Sept. 5, by C. C. Nordin, clk. Bd. Educ., 3 story and basement, 125 x 151 ft., rein.-con. and brick addition. $150,000. F. L. Packard, 16 East Broad St., Columbus, archt. Noted July 12.

Ind., Mishawaka—High School—Sept. 6, by Bd. Educ., high school, Lincoln Highway, Studebaker St., Gerhart and Linden Aves. H. W. Tupper, secy. Perkins, Fellows & Hamilton, 814 Tower Court, Chicago, Ill., archts. Noted Oct. 12.

Mich., Detroit—School—Sept. 7 by Bd. Educ., 1354 Bway. Ave., 2 story and basement, 40 ft. high, 83x163 ft., rein.-con., brick and steel, plain foundation, Garden Ave. $250,000. Malcomson & Higginbotham, Industrial Bank Bldg., archts.

Ill., Chicago — Apartment — M. Telechausky, 1619 North Robey St., receiving bids 3 story, fireproof, Eberhard and 75th Sts. $150,000. E. J. Patelski, 157 West Randolph St., archt.

Ill., Chicago — Apartment — M. Telechausky, 1619 North Robey St., receiving bids 3 story, 100 x 164 ft., fireproof, Woodlawn Ave. between 52nd and 53rd Sts. $275,000. E. J. Patelski, 157 West Randolph St., archt.

Ia., Mediapolis—School—Aug. 31 by Bd. Educ., 3 story and basement, 66x179 ft. with gymnasium annex, rein.-con., brick and stone. $150,000. J. E. Berry, secy. Keffer & Jones, 204 Masonic Temple Bldg., Des Moines, archts.

Minn., Proctor — School — Sept. 15, by Secy. Bd. Educ., 2 story and basement, 125x200 ft., concrete steel and brick. $150,000. E. F. Broomhall, 710 Alworth Bldg., Duluth, archt. and engr. Noted Aug. 9.

Kan., Topeka—Hospital—Aug. 25, by J. M. Kirkpatrick, pres. Security Benefit Assn., 701 Kansas Ave., Topeka, 3 story and basement, 40 x 110 ft., brick, stone and concrete, plain foundation. $200,000. Smith, Garden & Martin, 1945 Michigan Ave., Chicago, archts.

Mo., Chillicothe—High School—Sept. 5, by Bd. Educ., 2 story and basement, 200 x 200 ft., rein.-con. and brick, plain foundation, Calhoun St. $300,000. R. W. Roberts, Chillicothe, archt. Payson & Caldwell, Interstate Bldg., Kansas City, associated archt. Noted Aug. 9.

Mo., Kansas City—School—Sept. 6, by C. A. Smith, archt., 602 Finance Bldg., 1 story and basement, rein.-con., brick, steel and stone, for Bd. Educ. $280,000.

Tex., Ft. Worth—Sept. 4, by Y. M. C. A., c/o W. G. Clarkson, archt., First Natl. Bank, constructing building on 5th and Lamar Sts. Noted Aug. 2.

Okla., Ponca City—Temple—A. F. and A. M. 83, takes bids Sept. 1, 5 story and basement, 50 x 140 ft., rein.-con., brick and stone. $200,000. Smith & Senter, 401 Commerce Investment Bldg., Okmulgee, archts. Noted Feb. 22.

Colo., Denver—Office—Sept. 1, by H. J. Manning, archt., Majestic Bldg., 2 story and basement, 60 x 165 ft., stone, concrete and reinforced steel, 16th Ave. and Lincoln St., for Capitol Life Insurance Co., Tabor Opera House Bldg. $200,000. Noted June 7.

Calif., Covina—Dormitory—Train & Williams, archts., Western Mutual Life Bldg., Los Angeles, receiving bids two 2 story, rein.-con. and brick, for Masonic Homes of State of California, c/o architects. $150,000. Noted June 28.

Calif., Los Angeles—Store and Lodge—S. T. Norton and F. H. Wallis, archts., Pacific Finance Bldg., receiving bids 2 story and 3 story and basement, brick, Union Ave. and 9th St., for Independent Order of B'Nae B'Rith, 519 West 9th St. $150,000. Noted May 31.

Calif., San Francisco — Apartment — L. Blum, 180 Jessie St., receiving bids 6 story, rein.-con. or steel, incl. steam heating, hot water plant with oil burner, incinerator, etc., Sutter and Hyde Sts. $150,000. C. O. Clausen, Hearst Bldg., archt.

Calif., San Francisco—School—Aug. 29, by Bd. Pub. Wks., constructing Portola Primary School on block bounded by Goettingen, Somerset, Bacon and Burrows Sts., for city and San Francisco Co. $169,000. J. Reid, Jr., 1st Natl. Bank Bldg., city archt.

Calif., Stockton — Home — Sept. 4, by Supervs. San Joaquin Co., 2 story, concrete or brick, on county hospital grounds. $150,000. R. P. Morrell, 41 South Sutter St., archt. Noted May 3.

BIDS RECEIVED

N. Y., Binghamton—Club and Office—Binghamton Club, Chenango and Henry Sts., general contract 4 story, modern construction, Front (83rd) St., from Mitchel Constr. Co., 332 Water St., $150,000

N. Y., Brooklyn—High School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Aug. 14, Girls Commercial High School, Classon Ave. between Union and President Sts., for Bd. Educ., from T. A. Clarke Co., 122 Livingston St., A $2,387,000; G. A. Fuller Co., 949 Bway., New York, B $2,492,000; T. Dwyer, Bway. and 216th St., New York, C $2,697,600. Noted July 26.

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., constructing School 186, 8 rooms, Spring Rd. and Rock Creek Church Rd., N.W., from D. J. Phipps, Roanoke, Va., (1) work complete $147,000 alternate (1) add $7,500 (2) add $700 (3) add $200 (4) add $200. Noted Aug. 2.

Tenn., Nashville—Office—Nashville, Chattanooga & St. Louis Ry., 10th and Broad Sts., 8 story, 50 x 90 ft., from Southern Ferro-Constr. Co., Trust Co. of Georgia Bldg., Atlanta, $200,000.

O., Granville—High School—C. F. Owens, clk. Bd. Educ., Aug. 10, 2 story and basement, 102 x 131 ft., brick and concrete, from S. J. Isobel & Sons, 311 Citizens Trust Bldg., Columbus, $138,528. Noted July 19.

Wash., Mt. Vernon—Courthouse—Comrs. Skagit Co., Aug. 6, 3 story, rein.-con. and brick, from Standard Constr. Co., Seaboard Bldg., Seattle, $229,872. Archts. est. $300,000. Noted July 26.

Calif., Centerville—High School—Centerville Union High School Dist., 2 story, concrete, from Leiter & Sons, Call Bldg., San Francisco, $183,387; hollow tile from C. H. Peterson, 185 Stevenson St., San Francisco, $191,700. Noted July 19.

Calif., Oakland — Store and Loft — J. Havens, c/o J. W. Plachek, archt., 2014 Shattuck Ave., Berkeley, 2 story and basement, rein.-con. and terra cotta, 11th and Clay Sts., here, from A. H. Vogt, 185 Stevenson St., San Francisco, $150,000. Noted Aug. 2.

Calif., Pomona — Lodge and Club — B. P. O. E., 2 story, brick, general contract from G. McCain, Pomona, $108,326. Noted July 5.

CONTRACTS AWARDED

Conn., Hartford — Apartment — W. H. Foberg, 509 Hillside Ave., will build 3 story, 100 x 180 ft. brick, plain foundation, Washington St., by day labor. $160,000. J. E. Marchetti, 721 Main St., archt. Noted July 26.

N. Y., Brooklyn—Loft—Mayflower Constr. Co., Inc., c/o M. Klein, archt., 37 Graham Ave., will build 100 x 200 ft., brick, steel and stone, plain foundation, Knickerbocker Ave., by day labor. $200,000.

N. Y., Jamestown — Theatre — Eastman Kodak Co., Kodak Park, Rochester, 5 story, 84 x 108 ft., brick addition, Swan St., here, to A. W. Hopeman & Co., Rochester. $155,000.

N. Y., New York—Apartment—Finkelstein & Schwartz, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, West 176th St., by day labor. $200,000.

N. Y., New York—Apartment—Marmac Constr. Co., c/o C. C. Wendeback, archt. and engr., 101 Park Ave., will build 9 story, brick, steel and stone, plain foundation, West 70th St., by day labor. $300,000.

N. Y., New York—Apartment—A. Murray, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Grand Concourse, by day labor. $200,000.

N. Y., Palmyra—School—Bd. Educ., new school, to Fitzpatrick & McArthur, Yonkers. Archts. est. $250,000. Noted July 12.

N. Y., Southold—School—Bd. Educ. brick, steel and stone, plain foundation, to O. L. Weidman, 552 7th Ave., New York City. Archts. est. $150,000. Noted July 12.

N. J., Jersey City — Bank — Greenville Bank & Trust Co., Ocean Ave., 1 story and mezzanine, 55 x 105 ft., brick and stone, plain foundation, Ocean and Lemback Aves., to J. Mitchell, Inc., 999 Bergen Ave. Noted June 14.

Pa., Phila.—School—D. J. Dougherty, 1723 Race St., 3 story and basement, 110 x 210 ft. steel and stone, 49th and Chestnut Sts., to F. V. Warren, 132 South 17th St., $437,228.

Md., Baltimore—Business—International Eng. & Constr. Co., 5 story, 48 x 144 ft., concrete and brick, Fayette and Paca Sts., to I. Silberstein, Equitable Bldg., $200,000.

Miss., Meridian — Temple — Hamasa Mosque Assn., 4 story, brick and rein.-con., plain foundation, 8th St., to Wetmore & Priester, Meridian, $175,000.

O., Cleveland—Commercial and Office—H. T. Jeffrey, archt., 621 Hanna Bldg., 4 story, 132 x 132 ft., brick, steel and concrete, East 12th St. and Chester Ave., to G. W. Hale, Hanna Bldg., for Chester 12th Building Co., c/o J. E. Andrews, of Cuyahoga Coal Co., Hanna Bldg. Archts. est. $300,000. Noted June 14.

O., Dover—Theatre and Lodge—G. A. Ebeling, archt., Newman-Stern Bldg., Cleveland, 4 story, 50 x 150 ft., brick, steel and concrete, here, to Union Lumber Co., Dover, for Dover Pythian Castle Co. Archts. est. $150,000. Noted June 28.

O., Zanesville—School—Bd. Educ. general contract rein.-con., brick and steel, Cookerville Rd. and Pine St., to Dunzweiler Constr. Co., Frazeysburg, Rd., $225,561.

Mich., Detroit. — Apartment — M. D. Caughey, 2323 East Grand Blvd., 8 story and basement, rein.-con., brick, steel and stone, plain foundation, East Grand Blvd. and Chene St., to O. Misch Co., 159 East Columbia Ave. Archts. est. $1,000,000.

Mich., Detroit—Hotel—P. R. Bierer, 381 West Grand Blvd., 8 story and basement, 100x157 ft., rein.-con., brick steel and stone, plain foundation, East Columbia St., to Bryant & Detwiler Co., 2336 Dime Bank Bldg. Archts. est. $600,000.

Mich., Detroit — Hotel — Book Estate, Book Bldg., superstructure for 29 story and basement, 151x220 ft., rein.-con., brick, steel and terra cotta, Michigan Ave. and Washington Blvd., to Lynch Constr. Co., Room 1106, 1200 Washington Blvd.; foundation to Spencer, White & Prentis, 1200 Washington Blvd.

Mich., Detroit—Schools—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 84x278 ft. rein.-con., brick and steel addition to Priest School, Wagner Ave., to W. H. Mueller, 1711 Ford Bldg., $287,000; also 2 story and basement, 40 ft. high, 64x140 ft., rein.-con., brick and steel addition to Western High School, Page and Scotten Aves., to F. H. Goddard & Co., 2130 Franklin St., $269,937. Noted Aug. 2.

Ill., Chicago—Church—Isaiah Congregation, c/o A. S. Alschuler, archt., 28 East Jackson Blvd., 4 story, 80x150 ft., fireproof, Greenwood and 51st Sts. to Salomon-Waterton Co., 230 East Ohio St. Archts. est. $350,000.

Ill., Granite City—Theatre—L. Landau, Jr., 19th and E Sts., 3 story, 125 x 245 ft., rein.-con. and brick, to R. Levine & Co., 6951 South Green St., Chicago. Archts. est. $200,000.

Wis., Milwaukee — School and Chapel — Capuchin Fathers, c/o St. Benedict the Moor Mission, 1 story, 50x116 ft., brick, tile and concrete, plain foundation, State St., to H. Schmitt & Son, 430 Farwell Ave. $200,000. Noted May 31.

Ia., Iowa City—Recitation—State Bd. Educ., Des Moines, general contract 4 story and basement, 70 x 220 ft., rein.-con., brick, tile, concrete and stone, State University, here, to J. and W. A. Elliott Co., 906 Lumber Exch. Bldg., Minneapolis, Minn., $389,494. Noted Aug. 23.

Buildings (Continued)

Ia., Le Mars—School—School Bd., 3 story and basement, 70 x 216 ft., rein.-con., brick and stone, general contract to Deveroux-Olson Co., Minneapolis, Minn., $108,570; heating and plumbing to Mathey Plumbing Co., Le Mars, $24,746. Noted July 19.

Minn., St. Paul—School—Dept. Educ., 2 story and basement, brick and tile, Palace and James Sts., general contract to P. A. Swenson & Hakanson, 202 Bremer Arcade, $128,000. Noted Aug. 2.

Kan., Coffeyville—Memorial Hall—City Comrs., 2 story and basement, 115 x 172 ft., concrete and stone, general contract to Universal Concrete Co., Coffeyville, $146,000.

Mo., Liberty—High School—Bd. Educ. general contract 2 story, 80 x 188 ft., rein.-con., brick and stone, to Baehl & Co., Manufacturers Natl. Bank Bldg., Leavenworth, Kan., $141,000. Noted March 1.

Mo., Joplin—Hospital—Methodist Episcopal Congregation, will build 4 story and basement, 60 x 100 ft., rein.-con. and brick, 2600 Sargent Ave., by day labor $250,000. E. W. Dearing, Boston, Mass., archt.

Mo., St. Louis—Club-Office—City Club, 911 Locust St., 16 story, rein.-con., brick and steel addition, concrete pile foundation, 11th St., to Humes-Deal Constr. Co., Century Bldg., fee basis. Archts. est. $350,000.

Mo., Warrensburg—High School—Bd. Educ., 2 story, 148 x 188 ft., rein.-con. and brick, to McCarthy Constr. Co., Chemical Bldg., St. Louis, $146,640. Noted Aug. 3.

Tex., Austin — Biology — University of Texas, 3 story and basement, 66 x 192 ft., concrete, brick, steel and terra cotta, general contract to Wattinger Bros., Littlefield Bldg., $318,640. Noted Aug. 9.

Tex., Corsicana — Schools — Bd. Educ. general contract high school to Brashear Constr. Co., Texarkana, $237,000, 3 grammar schools, to Johnson Constr. Co., Cameron Bldg., Waco, $199,806, all brick, stone and concrete; plumbing, to J. H. Wooley, Corsicana, $32,048; heating and ventilating to Kennison Bros., Woods St., $54,853. Engrs. total est. $600,000. Noted July 12.

Tex., Denison—Hotel—Denison Hotel Co., 500 Main St., will build 6 story and basement, 110 x 120 ft., concrete, brick and stone, plain foundation, by day labor. $250,000. W. J. Knight & Co., Century Bldg, St. Louis, Mo., engrs. Barnett, Haynes & Barnett, Century Bldg., St. Louis, Mo., archts. Noted July 12.

Tex., Houston — Hotel — Sam Houston Hotel Co., Prairie and San Jacinto Sts., 10 story and basement, 100 x 100 ft., brick, stone and concrete, to D. Hall, Carter Bldg., Houston, $600,000.

Tex., Texarkana—Bank and Office—Texarkana Natl. Bank., 8 story and basement, 25 x 150 ft., rein.-con., steel and brick, Broad St., to Murch Bros. Constr. Co., Railway Exch., St. Louis, Mo. $250,000.

Okla., Pawhuska—Hotel—C. A. and J. L. Duncan, will build 5 story, 190 x 520 ft., brick, by day labor. $200,000. Noted July 26.

Calif., Los Angeles—Apartment—S. Reiss, c/o Monaco & Bordeaux, archts., Bank of Italy Bldg., 4 story and basement, brick, Serrano St., to Richardson Building & Eng. Co., 631 South Berendo St., $150,000. Noted July 12.

Calif., Los Angeles—School—City, Fremont School, brick, to J. C. Bannister, 903 North Mariposa St., $425,000. Noted Aug. 16.

Calif., Orange—Hotel—G. Richards and R. Smith, c/o contractors, alterations and additions to hotel, to A. T. Hesse, 1117 Hollingsworth Bldg., Los Angeles, $150,000.

Calif., San Luis Obispo—Hotel—H. H. Carpenter, is at head of syndicate, which let contract for 5 story and basement, brick, to Burck Constr. Co., 714 South Hill St., Los Angeles, to exceed $250,000.

Wash., Olympia—Capitol—State Capitol Comn., constructing main portion of legislative building of Capitol (exclusive of dome), brick and stone, plain foundation, to Sound Constr. & Eng. Co., Lowman Bldg., $780,000. Noted July 19.

Que., Montreal — Church — Trinity Memorial Church, Claremount Ave., 2 story, 83 x 169 ft. church, Sherbrooke and Northcliffe Aves., to W. S. D. Cook, 10 Cathcart St., $224,000, steel contract to Dominion Bridge Co., Lachine, stone contract to Morrison Quarries, 128 Bleury St.

Federal Government Work

PROPOSED WORK

D. C., Wash.—Conduit Road, etc.—U. S. Engineer Office, Old Land Office Bldg., plans conduit road, hydroelectric plant, filtration plant, reservoir, and completion of conduits.

D. C., Wash. — Repairing Roof — Spec. 4902—Bureau Yards & Docks, Navy Dept., plans repairing roof of Naval Hospital.

Tenn., Memphis—Derrick—U. S. Engineer, plans to purchase 25 ton steel derrick.

California—Road—U. S. Bureau Pub. Rds., 9 Main St., San Francisco, rejected bids grading and surfacing 15.5 mi. Murphy-Big Trees National Forest Highway, Calaveras Co. Will readvertise shortly. Noted Aug. 16.

Calif., San Diego—Roads and Walks—Spec. 4901—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans roads and walks at Marine Barracks, Naval Operating Base, here.

BIDS DESIRED

Mass., Boston — Flooring — Sept. 10, by Treas. Dept., Wash., D. C., flooring, incl. mechanical equipment, renovation and remodeling in U. S. Post Office and Sub-Treasury, here. J. A. Wetmore, acting superv. archt.

Mass., Rutland—Quarters, etc.—Sept 17, by U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., constructing, complete, nurses quarters, mess hall and utilities building at U. S. Veterans Hospital, 89, here. F. T. Hines, dir.; adv. E. N.-R. Aug. 23.

N. Y., New York—Dredging, etc.—Aug. 30, at office U. S. Engineer, 616 Army Bldg., dredging and rock removal Area 2 New York and New Jersey Channels; adv. E. N.-R., Aug. 23.

N. Y., Waterloo—Post Office—Sept. 5 by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Ky., Louisville—Clam Shell Buckets—U. S. Engineer, P. O. Box 72, taking bids 3 clam shell buckets 1½ cu.yd. capacity, extra heavy type, reinforcing lips on scoops, f.o.b. Owensboro.

Wash., Seattle—Dredging—Sept. 1, at office U. S. Engineer, dredging 9,200 cu.yd. rock and 2,300 cu.yd. earth in Willapa River.

Calif., San Diego — Storehouse — Spec. 4809—Sept. 5, by Bureau Yards & Docks, Navy Dept., Wash., D. C., paint and oil storehouse, here. Noted Aug. 9.

H. T., Hilo — Breakwater — Oct. 15, at office U. S. Engineer, Honolulu, breakwater in Harbor, here; adv. E. N.-R. Aug. 23.

BIDS RECEIVED

N. H., Concord — Remodeling — Treas. Dept., Wash., D. C., remodeling U. S. Post Office, here, from C. H. Holmes Constr. Co., Sommerville, Mass., $6,918. Noted July 12.

Massachusetts — Dredging — U. S. Engineer, Providence, dredging 260,000 cu.yd. in New Bedford and Fair Haven Harbor, here, from Bay State Dredging Co., 62 Conder St., East Boston (Boston P.O.) $0.389 per cu.yd. Noted July 26.

Mass., Chelsea—Reroofing—Spec. 4886—Bureau Yards & Docks, Navy Dept., Wash., D. C., reroofing building at Naval Hospital, here (1) work complete, from D. Pasquala, 8 Bartlett Pl., Boston, (1) $40,681 (2) $2,321 (3) $12,634 (4) $14,955 (5) add $7,000. Noted July 26.

N. Y., Chelsea — Water Supply — Treas. Dept., Wash., D. C., water supply system at U. S. Veterans Hospital, here, from Noland-Clifford Co., 330 28th St., Newport News, Va., $53,654. Noted July 26.

Md., Annapolis—Water Softening Plant—Spec. 4836—Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant at Naval Academy, here, from Permutit Co., 440 4th Ave., New York City, (1) work complete $13,270, addendum (1) $60 (2) $2,500 (3) $600 (4) $120 (5) $3,820 Item 2 $15,485 addendum (1) $70 (2) $2,414 (3) $850 (4) $320 (5) $3,990 telegraphic modification Item 1 deduct $400 addendum (2) deduct $400 (5) deduct $400, Item 2 deduct $500 addendum (2) deduct $500 (5) deduct $500 Item 3 addendum (2) $1,800 (5) $1,800. Noted July 26.

Md., Baltimore—Dredging—U. S. Engineer, dredging 762,600 cu.yd. in Harbor, here, from Sanford & Brooks Co., 24 Commerce St., $95,249. Noted July 12.

D. C., Anacostia—Hangar—Spec. 4868—Bureau Yards & Docks, Navy Dept., Wash., D. C., landplane hangar, here, from C. A. Hofferberth, Woodward Bldg., Wash., $6,570. Noted Aug. 9.

D. C., Wash.—Cement—A. L. Flint, general purch. officer, The Panama Canal, Wash., D. C., furnishing 10,000 bbl. portland cement f.o.b. New York City, from Atlas Portland Cement Co., 25 Bway., New York City, $33,400.

D. C., Wash.—Fire Protection System—Treas. Dept., Wash., D. C., installing fire protection work in Treasury Annex 2, from C. A. Hofferberth Constr. Co., Woodward Bldg., $4,434. Noted Aug. 2.

Ala., Florence — Castings — U. S. Engineer, miscellaneous castings, from Hardie-Tynes Mfg. Co., 800 North 28th St., Birmingham, $6,350 f.o.b. Birmingham.

Ill., Evanston—Extension—Treas. Dept. Wash., D. C., extension with driveway at U. S. Post Office, here, from Garber & Cissel, Inc., 203 West 4th St., Bethlehem Pa., $13,500. Noted July 26.

Wis., Neenah — Water System — Treas. Dept., Wash., D. C., water system for U. S. Post Office, here, from F. T. Hartel, Neenah, $1,582. Noted July 12.

Ia., Knoxville—Buildings—U. S. Veterans Bureau, in office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., garage and creamery, at U. S. Veterans Hospital 57, here, from C. Weitz Sons, 713 Mulberry St., Des Moines, $79,800. Noted July 19.

Kan., Ft. Scott—Mailing Shed—Treas. Dept., Wash., D. C., mailing shed for U. S. Post Office, here, from Huff Contg. Co., Ft. Scott, $4,447. Noted July 19.

Wyo., Sheridan — Mailing Vestibule — Treas. Dept., Wash., D. C., mailing vestibule in U. S. Post Office, here, from G. E. Wright, Inc., Monadnock Blk., Chicago, $3,594.

Mo., St. Louis — Remodeling — Treas. Dept., Wash., D. C., remodeling Custom House, here, from Kellermann Contg. Co., Victoria Bldg., $6,590.

Arizona—Roads—E. S. Wheeler, dist. engr. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, constructing 16.522 mi. Salt River-Pleasant Valley, Sect. 1, Forest Highway, Tonto National Forest, Gila Co., 12 ft., from W. C. Braley, Claypool, 80,946 cu.yd. common excav., $0.28, 18,917 cu.yd. rock excav. $1.25, 22 cu.yd. Class A concrete $35, 450 cu.yd. cement rubble masonry, $14, etc., total $87,803. Noted Aug. 2.

Wash., Puget Sound—Crane—Spec. 4861—Bureau Yards & Docks, Navy Dept., Wash., D. C., electric traveling bridge crane, Navy Yard, here (1) work complete, from Pawling & Harnischfegar, 38th St. and National Ave., Milwaukee, Wis., (1) $12,235; Cyclops Iron Wks., 837 Folosm St., San Francisco, Calif., (1) $12,400 deduct $1,400 for magnetic controls.

Wash., Seattle—Removal—U. S. Dist Engineer, Burke Bldg., (A) removal of 399,000 cu.yd. earth along north side Lake Washington Canal from Locks to Puget Sound, overdepth 63,000 cu.yd (B) removal of 978,000 cu.yd. from canal from locks out to Puget Sound, overdepth 140,000 cu.yd. from Puget Sound Bridge and Dredging Co., Central Bldg., (A) $0.4273 (B) $0.3873. Noted July 19.

Calif., San Diego—Barracks, etc.—Spec. 4843—Bureau Yards & Docks, Navy Dept., Wash., D. C., 2 barracks and extension to mess hall at Training Station, here, (1) work complete, from R. E. McKee, 1916 Texas St., El Paso, Tex., (1) $209,569 (2) $209,569 (3) $125,224 (4) $167,345 (5) $167,345 all (200 days) (6) add $625 (7) add $325, telegraphic modifications, deduct $4,000 each from (1) and (2), deduct $1,000 each from (3), (4) and (5). Noted July 26.

Calif., San Diego—Light, System etc.—Spec. 4821—Bureau Yards & Docks, Navy Dept., Wash., D. C., electric light, power and telephone systems, at Destroyer Base, here, from Globe Electric Wks., 6th and K Sts., (1) $5,000 (75 days) (2) $1,000 (3) $500 (4) $600 telegraphic modification, (1) deduct $560 (2) deduct $800 (3) deduct $250 (4) deduct $200. Noted July 19.

H. T., Pearl Harbor—Piers and Wharf—Spec. 4799—Bureau Yards & Docks, Navy Dept., Wash., D. C., rein.-con. piers and wharf at Submarine Base, here, (1) work complete, from Hawaiian Dredging Co., Ltd., 854 Kuhuhuana St., Honolulu, (1) $205,000 (300 days) telegraphic modification deduct $6,125 (2-A) $1,900 deduct $580 (2-B) $1,600 deduct $334 (3-A) $2,600 deduct $900 (3-B) $2,300 deduct $535 (4a) $2 (4b) $0.75 (5a) $4 (5b) $2.25 (6a) $4 (6b) $0.50. Noted June 14.

CONTRACTS AWARDED

N. Y., Buffalo—Dredging, etc.—U. S. Engineer, dredging and rock removal in Black Rock Channel to Dunbar & Sullivan Dredging Co., Dime Bank Bldg., Detroit, Mich., $124,900. Noted July 26.

N. J., Lakehurst—Hangar—Spec. 4849—Bureau Yards & Docks, Navy Dept., Wash., D. C., balloon hangar, here, to Donnell-Zane Co., 233 Bway., New York City, $9,280 (120 days) former contract rescinded. Noted June 28.

Delaware—Excavation—U. S. Engineer, Wilmington, completing, widening and dredging Chesapeake and Delaware Canal, creating new entrance from Delaware Bay and improving entrance at Chesapeake Bay, Delaware and Maryland, 6,000,000 cu.yd. excav., to Atlantic Gulf and Pacific Co., 13 Park Row, New York City, Sects. A and D, $740,688; Arundel Corp., Pier 2, Pratt St., Baltimore, Md., Sect. B, $257,359. Noted Aug. 9.

Federal Government Work (Continued)

Md., Baltimore—Dredging—U. S. Engineer, dredging in Queenstown Harbor, Md., to Calkins Dredging Co., Inc., 604 Bankers Trust Bldg., Norfolk, Va., $5,564. Noted June 28.

D. C., Wash.—Intake Chamber, etc.—U. S. Engineer, 250 Old Land Office Bldg., Items A, B and C, being intake chamber, cut and cover conduit and tunnel respectively of water supply conduit for Dist. of Columbia, to M. A. Long Co., 2016 West North Ave., Baltimore, Md., $368,709. Noted Aug. 9.

Virginia — Quarters, etc. — Spec. 4855 — Bureau Yards & Docks, Navy Dept., Wash., D. C., inspector's quarters, stable and garage, at Naval Ammunition Depot, St. Julien's Creek, here, (1) work complete, to H. M. Lucas, 115 Bruce Pl., Portsmouth, Items (1) (2) (3) and (4) $12,039 (150 days). Noted Aug. 9.

S. C., Spartanburg — Extension — Treas. Dept., Wash., D. C., extension to U. S. Post Office and driveway, here, to Garber & Cissel, Inc., 203 West 4th St., Bethlehem, Pa., $10,850 (120 days). Noted July 12.

Tenn., Memphis — Cement — Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., furnishing 15,000 bbl. portland cement f.o.b. U. S. Siding, here, to Oklahoma Portland Cement Co., Tradesmen's Natl. Bank Bldg., Oklahoma City, Okla., $3.11 per bbl. Noted July 12.

O., Marion — Extension — Treas. Dept., Wash., D. C., extension to building and driveway at U. S. Post Office, here, to Garber & Cissel, Inc., 203 West 4th St., Bethlehem, Pa., $19,100. Noted July 5.

Mich., Alpena—Breakwater—U. S. Engineer, 337 Federal Bldg., Detroit, furnishing and placing 11,700 ton core stone and 10,300 ton armor stone for rubble mound breakwater, here, to T. L. Durocher Co., Detour, $76,340. Noted Aug. 16.

Mich., Houghton — Post Office — Treas. Dept., Wash., D. C., constructing complete incl. mechanical equipment, U. S. Post Office, here, to W. D. Lovell, 1415 8th St., S.E., Minneapolis, Minn., $71,780 (1 year). Noted May 31.

N. M., Albuquerque—Remodeling—Treas. Dept., Wash., D. C. remodeling U. S. Post Office, here, to Garber & Cissel, Bethlehem, Pa., $2,558 (90 days). Noted July 12.

Miscellaneous

PROPOSED WORK

Flood Control—Hornell, N. Y.—City and State plan channel 1 mi. above and below city, dykes built where necessary and River St. bridge widened and raised, bed of Chauncey Run concreted and retaining wall constructed above city to regulate flow of water, Crosby Creek will be made deeper and adequate dykes constructed, also dam to control flow. Canacadea Creek walls will be made higher and stronger. $400,000.

Transmission Line—North Carolina—North State Power Co., 118 West Martin St., Raleigh, plans 25 mi. transmission line from Fuquay via Cardenas, Angier, Coats to Bouies Creek. K. B. Johnson, Cardenas, interested.

Fire Houses — Greensboro, N. C. — See "Industrial Works."

Hydro-electric Development — Ballston Spa, N. Y. — Saratoga Co., plans hydro-electric development and water supply system, for Homestead Sanatorium, Saratoga Co. Tuberculosis Hospital. $50,000. Utilities Eng. Co., Inc., 467 Bway., Albany, engrs.

Subway — Memphis, Tenn. — City, Nashville, Chattanooga & St. Louis R.R. and Southern R.R. having plans prepared Bellvue subway. $250,000. Work will start in about 30 days. W. F. Schulz, Chamber Commerce, engr. Noted July 26.

Oil Pipe Lines—Kentucky—Indian Pipe Line Corp., Lawrenceville, Ill., plans two 4 in. oil pipe lines from Morgantown to Woodbury, over 20 mi. To exceed $25,000. G. S. Bryant, c/o owner, ch. engr.

Subway—Alliance, O.—Plans subway west of city under Pennsylvania R.R. tracks. $100,000.

Playgrounds—Alton, Ill.—Defeated $40,000 bonds for playgrounds. Noted July 12.

Revetment—Bismarck, N. D.—State Hy. Comn., U. S. Engrs., Bureau Pub. Rds., Wash., D. C., and Northern Pacific Ry. Co., 522 2nd Ave., S., St. Paul, Minn., making plans for revetment work on Missouri River here. $75,000.

Transmission Line—Stockton, Mo.—See "Industrial Works."

Swimming Pool—Highland Park, (Dallas, P. O.) Tex.—City having plans prepared 60 x 140 ft. concrete swimming pool in Davis Park. Cost to exceed $25,000. Myers & Noyes, Mercantile Bank Bldg., Dallas, engr.

Grain Elevator—Houston, Tex.—Houston Port Dist. making plans grain elevator. $1,250,000. J. C. McVea, city engr. Howe & Wise, co. engrs.

Power Development—Slayton, Ore.—J. R. Luper, state engr., granted A. D. Gardner, Slayton, permission to appropriate 1,000 second feet of water from North Fork of Santiam River at 4 points between here and Mehama, to develop 13,636 hp. $250,000. Engineer not selected.

Park Improvements — Redwood City, Calif.—San Mateo Co. plans to purchase 1,000 acre site for park purposes.

Park Improvements—Berkeley, Calif.—Plans election to vote on bonds to exceed $100,000, to purchase sites, and park improvements.

Cement, etc. — San Diego, Calif. — Bd. Supervs. San Diego Co., returned bids unopened for 20,500 bbl. cement and 16,000 tons crushed rock or gravel. These materials will be included in bids (to be asked at later date) for construction work complete on Mission Rd. 1-C from Fallbrook to San Diego-Riverside Co. line. Noted July 26.

Drilling Wells—Bothwell, Ont.—F. L. Snively, 212 Imperial Bldg., Hamilton, plans to drill wells for oil and gas. $25,000.

Pier, etc.—Port Stanley, Ont.—Dept. Pub. Wks., Ottawa, takes bids end of month building new pier and widening harbor, here. $60,000. H. B. Craig, Royal Bank Bldg., London, engr.

BIDS DESIRED

Hydraulic Fill—Norwalk, Conn.—Taking bids 75,000 yd. hydraulic fill, (sand, gravel and mud), in good harbor, near here. Address R. E. Case, 31 Nassau St., New York City; adv. E. N.-R. Aug. 23.

Traffic Signal Electric Lights—New York, N. Y.—Aug. 27, by R. E. Enright, police comr., 240 Center St., traffic signal electric lights under elevated railroad structure, on 6th Ave. at 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 53rd, 55th and 57th Sts.

Stump Pullers, etc. — Hovey, Miss. — Pioneer Fruit Co. (subsidiary of Gulf & Ship Island R.R. Gulfport), taking bids stump pullers, stump boring machines, and farm terracing machines for developing large fruit farm on cut-over timber lands. W. P. James, mgr.

Cement—Newbury, Ind.—Natl. Contract Co., Citizens Natl. Bank Bldg., Evansville, taking bids about 40,000 bbl. portland cement for lock, here. $100,000. S. L. May, pres.

Pavilion—Detroit, Mich.—Michigan State Fair Assn., 502 Bowles Bldg., taking bids 1 story and mezzanine, 201 x 466 ft. rein.-con., brick and steel pavilion, plain foundation, at state fair grounds. $300,000. L. W. Fry, Lansing, archt.

Car Barns—Ironwood, Mich.—Ironwood & Ishpeming Ry. & Light Co., taking bids 1 story, 60 x 126 ft. rein.-con. and brick car barn. $50,000. Private plans.

Tunnel—Madison, Wis.—University of Wisconsin, taking bids for concrete steam tunnels from central heating station to Wisconsin General Hospital. $25,000. Private plans. Noted July 12.

Foundation—Milwaukee, Wis.—See "Industrial Works under Proposed Work."

Gas Container—Wis., Milwaukee—Milwaukee Gas Light Co., 182 Wisconsin St., taking bids structural steel supports, steel tank, 145 ft. high, St. Paul Ave., $1,150,000. R. B. Brown, pres. Private plans.

Transmission Line—Schullsburg, Wis.—Northern Mines Co. taking bids high power transmission line, $25,000. A. Rodhams, supt. Private plans. Noted Aug. 9.

Lock, Gates, etc.—Illinois—Sept. 19 at office Director Dept. Pub. Wks. and Buildings, Div. Waterways, Springfield, constructing Lockport Lock, also water gates and valves of Lockport and Marseilles Locks; adv. this issue.

Road Grader—Onida, S. D.—Sept. 4, by Sully Co., one J. D. Adams & Co. No. 8 Road King grader. G. L. Glessner, co. aud.

Cement—Jefferson City, Mo.—Sept. 28, by Missouri State Hy. Comn., furnishing cement for 1, 3 and 5 years beginning Jan. 1, 1924. Adv. E. N.-R. Aug. 23.

Cement—Merced, Calif.—Sept. 4, by Merced Irrigation Dist. furnishing and delivering 6,000 bbl. cement. A. L. Cowell, secy.

Fire Alarm System—Sacramento, Calif.—City Comn. receiving bids fire alarm system. $25,000. A. Givan, city engr.

Loader, etc.—San Jose, Calif.—Sept. 4, by Supervs. Santa Clara Co., furnishing 1 Spearwell Mogul loader, creeper tread track. H. A. Pfister, co. clk.

Wharf—Sorel, Que.—Sept. 4, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., reconstructing concrete high level wharf here.

BIDS RECEIVED

Foundation Wall, etc.—New York, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Aug. 17, foundation wall, piers, trap pits, etc., at George Washington High School, Audubon Ave. about 432 ft. north of West 190th St., here, from J. T. Brady Co., 103 Park Ave., $113,598. Noted Aug. 9.

Foundations—New York, N. Y.—Dept. Plants and Structures, Municipal Bldg., foundations for central motor repair shop, 16th St. and Ave. C, from P. T. Cox Contg. Co., 154 Nassau St., $354,400.

Heating and Ventilating Apparatus, etc.—New York, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Aug. 10, heating, ventilating and temperature regulating apparatus in Julia Richman High School, 2nd Ave. from East 67th to East 68th Sts., here, from Gillis & Geoghegan, Inc., 537 West Bway., $268,630; plumbing and drainage work in above, from N. P. Lorenzo, 404 East 49th St., $138,800. Noted Aug. 2.

Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in P. S. 121, 103rd St. between 2nd and 3rd Aves. from Raisler Heating Co., 129 Amsterdam Ave., $68,400.

Subway Changes — New York, N. Y. — Transit Comn. 49 Lafayette St., Aug. 17, making changes in subway structure at Bway. incidental to widening of West 32nd St. and constructing ventilation flue at West 32nd St. and Bway., Routes 4 and 36, Sect. 2, Manhattan Boro, Agreement "CN," from Slattery Eng. & Constr. Co., 10 East 43rd St., $28,910.

Underground Cable Fire Alarm System—St. George, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., Aug. 14, portion of underground cable fire alarm system, here, from Watega Contg. Co., $14,829. Noted Aug. 9.

CONTRACTS AWARDED

Fill—Annapolis, Md.—State Rds. Comn., Baltimore, fill for approaches to Severn River Bridge, here, Anne Arundel Co., Contr. AB-10E, to Development & Constr. Co., American Bldg., Baltimore, $23,300.

Levee—Yazoo City, Miss.—Rocky Bayou Levee Dist. levee on east bank of Yazoo River, north bank O'Neals Creek and south bank of Short Creek, 2 canals, etc., to Clark Constr. Co., Memphis, $150,000.

Grain Elevator—Chippewa Falls, Wis.—Farmers Produce Co., c/o F. W. Anderson, mgr., 15 West Central St., will build 2 story, brick, plain foundation, by day labor. $40,000. Private plans.

Diversion Wall, etc.—Peshtigo, Wis.—Peshtigo Paper Co., rein.-con. and steel diversion wall across River to connect with steel bridge on other side of river, also 500 ft. concrete tunnel on east side of river, to D. C. Northrup, Peshtigo. Engrs. est. $40,000.

Lighting System—Maquoketa, Ia.—Extending electric lighting system to D. L. Chapin, Jr., Wichita, Kan., $32,600.

Paving Materials — St. Paul, Minn. — H. W. Austin, city purch. agt., materials for paving Front St. between Dale and Rice Sts., 6,645 sq.yd. 3 in. vertical fibre brick, to Streator Clay Mfg. Co., 713 Guardian Life Bldg., $1.62 per sq.yd.; 4,000 cu.yd. crushed rock or gravel, for concrete base, to J. L. Shiely Co., 305 Dakota Bldg., $2.60 per cu.yd.; 260 tons asphalt and 80,000 lb. asphalt filler, to Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $21.30 per ton and $26.60 per ton (in drums) respectively. Contract for 5,240 bbl. portland cement not awarded. Noted Aug. 2.

Pipe Line—Texas—Lone Star Gas Co., Amer Exch. Natl. Bank Bldg., will contruct 45 mi. 12-16-18 in. gas pipe line from Gordon to Strawn, by day labor. $1,300,000. J. C. Brokaw, c/o owner, engr.

Levee—Sacramento, Calif.—Removal of Y St. levee, 144,744 cu.yd. earth excav., to Byrne, Yost & Treatster, 2512 N St., $60,049. Noted Aug. 9.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., will build 4,210 ft. 16 in. c.i. gas main in Hanatoux St., $31,365, also 11,565 ft. 4, 6, 8 and 12 in. c.i. mains in 16 other streets, $29,660, by day labor.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Road Work

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth, for the reconstruction of Riverside Drive, Road No. 52, Sect. 1, with a reinforced concrete pavement, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, Sept. 5, 1923, at 11:00 A.M. Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk,
Freehold, N. J., August 8, 1923.

Bids: Sept. 12.

Bridge Letting

Fort Wayne, Ind.

Notice is hereby given that the Board of Commissioners of Allen County, will receive sealed proposals or bids for the erection and construction of a bridge over the Naumee River at Columbia,Fort Wayne, Indiana, at the Auditor's Office up to 10 o'clock a.m., on the 12th day of September, 1923.

Plans and specifications and profile have been adopted by the Board of Commissioners and are now on file in that office, for the inspection of the bidders.

Bids must be accompanied by a good and sufficient bond equal to the amount of the bid as required by law and the necessary affidavits required by the law of the State of Indiana, in such cases made and provided.

Bonds signed by two or more freeholders and residents of the county, or by a properly authorized and qualified bonding or surety company, will be accepted by the Board.

Bidders must submit their proposals, bids and affidavits on blank forms to be furnished by the County Auditor on application.

The Board of Commissioners reserves the right to reject any and all bids.

Given by order of the Board of County Commissioners of Allen County, Indiana.

JOHN H. JOHNSON,
Auditor Allen County, Indiana.

Bids: Sept. 5.

Red Bank—Oceanport Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Red Bank-Oceanport Road No. 45, Sect. 1, with reinforced concrete pavement, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, Sept. 5, 1923, at 11:00 A.M. Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer, at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk,
Freehold, N. J., August 8, 1923.

Bids: Aug. 29.

State Highway Construction

Raleigh, N. C.

Sealed bids for the construction of the following projects will be received by the North Carolina State Highway Commission at Raleigh, N. C., until 10 A.M. on the 29th day of August, 1923, when they will be opened and read:

Hard surface (Concrete or Asphaltic Paving Projects) including grading, reinforced concrete or cast iron pipe, structures, etc.

Project No.	County	Length (Miles)
180	Perquimans	9.96
185-C	Pitt	14.35
352 (macadam)	New Hanover	2.31
507	Alamance	4.03
592	Rockingham	8.22
611 & 697A	Anson-Union	12.45
641	Iredell	8.04
745	Forsyth	4.57
902	Buncombe	4.95

Topsoil, Sand Clay, Gravel, or Grading projects, including grading, drainage pipe, structures, etc.

Project No.	County	Length (Miles)
421	Franklin	8.23
495	Warren	7.96

Specifications, proposal forms, etc., may be obtained from the State Highway Commission at Raleigh, N. C.

Plans may be seen in the Raleigh Office, or in the offices of the District Engineer.

Bridge plans may be obtained from the State Highway Commission at Raleigh, N. C., upon payment of Five ($5.00) dollars per set.

The right is reserved to reject any or all bids.

By order of the North Carolina State Highway Commission.

Bids: Sept. 5.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of Bridge No. U-11 consisting of a 26' I-Beam span encased in concrete and an earth dam containing a sheet pile and reinforced concrete core-wall, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, Sept. 5, 1923, at 11:00 A.M., Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk,
Freehold, N. J., August 8, 1923.

Bids: Sept. 1.

Two Highway Bridges

Ellicottville, N. Y.

Sealed proposals will be received by the Town Board of the Town of Ellicottville, Cattaraugus County, N. Y., at the office of the Town Clerk, Ellicottville, N. Y., on Saturday, September 1, 1923, at 2 o'clock P.M., for the construction of two highway bridges, each approximately 60 ft. span and 18 ft. roadway, on the proposed new highway between the village of Ellicottville and Ashford station, across the Great Valley creek.

Sealed proposals also will be received for the construction of approximately 10,000 cubic yards of fill or embankment necessary to the construction of said proposed new highway.

Plans and specifications are on file with the Town Clerk of the town of Ellicottville, and bidding sheets may be obtained at said Town Clerk's office.

Each proposal must be accompanied by a certified check for at least 5% of the amount of the proposal, and shall be made payable to John W. Ellis, Supervisor.

Each proposal must be accompanied by an affidavit from a surety or bonding company, duly qualified under the laws of the State of New York, stating that in case this bidder be awarded the contract for the work covered in the bid, said surety or bonding company will furnish the required bond within ten (10) days of the award of the contract.

The Town Board of Ellicottville reserves the right to reject any or all proposals.

CLAYTON C. HUGHEY,
Town Clerk,
Ellicottville, N. Y.

CONSTRUCTION NEWS

Engineering News-Record, August 30, 1923

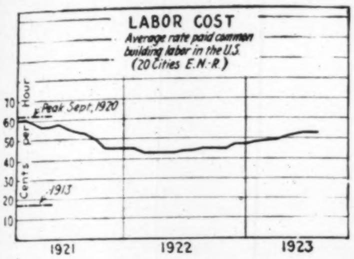
The Construction Barometer

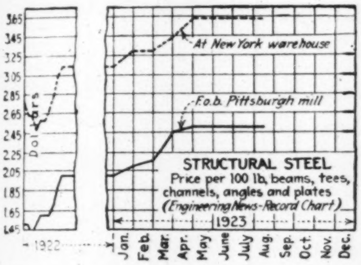
Prices Firm—Demand Improving—Domestic Situation Sound

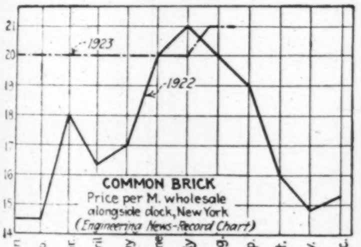
SEASONAL dullness still permeates the market, but with the approach of Autumn some improvement in demand is noted, particularly in the metals. Prices of basic materials show added firmness.

The National Bank of Commerce in New York says: "The Ruhr problem and the whole question of reparations are in an acute stage, but it seems probable that to a large extent the immediate effects of the European situation on business in the U. S. have been discounted. The attention of merchants and manufacturers is therefore focused primarily on domestic conditions, especially the agricultural situation and wholesale prices of commodities."

The E. N.-R. Construction Cost Index Number from 1913 to date is given in the center table.







E. N.-R. Construction Cost Index Number

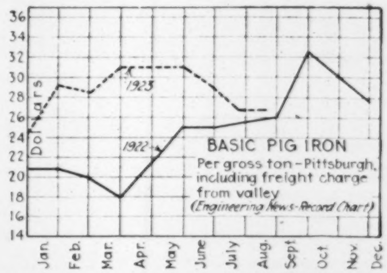
1914 to 1923
(1913 = 100)

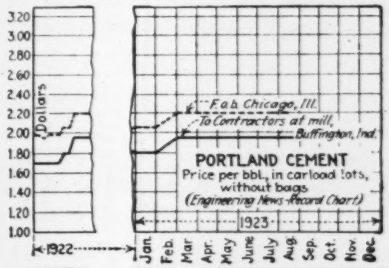
	1914	1915	1916	1917	1918
Jan.	89.22	87.12	130.46	167.75	184.51
Feb.	89.22	87.36	134.46	167.75	184.51
Mar.	88.97	87.66	142.96	175.66	184.51
Apr.	87.97	90.16	147.31	183.41	186.01
May	88.62	90.16	148.86	187.61	186.01
June	87.87	88.96	146.51	199.26	186.31
July	88.12	90.51	145.76	204.01	188.65
Aug.	90.11	91.76	146.56	198.41	193.85
Sept.	90.36	93.01	149.56	190.31	193.85
Oct.	88.51	96.16	152.91	167.11	193.85
Nov.	87.26	101.06	155.66	166.51	193.55
Dec.	86.51	107.06	167.15	167.11	194.75
Aver.	88.56	92.58	147.35	181.24	189.20

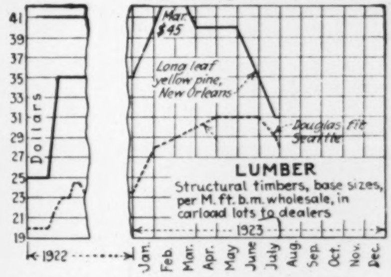
	1919	1920	1921	1922	1923
Jan.	198.05	206.55	230.87	168.72	191.70
Feb.	201.50	225.10	230.67	168.72	197.40
Mar.	198.05	240.85	224.27	162.04	205.25
Apr.	191.25	265.20	213.07	164.72	213.50
May	191.25	268.90	210.82	164.62	216.70
June	191.85	273.80	209.82	166.62	220.70
July	193.65	265.65	203.82	169.70	222.10
Aug.	196.65	252.00	193.07	173.40	221.50
Sept.	202.85	255.20	188.27	185.00	......
Oct.	202.25	255.20	182.57	188.60	......
Nov.	206.85	255.32	166.32	188.60	......
Dec.	206.85	251.62	167.82	192.60	......
Aver.	198.42	251.28	201.78	174.45	......

BASE PRICES FIRM

	Aug. 30	Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl	2.20	2.05	Feb. 1
Pine, N. Y., M. ft....	63.00	59.00	July 5
Fir, San Fran., M. ft	41.00	39.00	Apr. 5
Common labor, hr...	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

Bids Close — See Eng. News-Record

WATERWORKS

Sept. 4 Mount Vernon, N. Y. ....Aug. 16
Sept. 4 Sleepy Eye, Minn. ....Aug. 23
Sept. 4 Buffalo, N. Y.............Aug. 30
Sept. 5 Lewiston, Idaho ....Aug. 23
Sept. 6 Evansville, Ind. ....Aug. 23
Sept. 6 West Concord, Minn. ....Aug. 30
Sept. 7 Waupun, Wis. ....Aug. 30
Sept. 7 New York, N. Y. ....Aug. 30
Sept. 11 Hoboken, N. J. ....Aug. 9
Adv. Aug. 9 to 30.
Sept. 12 Lamar, S. C. ....Aug. 30
Sept. 15 Grand Island, N. Y. ......Aug. 30
Adv. Aug. 30.
Sept. 18 McAlester, Okla. ....Aug. 30
Adv. Aug. 30.
Sept. 19 South Bend, Ind...........Aug. 30
Adv. Aug. 30.
Sept. 26 Providence, R. I. ....Aug. 30
Adv. Aug. 30.

SEWERS

Sept. 3 Bradentown, Fla. ....Aug. 23
Sept. 4 Perth Amboy, N. J. ......Aug. 30
Adv. Aug. 30.
Sept. 4 Euclid, O. ....Aug. 30
Sept. 4 Parkersburg, W. Va......Aug. 30
Sept. 4 Williamsport, Pa ....Aug. 30
Sept. 4 Tracy, Minn. ....Aug. 30
Sept. 10 New York ....Aug. 30
Sept. 11 Laredo, Tex. ....Aug. 30
Adv. Aug. 23 and 30.
Sept. 11 St. Louis, Mo. ....Aug. 23
Sept. 12 Monessen, Pa..............Aug. 30
Sept. 14 Wash., D. C...............Aug. 30
Adv. Aug. 30.
Sept. 15 Norfolk, Va. ....Aug. 30
Adv. Aug. 30.
Sept. 24 St. Petersburg, Fla. .....Aug. 23
Adv. Aug. 23 and 30.
Nov. 1 Fort Erie, Ont. ....Aug. 23

WASTE DISPOSAL

Sept. 4 Lakewood (Cleveland P. O.), O. ....Aug. 16
Sept. 6 Long Island City, N. Y. ...Aug. 30
Sept. 17 St. Petersburg, Fla. ......Aug. 23
Adv. Aug. 23 and 30.

BRIDGES

Sept. 4 Plainfield, N. J. ....Aug. 23
Sept. 4 Rockford, Ill. ....Aug. 30
Sept. 5 Freehold, N. J. ....Aug. 16
Adv. Aug. 16 to 30.
Sept. 5 Missouri ....Aug. 30
Sept. 5 Keyport, N. J. ....Aug. 23
Adv. Aug. 23 and 30.
Sept. 5 Minnesota ....Aug. 23
Sept. 6 Columbia, Tenn. ....Aug. 30
Sept. 7 New York ....Aug. 30
Adv. Aug. 23 and 30.
Sept. 11 New Jersey ....July 26
Sept. 11 Indiana ....Aug. 30
Sept. 11 California ....Aug. 30
Sept. 11 New Jersey ....Aug. 30
Sept. 12 Ft. Wayne, Ind. ....Aug. 23

Bids Close		See Eng. News-Record
Sept. 15	Canadian, Tex.	Aug. 23
Sept. 19	Phila., Pa.	Aug. 23
Oct. 2	Mermentau, Mich.	Aug. 30
	Adv. Aug. 30.	
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Sept. 4	California	Aug. 23

EXCAVATION, DRAINAGE, IRRIGATION

Sept. 4	Selma, Calif.	Aug. 23
Sept. 6	Estherville, Ia.	Aug. 30
Sept. 11	Clarksdale, Miss.	Aug. 30
Sept. 18	Lake Charles, La.	Aug. 23
	Adv. Aug. 23 and 30.	

STREETS AND ROADS

Aug. 31	New York	Aug. 23
	Adv. Aug. 16 to 30.	
Sept. 1	Tuscaloosa, Ala.	Aug. 23
Sept. 1	Lockport, N. Y.	Aug. 23
Sept. 2	Martinez, Calif.	Aug. 23
Sept. 3	Michigan	Aug. 23
Sept. 3	Belzoni, Miss.	Aug. 30
	Adv. Aug. 30.	
Sept. 3	Sedalia, Mo.	Aug. 30
Sept. 4	San Jose, Calif.	Aug. 9
Sept. 4	San Diego, Calif.	Aug. 16
Sept. 4	San Diego, Calif.	Aug. 23
Sept. 4	Stockton, Calif.	Aug. 23
Sept. 4	Buffalo, N. Y.	Aug. 23
Sept. 4	Sebring, Fla.	Aug. 30
Sept. 4	Holdenville, Okla.	Aug. 30
Sept. 4	Ft. Worth, Tex.	Aug. 30
Sept. 5	Freehold, N. J.	Aug. 16
	Adv. Aug. 16, 23 and 30.	
Sept. 5	Michigan	Aug. 23
Sept. 5	Marysville, Calif.	Aug. 23
Sept. 5	Minnesota	Aug. 23
Sept. 5	Missouri	Aug. 30
Sept. 5	Illinois	Aug. 30
Sept. 6	New York, N. Y.	Aug. 30
Sept. 6	Gulfport, Miss.	Aug. 23
Sept. 6	Dallas, Tex	Aug. 23
Sept. 6	Idlewood (Cleveland Heights P. O.), O.	Aug. 30
Sept. 6	Vermont	Aug. 30
	Adv. Aug. 30.	
Sept. 7	Albany, Ala.	Aug. 30
Sept. 7	Georgia	Aug. 30
Sept. 7	Mississippi	Aug. 30
Sept. 7	Michigan	Aug. 23
Sept. 7	Trenton, N. J.	Aug. 30
Sept. 10	Dallas, Tex.	Aug. 23
Sept. 10	Madison, S. D.	Aug. 23
Sept. 10	St. Paul, Minn.	Aug. 23
Sept. 10	Greenwich, Conn.	Aug 30
	Adv. Aug. 30.	
Sept. 10	Michigan	Aug. 30
Sept. 10	Sanford, Fla.	Aug. 30
Sept. 10	Seattle, Wash.	Aug. 30
Sept. 10	Groesbeck, Tex.	Aug. 30
Sept. 10	Wichita, Kan.	Aug. 30
Sept. 11	Pennsylvania	Aug. 30
Sept. 11	Anamosa, Ia.	Aug. 30
Sept. 11	Massachusetts	Aug. 30
Sept. 11	Alabama	Aug. 16
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	San Diego, Calif.	Aug. 23
Sept. 11	Alabama	Aug. 23
Sept. 11	Decatur, Tex.	Aug. 23
Sept. 11	Austin, Tex.	Aug. 23
Sept. 11	Sonora, Tex.	Aug. 23
Sept. 11	Washington	Aug. 30
Sept. 12	Faribault, Minn.	Aug. 23
Sept. 12	Michigan	Aug. 30
Sept. 12	Newton, Tex.	Aug. 30
Sept. 12	Lisbon, O.	Aug. 30
Sept. 13	Point Pleasant Beach, N. J.	Aug. 30
	Adv. Aug. 30.	
Sept. 15	Niagara Falls, N. Y.	Aug. 30
Sept. 15	Tonawanda, N. Y.	Aug. 30
	Adv. Aug. 30.	
Sept. 17	Dallas Tex.	Aug. 30
Sept. 18	Marlin, Tex.	Aug. 30
Sept. 24	Carrollton, Miss.	Aug. 30
Sept. 26	Kentucky	Aug. 30
Sept. 26	Kentucky	Aug. 23

BUILDINGS

Sept. 3	Albert Lea, Minn.	Aug. 30
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 4	Stockton, Calif.	Aug. 23
Sept. 4	Ft. Worth, Tex.	Aug. 23
Sept. 4	Cincinnati, O.	Aug. 30
Sept. 4	Milwaukee, Wis.	Aug. 30
Sept. 5	Thiells, N. Y.	Aug. 9
Sept. 5	Eastview, N. Y.	Aug. 16
	Adv. Aug. 16 to 30.	
Sept. 5	Wapakoneta, O.	Aug. 23
Sept. 5	Chillicothe, Mo.	Aug. 23
Sept. 5	St. Louis, Mo.	Aug. 30
Sept. 5	Buffalo N. Y.	Aug. 30
Sept. 6	Kansas City, Mo.	Aug. 23
Sept. 6	Mishawaka, Ind.	Aug. 23
Sept. 6	New Brunswick N. J.	Aug. 30
Sept. 7	Atlanta Ga.	Aug. 30
Sept. 7	Detroit, Mich.	Aug. 23
Sept. 7	Los Angeles, Calif.	Aug. 30
Sept. 10	Louisville, Ky.	Aug. 30
Sept. 10	Detroit, Mich.	Aug. 30
Sept. 11	Winona, Minn.	Aug. 30
Sept. 12	Geneva, O.	Aug. 23
Sept. 12	Athens, O.	Aug. 30
Sept. 14	Los Angeles, Calif.	Aug. 30
Sept. 15	Dallas, Tex.	July 26
Sept. 15	Sedalia, Mo.	Aug. 16
Sept. 15	Proctor, Minn.	Aug. 23
Sept. 20	Oakwood (Dayton P. O.), O.	Aug. 30
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Oct. 10	Birmingham, Ala.	Aug. 30
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Sept. 5	Lumber—Rock Island, Ill.	Aug. 30
Sept. 5	Post Office — Waterloo, N. Y.	Aug. 23
Sept. 5	Storehouse—San Diego, Calif.	Aug. 23
Sept. 6	Dredging—Oakland, Calif.	Aug. 16
Sept. 6	Reroofing—Chelsea, Mass.	Aug. 30
Sept. 6	Hospital—Excelsior Springs Mo.	Aug. 30
	Adv. Aug. 30.	
Sept. 7	Lumber—Rock Island, Ill.	Aug. 30
Sept. 10	Flooring—Boston, Mass.	Aug. 23
Sept. 11	Dredging—Galveston, Tex.	Aug. 16
	Adv. Aug. 16 to 30.	
Sept. 11	Road—Arizona	Aug. 30
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
Sept. 12	Pistons, etc. — Denver, Colo.	Aug. 9
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19
Sept. 17	Quarters, etc. — Rutland, Mass.	Aug. 23
	Adv. Aug. 23 and 30.	
Sept. 19	Laboratory—Wash., D. C.	Aug 30
Sept. 25	Dredging—Galveston, Tex.	Aug. 30
	Adv. Aug. 30.	
Sept. 25	Dredging—Providence, R. I.	Aug. 30
	Adv. Aug. 30.	
Sept. 28	Breakwater—Milwaukee, Wis.	Aug. 30
	Adv. Aug. 30.	
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23
	Adv. Aug. 23 and 30.	

MISCELLANEOUS

Sept. 4	Cement—Merced, Calif.	Aug. 23
Sept. 4	Loader, etc.—San Jose, Calif.	Aug. 23
Sept. 4	Road Grader—Onida, S. D.	Aug. 23
Sept. 4	Wharf—Sorel, Que.	Aug. 23
Sept. 4	Paving Materials—St. Paul, Minn.	Aug. 30
Sept. 5	Wall—Waterloo, Ia.	Aug. 30
Sept. 5	Levee System—Ililnois	Aug. 30
Sept. 6	Fill—Newark, N. J.	Aug. 30
Sept. 6	Shell Ballast, etc.—Texas	Aug. 30
Sept. 7	Lumber and Piles—New York, N. Y.	Aug. 30
Sept. 10	Enclosures—New York, N. Y.	Aug. 30
Sept. 11	Grain Elevator—Oswego, N. Y.	Aug. 16
	Adv. Aug. 16 to 30.	
Sept. 12	Tunnel—Colorado	Aug. 9
Sept. 17	Elimination of Grade Crossing —Youngstown, O.	Aug. 30
Sept. 19	Lock Gates, etc.—Illinois	Aug. 23
	Adv. Aug. 16 to 30.	
Sept. 25	Culvert—St. Louis, Mo.	Aug. 30
Sept. 28	Cement—Jefferson City, Mo.	Aug. 23
	Adv. Aug. 23 and 30.	
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
	Adv. Aug. 16 and 30.	
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford—Water Bd. plans renewing 500 ft. c.i. pipe in State St., laying 3,400 ft. new c.i. pipe in Retreat Ave. and Boulevard. $25,000. C. M. Saville, 1029 Main St., engr.

N. Y., Churchville—Takes bids about Sept. 15, waterworks system. $80,000. G. Y. Webster, 303 Wilder Bldg., Rochester, village atty.

N. C. Raleigh—Plans to extend waterworks. $175,000. C. C. Page, comr. Pub. Wks.

N. C., Walnut Cove—Plans water power plant, waterworks and sewerage systems. $83,000

Fla., Orlando—Sept. 4, to vote on $525,000 bonds extending and improving waterworks and electric light plants.

Ky., Augusta—Plans waterworks system, $60,000.

Ky., Louisville — Louisville Water Co., 435 3rd St., plans 12 in. main from Ashbottom Rd. in Highland Park to 7th St. $15,000. J. Chamber, c/o owner, ch. engr.

Ky., Morganfield—Plans waterworks system with intake in Ohio River. $25,000. Gannett, Seelye & Fleming, Randolph Bldg., Memphis, Tenn., engrs.

Ky., Newport — Plans filtration plant $360,000; pumping station $240,000. J. N. Chester Co., Union Bldg., Pittsburgh, Pa., engrs.

Mich., Lansing—Plans additional well development. $350,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, Ill., engrs.

Mich., Lansing—Takes bids in about 6 weeks extending mains. $250,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, Ill., engrs.

Wis., Phillips—Had plans prepared and takes bids 100,000 gal. steel tank on 50 ft tower, 1 m.g. rein.-con reservoir, 2 pumping engines, 10,700 lin.ft. 12 in. c.i. water pipe, 2,000 lin.ft. 6 and 8 in. c.i. mains, $35,000. F. Henry, c/o Court House, engr. Noted Mar. 22.

Ill., Downers Grove — Plans concrete reservoir, 1 m.g. capacity. $35,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Ia., Washington—Sept. 6, to vote on $86,000 bonds for waterworks improvements, incl. 200,000 gal. elevated tank, complete new pumping station, motor driven pumps, etc. A. L. Mullergren, Gates Bldg., Kansas City, Mo., engrs. Noted June 21.

Kan., Scranton—Voted $50,000 bonds for improvements to water system, incl. new pump, pipe lines, etc.

Mo., Hannibal—Making preliminary plans improving and extending waterworks system incl. new pumps, motors at main station $26,000, 20 in. main from pumping station to reservoir $32,000, filtration plant $155,000, new mains on West Main St. and Oakwood Dist. $38,000, high service reservoir in South Hannibal with pumping equipment, etc $75,000, other miscellaneous items, $20,000. D. H. Maury, 304 South Dearborn St., Chicago, Ill., engr.

Mo., Jamesport — Having preliminary plans prepared waterworks and sewers. $25,000. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs. Noted Aug. 16.

Tex., Edgewood—Voted $40,000 bonds for waterworks plant and improvements, also $15,000 bonds for electric light plant.

Tex., Oak Cliff (Dallas P. O.)—Plans 5 new artesian wells for water supply, $250,000. E. A. Kingsley, Dallas, city engr.

Tex., Sweetwater—Making plans filtration plant. $35,000 bonds voted for project. M. Boothe, mayor. Noted July 19.

Tex., Vickery—Plans election to vote on $35,000 bonds for water works system, Fresh Water Dist. 3. J. C. Darnell, superv. Engineer not announced.

Okla., Bartlesville—Making preliminary plans waterworks improvements. Burns & McDonnell, 401 Interstate Bldg., Kansas City, Mo., engrs.

Okla., Ramona—Defeated $50,000 bonds new mains, well and pumping equipment. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs. Noted Aug. 16.

Okla., Slick—Voted $89,000 bonds for 2 wells with pumps, elevated tank and tower and distribution system. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs. Noted July 19.

Okla., Sulphur—Making preliminary plans extending waterworks. $50,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Calif., Livingston—Plans waterworks and sewerage systems. To exceed $25,000. A. E. Cowell, Merced, engr.

Ore., Portland—Takes bids about Sept. 9, for 30 mi. 54 and 56 in. pipe line from Bull Run Reservoir. $2,500,000. F. Randlett, ch. engr. Noted May 31.

Ont, Creemore—Having plans prepared waterworks system incl. c.i. mains, hydrants, etc. $25,000 to $40,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Durham—Plans waterworks system incl. pumps, water tank, mains, hydrants etc. $100,000. Engineer not selected.

Ont., Niagara Falls—Queen Victoria Pk. plans 14,000 ft. 4 and 6 in. c.i. mains $30,000. J. H. Jackson, supt.

Waterworks (Continued)

BIDS DESIRED

R. I., Providence—Sept. 26, at office of Water Supply Bd., City Hall, sluice gates, etc., for Scituate Dam. F. E. Winsor, ch. engr.; adv. E. N.-R. Aug. 30.

N. Y., Buffalo — Sept. 4, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., thirty 30 in., thirty 24 in., sixty 20 in. and thirty 10 in. flanged gate valves.

N. Y., Grand Island—Sept. 15, Bd. Comrs., Water Dist. 1, constructing waterworks system. E Bucher, chn. H. Ashley, engr.; adv. E N.-R. Aug. 30.

N. Y., New York — Sept. 7, by E. W. Beckley, comr. Dept. of Purchase, ci. pipe, special and valve box castings, valves and fire hydrants to Dept. Water Supply, Gas and Electricity.

S. C., Lamar—Sept. 12, by Comrs. Pub. Wks., waterworks and sewerage system, incl. c.i. mains, galvanized service mains, tower, tank, pumping machinery, reservoir, 19,000 ft. 8-12 in. sewer pipe and septic tank. Cost not to exceed $65,000. Ryan Eng. Co., Arcade Bldg., Columbia, engrs.

O., Idlewood (Cleveland Heights P. O.)—See "Streets and Roads."

Ind., South Bend—Sept. 19, by Bd. Pub. Wks., complete waterworks pumping station. J. W. Toyne, engr.; adv. E. N.-R. Aug. 30. Noted Mar. 8.

Wis., Waupun — Sept. 7, by Water & Light Comrs. 200,000 gal. rein.-con. reservoir. $15,000-$20,000. Kaudy & Dick Eng. Co., Ripon, engrs. Noted Aug. 9.

Minn., West Concord—Sept. 6 (change of date), alternate bids on watermains (a) 2,240 lin.ft. mains with hydrants, valves, etc. (b) 12,960 lin.ft. mains with hydrants, etc. $16,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs. Noted Aug. 23.

Okla., McAlester—Sept. 18, waterworks improvements. E. T. Archer & Co., New England Bldg., Kansas City, Mo., consult. engrs.; adv. E. N.-R. Aug. 30.

Ont., Dunnville — Pub. Utilities Comn., taking bids for waterworks chlorination apparatus with capacity of 500,000 to 1,000,000 imp. gal. per day. $25,000. Engineer not appointed.

BIDS RECEIVED

New York—N. J. Hayes, comr., Water Supply, Gas & Electricity, Municipal Bldg., New York, Aug. 21, mains in Queens Blvd., etc., Queens Boro., from F. J. Kelly Co., Inc., 186 Joralemon St., Brooklyn, $280,988. Noted Aug. 16.

N. Y. Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Aug. 21, mains in Ocean Parkway, here, from Carter Contg. Co., Inc., 23 Beaver St., New York, $169,833. Noted Aug. 16.

N. Y., Mount Pleasant — N. J. Hayes, comr., Water Supply, Gas & Electricity, Municipal Bldg., New York, Aug. 21, removing old Croton Aqueduct arch over Bway. near Tarrytown, here, and installing inverted syphon venturi meter, from Spencer, White & Prentiss, 47 West 42nd St., New York, $91,853. Noted Aug. 16.

CONTRACTS AWARDED

N. J., Maple Shade—Committee Chester Twp., to Pittsburgh-Des Moines Steel Co., 50 Church St., New York City, steel standpipe, $11,360; to G. S. Miller, Pitman, foundation for same, $4,974. Noted Aug. 2.

Md., Baltimore—Bd. Awards, galvanized w.i. pipe, couplings and malleable iron fittings for Water Dept., to W. Stebbins & Sons, Charles and Lombard Sts., $12,970. Noted Aug. 9.

O., Cleveland—Cuyahoga Co., 24,750 ft. 8 and 12 in. c.i. mains in Impvt. 41 of Co. Sewer Dist., to D. Pfahl & Co., Fisher Rd., $153,405. Noted Aug. 16.

O., Cleveland—For 1½ mi. 24 in. c.i. main in Superior Ave., Contr. 28, to J. T. Martin, 1452 West 98th St., $123,070; 1½ mi. 36 in. c.i. main in Magnolia Dr., Contr. 29, to J. Connelly Constr. Co., 400 71st Euclid Bldg., $216,783. Noted Aug. 2 and 9.

O., Cleveland—Commissioner Purchases & Supplies, City Hall, c.i. main in Lorain Ave., to J. Kalill & Jackson Co., 621 Bangor Bldg., $227,302. Noted July 26.

Minn., St. Paul — H. W. Austin, city purch. agt., 1 triplex portable pump, gasoline engine driven, for Water Dept., to Robinson, Cary & Sands Co., 4th and Wacouta Sts., $675; 499,736 tons reinforcing to C. A. P. Turner, 627 1st Ave. N., Minneapolis, $30,934. Noted Aug. 2.

S. D., Flandreau—Improving waterworks incl. concrete well, 1,500 lin.ft. 10 in. c.i. pipe, brick and tile pumphouse, etc., to W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $18,000. Noted July 26.

Que., Greenfield Park—See "Sewers."

Ont., Islington—Etobicoke Twp., laying 6 in. watermains to Ruscica Bros., 256 Ontario St., Toronto, $2,301, steel stand pipe to Horton Steel Wks., Ltd., Bridgeburg, $21,800, encasing stand pipe to F. Barrett, Islington, $5,389, 12 in. c.i. mains to Natl. Iron Corp., Cherry St., Toronto, $5,138. Noted July 12.

Ont., Whitby—Pub. Utilities Comn., 1,000 ft. 16 in. intake pipe to Toronto Iron Wks., Royal Bank Bldg., $6,000, excavating, dredging and laying 1,000 ft. 16 in. pipe to R. Carson, Midland, 2 centrifugal motor driven pumps to J. Hepburn Co., 18 Van Horne St., Toronto. Total cost $40,000. Noted July 12.

Ont., Weston—To A. Cavotti, 257 Euclid Ave., Toronto, laying mains, $5,597 to Drummond McCall Co., 373 Front St. E., Toronto, valves $17.55 each, valve boxes $8 each, hydrants $68.50 each, to Dominion Wheel & Fdry. Co., 131 Eastern Ave., Toronto, c.i. specials $1,648, total est. $30,000.

Sewers

PROPOSED WORK

N. Y., Binghamton—Making plans 1.5 mi. concrete sanitary sewer, from rear of Woodrow Wilson School to Chenango River. $225,000. W. E. Weller, 26 Crary Ave., engr.

Pa., Williamsport—Plans election to vote on $60,000 bonds for general improvements incl. sewers and bridges. M. H. Krause, Susquehanna Trust Co. Bldg., engr.

N. C., Raleigh—Plans to extend sewer lines in various streets. $100,000. C. C. Page, comr. Pub. Wks.

N. C. Walnut Cove—See "Waterworks."

Ga., Columbus—Plans election early in November to vote on $100,000 bonds for sewerage system.

Fla., St. Augustine—Plans sewers in Dist. 6. $45,000. C. G. Oldfather, city aud. and clk.

Wis., Madison—Making plans vitr. clay sewers in Johnson St. Dist. $35,000. E. E. Parker, City Hall, engr. Noted July 12.

Neb., Fremont—Plans election soon to vote on $120,000 bonds for sewage disposal plant. L. M. Roessler, Fremont, engr.

Mo., Jamesport—See "Waterworks."

Mo., Kansas City — Fairfax D. D. 2, takes bids about Sept. 17, 11,000 ft., 5½ to 13 in. sewer. $460,000. Horner & Wyatt, McMillian Bldg., Kansas City, Mo., engrs.

Okla., Oklahoma City—Oct. 3, to vote on $1,500,000 bonds for 2 sewage disposal plants. B. M. Hart, City Hall, engr.

Calif., Livingston—See "Waterworks."

Calif., Long Beach—Had plans prepared outfall sewers in Bway. and Beach Sts. To exceed $35,000.

Calif., Long Beach — City rejected bids sewerage system in Dist. 1. Will readvertise. Noted Aug. 23.

Calif., Orange—Voted $190,000 bonds for out fall sewer. Noted July 26.

Calif., Santa Paula—Voted $90,000 bonds for sewer improvements. Noted July 26.

Quebec—City of Montreal plans to vote $2,500,000 for sanitary improvement of Little St. Pierre River, from here to Lachine incl. deepening tail race from mouth of St. Pierre to St. Lawrence Rivers, $75,000, pumping station, $200,000, constructing Sect. 1 from tail race to Cote St. Paul Rd., $640,000, siphon under Lachine Canal, $520,000, Sect. 2 from Cote St. Paul Rd. to Lachine, $1,100,000. Also plans 37,000 ft. conduit to take under pressure the discharge from Westmount and eastern sections of Notre Dame De Grace, $530,000. G. R. McLeod, technical service engr.

Que., Montreal — Plans 2,050 ft. 2 x 3 brick sewer in Gouin Blvd., $17,694, also 3,428 ft. 12 and 15 in. tile in Savoie Lane, Elierslie Ave. and Gouin Blvd., $13,268. E. Gauthier, asst. city clk.

Ont., Milton — Making plans sewerage system, 10,000 lin.ft. 8 in. and up vitr. tile pipe. $30,000. Chipman & Powers, Mail Bldg., Toronto, engrs.

Ont., Riverside—Plans 4,000 ft., concrete and tile intercepting sewer on Riverside Dr. $25,000. R. W. Code, McGregor Bldg., Windsor, engr.

BIDS DESIRED

New York—Sept. 10, by Transit Comn., 49 Lafayette St., New York City, miscellaneous drainage and sewers in Boros of Manhattan, Brooklyn and Queens. Agreement "CO." Former bids rejected. Noted Aug. 23.

N. Y., Tonawanda — See "Streets and Roads."

N. J., Perth Amboy—Sept. 4, by City Council, City Hall, for trunk sewer with necessary connections and appurtenances. A. Jennetty, street comr.; adv. E. N.-R. Aug. 30.

Pa. Monessen — Sept. 12 by City Engineer, 1,100 ft. 72 in., 750 ft. 60 in. and 1,686 ft. 48 in. concrete sewers, also 650 ft 18 in. vitr. sewer. $30,000.

Pa., Williamsport — Sept. 4, by City Council, 1,113 ft. 8 in. sanitary sewers, in Brandon Pl., West 4th, Maple and Wilson Sts., 5,277 ft. 12-27 in. storm sewers in Memorial Pk., West 4th and Washington Sts. L. Mussina, city engr.

D. C., Wash.—Sept. 14, at office Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., for 16,500 ft. 6-18 in. sewers and appurtenances. R. B. Morse, Hyattsville, Md., ch. engr.; adv. E. N.-R. Aug. 30.

Va., Norfolk — Sept. 15, at office W. B. Causey, city mgr., sewers in Sects. A, B and C, Ocean View Dist. W. H. Taylor, 3rd, acting city mgr.; adv. E. N.-R. Aug. 30.

W. Va., Parkersburg—Sept. 4, by City Council, storm and sanitary sewers in Latrobe St., et al. $35,000. J. V. Dunbar, city engr.

S. C., Lamar—See "Waterworks."

O., Euclid—Sept. 4, concrete and tile sewer in Sects. 1 and 2 of Lake Shore Blvd. and East 196th St., $250,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.; sewage plant and outfall pipe, Lake Shore Blvd. and Bliss Rd., 1,125 ft. steel or concrete pipe, 9,000 cu.yd. earth and 12,000 cu.yd. rock trenching, 340,000 lb. steel, 3,500 cu.yd. concrete. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engrs. Noted Aug. 16.

O., Idlewood (Cleveland Heights, P. O.)—See "Streets and Roads."

Minn., Tracy—Sept. 4, sewer system repairs and extensions, and installing septic tank, etc. $28,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Nov. 23.

Tex., Laredo—Sept. 11, by L. Villegas, mayor, storm sewers and appurtenances. S. F. Crecelius, 211 Alexander Bldg., engr.; adv. E. N.-R. Aug. 30.

BIDS RECEIVED

Pa., Phila.—Completing Rock Run Main Sewer in Ogontz Ave., from Pacifico Ventesco, 309 East Harris St., $59,644, also completing water and air piping, at Frankford Grit Chamber, from Bulman Bros., 2501 North 5th St., $1,166. Noted Aug. 16.

D. C., Wash. — Dist. Comrs. 509 Dist. Bldg., furnishing 700,000 red sewer brick, from Montague Mfg. Co., West Broad St., Richmond, Va., $25.72 per M. Noted Aug. 16.

O., Cleveland—Cuyahoga Co., 16,000 ft. 8 in. and 16,000 ft. 12-16 in. tile sewer in Impvt. 6, from Langaham Constr. Co., Marshall Bldg., $220,000.

O., Northwest Boulevard (Columbus P. O.)—E. Gross, city clk. Aug. 17, sanitary sewers in alleys in plats 4 and 5, 14,173 ft. 6-18 in. vitr. pipe, from Gaty Constr. Co., Sandusky and Mound Sts., Columbus, $21,845.

Wyo., Sheridan—See "Streets and Roads."

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Central Ave. and Vorhees Pl., to J Gallo, 203 Division St., Brooklyn, $72,793 and $13,648 respectively; in Idaho and 161st Sts., to H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, $4,853 and $2,730 respectively; in Lake St., H. Johnson, $5,914. Noted Aug. 16.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in (1) Mayflower Ave. (2) Bradford Ave. (3) West 262nd St. (4) Holland Ave. (5) Randall Ave.; grading and building inlets in (6) Magneta St. (7) Spuyten Duyvil Parkway (8) Lurting Ave. (9) unnamed streets (10) Hone Ave. (11) Yates Ave. (12) Knapp St. (13) Delafield Ave. concrete culvert across (14) Ludlow Ave. to Norton Eng. & Contg. Co., (1) $2,053; J. V. Timoney Co., 220 East 201st St., (2) $10,303; A. Gregorio, (3) $3,609; M. Del Balso, 660 East 221st St., (4) $6,396 (14) $11,997; McDonald & Wilson Co. (5) $8,558; I. F. Cavaluzzio, 1538 Walton Ave., (6) $4,851 (8) $18,804 (11) $26,309; O'Connoll & Strada, Inc., 3318 Olinville Ave. (7) $20,862; Spedero & Turiamo Co., 3185 East Tremont Ave. (9) $619; Spadero Contg. Co., 827 East 217th St., (10) $15,133; C. Petrillo Co., Inc., (12) $1,445. Noted Aug. 23.

Sewers (Continued)

N. J., Haddonfield—Boro Commissioners, Boro Hall, sanitary sewerage system and sewage pumping station, etc., to G. W. Miller Co., Pitman, $65,000. Noted July 26.

Md., Baltimore—Bd. Awards, constructing sludge digestion tanks 24, 25 and 26, and sludge drying beds 9 and 10, at Baltimore Sewage Treatment Wks., to Consolidated Eng. Co., Calvert Bldg., $160,310. Noted Aug. 16.

O., Akron — Constructing Forest Hill Trunk sewer, to F. George, Akron, $80,154. Engrs. est. $80,000. Noted Aug. 9.

O., Akron—Sewer in West Market St. from West St. to Merriman Rd., to McAlonan Bros., 197 West Buchtel Ave., $53,020. Engrs. est. $60,000. Noted Aug. 9.

O., Euclid—Sewers in Lake Shore Blvd., Sects. 3 and 4, to Hadded-Mall Co., Schofield Bldg., Cleveland, $156,256; in Chardon Rd., to Curro Bros. & Whittaker, 12208 Mansfield Rd., Cleveland, $35,189; in Johnson Rd., to Iafornaro Constr. Co., 2218 Murray Hill Rd., Cleveland, $51,800; in Cut Rd., to C. W. Jackson, 1318 East 84th St., Cleveland, $114,823. Noted Aug. 30.

Kan., Wichita—For 25,335 lin.ft. 12-54 in. sewers, curbing and paving various streets in Riverside Dist., to A. Dobson Co., 1st Natl. Bank Bldg., Lincoln, Neb., $129,414. Noted Aug. 2.

Calif., Oakland—Constructing 12, 14, 18 and 21 in. vitr. and 30 in. concrete pipe sewers in portions Jackson St., to Canbar & Garden, 969 3rd St., Oakland. Noted Aug. 23.

Que., Greenfield Park—Constructing 6,000 ft. c.i. sewers and watermains incl. 6-10 in. sewer pipe and 8-18 in. water pipe, to T. O'Sullivan Contg. & Constr. Co., Montreal, $46,597.

Waste Disposal

BIDS DESIRED

N. Y., Long Island City—Sept. 6, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., construction and completion of building and runway, furnaces, appurtenances and chimney of Bergen Landing Destructor, 4th Ward.

Calif., Sacramento — Receiving bids for incinerator. Former bids rejected. Noted Aug. 23.

Bridges

PROPOSED WORK

Okla., Tulsa—See "Streets and Roads."

New Jersey—State Hy. Comn., Trenton, rejected bids steel bridge of two 73 ft. spans, 30 ft. roadway, over Crosswicks Creek, Burlington and Mercer Counties. $80,000. Will readvertise. J. L. Vogel, 772 Broad St., Newark, engr. Noted Aug. 23.

Pa., Williamsport—See "Sewers."

Ky., Clay City—State Hy. Dept., Frankfort, having plans prepared 240 rein.-con. and steel bridge, to have one 100 ft. and two 70 ft. spans, over Red River, Powell Co., near here. To exceed $25,000. J. S. Boggs, state highway engr.

O., Kenmore—Plans viaduct over railroad tracks at 27th St., either steel, rein.-con. or steel incased in concrete. To exceed $100,000. Cost to be borne by city and railroad. D. P. Dowling, City Building, engr.

O., Massillon—See "Streets and Roads."

Minnesota—State Hy. Dept., St. Paul, plans 1,500 ft., steel and concrete bridge, over Mississippi River between St. Paul and Minneapolis, to connect Minneapolis with new Ford plant. Site undetermined. $1,500,000. C. M. Babcock, state highway comr.

Tex., Dallas—See "Streets and Roads."

BIDS DESIRED

New York—Sept. 7, by Committee on Bridges, at office C. MacDonald, engr. Westchester Co., White Plains, Van Cortlandt Bridge, over Croton River, between Cortlandt and Ossining; adv. E. N.-R. Aug. 30.

New Jersey—Sept. 11, at office State Hy. Comn., Trenton, concrete encased steel plate girder bridge, one 89 ft. span, concrete abutments, temporary bridge and rein.-con. slab approaches and removal of present bridge, over Pequannock River at M. P. 16.1, State Highway Route 8, Sect. 3, Pequannock and Pompton Twps., Morris and Passaic Counties. J. L. Vogel, 772 Broad St., Newark, bridge engr.

La., Mermentau — Oct. 2, by State Hy. Comn., Baton Rouge, highway bridge and approaches, over Mermentau River, Federal Aid Project 122. J. M. Fourmy, ch. engr.; adv. this issue.

Tenn., Columbia—Sept. 6, by B. Wilkes, engr., Maury Co., 40 ft. span concrete bridge over Carters and Gibson Creeks.

O., Youngstown—See "Miscellaneous."

Indiana—Sept. 11, by State Hy. Dept., Indianapolis, constructing the following bridges; **F A means Federal Aid, S A State Aid, S R State Road, s t steel truss, r c g rein.-con. girder, r c a rein.-con. arch, r c s rein.-con. slab; s t with four 198 ft. spans over White River, S R 4-M, F A 116, Lawrence, means steel truss bridge with four 198 ft. spans over White River, on State Rd. 4-M, Federal Aid 16, Lawrence Co.;** s t with four 198 ft. spans, over White River, S R 4-M, F A 16, Lawrence; one 31 ft. s t over Drain Ditch, S R 2-C, F A 17, Porter; one 55 ft. s t over Drain Ditch, S R 2-D, F A 17, one 20 ft. r c s over State Creek, Boot Jack Rd., F A 48, one 69 ft. s t and one 28 ft. r c g over Trail Creek, S R 15-H, F A 48, Laporte; one 55 ft. s t over Grassy Creek, one 48 ft. s t over Sandy Creek, one 48 ft. s t over Lewis Branch, three 124 ft. s t over Muscatatuck River, 1 r c g with twelve 38 ft. spans and 1 r c g with five 38 ft. spans, over Muscatatuck River, all on S R 1-E, F A 21, Jackson; one 72 ft. s t over Blue Lick Creek, S R 1-B and one 55 ft. s t over Pigeon Roost, S R 1-C, both F A 21, Clark Co.; 2 r c g with three 38 ft. spans, over Flat Creek and Muscatatuck Bottom, one 65 ft. s t over Hutto Creek, S R 1-D, F A 21, also one 28 ft. r c g over White Eye Creek, S R 40-G, F A 59, Scott; one 124 ft. s t and 1 r c g with twelve 38 ft. spans, over Muscatatuck River, S R 1-D, F A 21, Jackson and Scott; one 50 ft. r c a over Drain Ditch, S R 10-I, F A 35, Vigo; one 28 ft. r c g over Bush Creek, S R 6-H, F A 40, one 48 ft. r c a over Little Eagle Creek, S R 6-H, S A 6, and r c a with three 65 ft. spans, over Big Eagle Creek, S R 6-H, F A 40, Marion; one 40 ft. s t over Drain Ditch, S R 2-L, S A 2, Whitley. J. D. Williams, dir.

Ill., Rockford—Sept. 4, at office A. R. Carter, supt. of Highways, Winnebago Co., 3 rein.-con. bridges, one 45 ft., one 30 ft. and one 26 ft. span, in Rockford Twp.

Missouri—Sept. 5, by State Hy. Dept., Jefferson City, six 80 ft. steel truss spans and 4 rein.-con. piers, over Morias Des Cygnes River, three 100 ft. and two 60 ft. steel truss spans, over Miami River, Bates Co.; three 80 ft. and one 60 ft. steel truss, six 20 ft. rein.-con. slab spans, 4 rein.-con. piers, over Platte River, one 60 ft. steel truss and six 20 ft. rein.-con. slab spans, 2 rein.-con. piers, over 102 River, Buchanan Co.; five 35 ft. deck girder and six 20 ft. rein.-con. slab spans, over Grand River, also three 12 ft. rein.-con. slab spans on Sta. 294-148, Cass Co.; one 50 ft. steel truss and one 25 ft. rein.-con. girder spans, over Jordan Branch, one 30 ft. and one 40 ft. rein.-con. deck girder spans and one 70 ft. steel truss span, over Castile Creek, Dekalb Co.; two 20 ft. rein.-con. slab spans, 1 concrete pier, over Gum Spring Branch, four 10 ft. rein.-con. slab spans, 3 rein.-con. piers, over Culpepper Branch, one 25 ft. deck girder span, on Sta. 1011-40, Newton Co.; one 70 ft. steel truss or rein.-con. arch span, over River Des Peres, St. Louis Co.; one 40 ft. I-beam span over Maple Slough Drainage Ditch, Mississippi Co.; six 20 ft. rein.-con. slab spans, over Willow Branch, Ray Co.; thirty 20 ft. I-beam spans, over Grand River, Livingston Co.; one 12 ft. rein.-con. slab span, Sta. 389-33, one 60 ft. steel truss span, over Minnow Branch, Marion Co.; one 60 ft. steel truss and four 20 ft. rein.-con. slab spans, 2 rein.-con. piers, over Rock Creek, four 30 ft. I-beam spans, over Cow Branch, Atchison Co.; one 180 ft. steel truss and four 20 ft. concrete slab spans, over Big St. Francis River, Madison Co.; three 10 ft. rein.-con. slab spans, 2 rein.-con. piers over Spring Creek, Douglas Co.; nine 20 ft. I-beam spans, over Grand River, Livingston Co.; three 20 ft. rein.-con. slab spans on Sta. 836-OO, Holt Co.; cleaning, painting and reflooring, one 120 ft. steel truss span, eight 30 ft. and one 15 ft. steel lattice girder spans, over Roark Creek, Taney Co.; two 152 ft. steel truss spans, over Jacks Fork, Texas Co. B. H. Piepmeier, ch. engr.

California—Sept. 11, by State Hy. Comn., Sacramento, bridge over Cedar Creek, 18 mi. east of Gilroy, incl. three 42 ft. 4 in. rein.-con. girder spans with concrete piers, abutments and wing walls; bridge across North Fork of Pacheco Creek, about 21 mi. east of Gilroy, incl. three 50 ft. and four 25 ft. rein.-con. girder spans on concrete bents. R. M. Morton, state highway engr.

BIDS RECEIVED

New Jersey—Joint Bridge Comn. of Essex and Hudson Counties, Court House (Newark), repairing and repaving bridge deck, concrete and wood block, over Passaic River, Jackson St., from J. Befumo, East Orange, 106.75% engrs. est. ($49,879). Noted Aug. 23.

N. J., Keyport—State Hy. Comn., Trenton, new abutment sand approaches for Bridge 43, over Luppatcong Creek on State Highway Route 4, here, from J. P. Clarke, 3 Cloverhill Pl., Montclair, $23,000. Noted Aug. 9.

South Carolina—State Hy. Comn., Columbia, bridges over Lynches River, Federal Aid Project 180B, Florence Co., rock asphalt paving, steel superstructures, hardware, treated and untreated piling, etc., from Palmer & Conrad, Florence, $46,150.

Ohio—See "Streets and Roads."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Aug. 20, constructing bridges, **c g means concrete girder, c s concrete slab, super, superstructure, sub substructure and s steel,** 3 c g and 1 c s Route 16, Sect. 6B, Coles, from Acme Eng. Co., Decatur, $30,420 less 1½% if personal bond is accepted; 1 sub for steel and 1 c s extension, Route 2, Sect. 64-B, Woodford, and 1 c g Route 2, Sect. 65-B, Woodford, from Camerer Cement Products Co., El Paso, $5,544 and $9,544 less 1½% respectively; 1 super for steel, Route 2, Sect. 64-C, Woodford, from Barr & Deniston, Rochester, Ind., $6,104; 1 sub for steel, 1 c s extension and 1 c g, Route 2, Sect. C, Woodford, and 1 s, 1 c g and 1 c s extension, Route 2, Sect. D, Woodford, from F. E. Marsh & Co., Des Moines, Ia., $15,700 and $22,000 respectively. Noted Aug. 9.

Calif., San Francisco — Bd. Pub. Wks., steel bridge superstructure to carry Bay Crossing Pipe Line of Hetch Hetchy Project across Dumbarton Straits, Contr. 93, thirty-six 105 ft. spans, 2,880,000 lb. metal, 326,000 sq.ft. protective coating on surface of all steel, 58,500 ft. O. P. walkways, etc., for City and San Francisco Co. from United States Steel-Products Co., Rialto Bldg., Proposition A $272,162; Proposition B $239,562. Noted Aug. 9.

CONTRACTS AWARDED

Conn., Forrestville—Concrete bridge with two 60 ft. spans, to A. DiMarco, Plainville. Engrs. est. $25,000. Noted July 26.

New York—G. A. Whalen, comr., Plant & Structures, Municipal Bldg., New York City, piers for bridge, over North Channel, Jamaica Bay Blvd., Queens Boro, to A. McMullen Co., 50 Church St., New York City, $466,000. Noted Aug. 2.

W. Va., Clendenin—Comrs. Kanawha Co., Charleston, bridge over Elk River, here, to Metal Products Co., Boyd Bldg., Charleston, $43,125. Noted July 26.

Ga., Waycross—State Hy. Dept. at East Point, 2 concrete bridges 375 lin.ft. long, on Waycross-Pearson Highway, Federal Aid Project 334 and 337, Ware Co., to C. E. Story, Leonard Bldg., Augusta, $24,343 and $19,893 respectively. Noted July 26.

Fla., Daytona—Comrs. Volusia Co., De Land, creosoted wood bridge, one 55 ft. steel draw span, across Halifax River, here, to M. L. Crewe, Daytona, $70,000. Noted July 26.

Louisiana—State Hy. Dept., Baton Rouge, 7 concrete bridges and 7 concrete piers along Shreveport-Minden Highway, Calcasieu Parish to C. W. George & Co., Arcadia, $44,704. Noted July 26.

Michigan—State Hy. Dept. Lansing, 90 ft. concrete girder Bridge 611001 near White Hall, Muskegon Co., to R. Love & Son, Muskegon, $31,406. Noted Aug. 16.

Mich., Indian River—State Hy. Dept., Lansing 90 ft. concrete girder Bridge 161701, Cheboygan Co., to J. S. Whitcomb Constr. Co., 525 Woodland Ave., Detroit, $37,761. Noted Aug. 24.

Ia., Elkader — Clayton Co. to W. C. Bender, Waukon, 3 box culverts, one I beam and re-erecting 1 pony truss, $7,475; W. Vogt, Guttenberg, 1 box culvert, $465; T. Fisko, Garber, 1 box culvert, $752; A. Olson Constr. Co., Waterloo, 1 box culvert and 1 high truss bridge, $35,767.

Ia., Mt. Pleasant—Henry Co., to Alexander & Higbie, 2733 6th Ave., Des Moines, 1 concrete deck truss, on Federal Aid Project 151, $25,477; to J. L. Whitney, Mt. Pleasant, 20 concrete box culverts, on above road, $12,732.

California—State Hy. Comn., Sacramento, rein.-con. bridge across Whitewater River, near Whitewater, Riverside Co., eight 44 rein.-con. girder spans, etc., to Gibbons & Reed Co., 905 South Olive St., Los Angeles, $120,132. Engrs. est. $132,217. Noted Aug. 23.

Calif., Ventura—Ventura Co. rein.-con. bridge with seven 30 ft. spans, concrete pile piers and abutments, timber pile foundation, over Conejo Creek, to J. Short, 420 South Beaudry St., Los Angeles, $23,900. Noted Aug. 23.

Dams

PROPOSED WORK

Tex., Bronte—Coke Runnels Water Impvt. Dist. 1, plans dam on Colorado River, ditches, laterals, etc. $4,500,000-$5,000,000. C. C. Holder, Bronte, engr.

Railways

PROPOSED WORK

California — City and County of San Francisco having plans prepared Eureka Tunnel route of municipal railway system. To exceed $1,000,000. M. M. O'Shaughnessy, city engr.

Indiana—Pennsylvania R.R., 844 Oliver Bldg., Pittsburgh, Pa., plans elevation of tracks on Lafayette St., in Ft. Wayne, here. $1,000,000. W. D. Wiggins, ch. engr.

BIDS DESIRED

Texas—See "Miscellaneous."

CONTRACTS AWARDED

Ontario — Kitchener Light Comrs. will double track ½ mi. street railway on King St. from Union to William Sts., by day labor. $25,000. A. R. Long, engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ark., Newport—Cache River D. D. making plans for drainage ditches, canals, etc., in Jackson and Poinsett Counties. $1,000,000. Morgan Engineering Co., Goodwin Inst., Memphis, Tenn., and Bowman Engineering Co., Newport, engrs. Noted Aug. 2.

Ont., Port Colborne—Dominion Dept. Rys. & Canals, Parliament Bldgs., Ottawa, soon takes bids for Port Colborne section of Welland Canal. $10,000,000. W. A. Bowden, ch. engr.

BIDS DESIRED

Miss., Clarksdale—Sept. 11, by Bd. Drainage Comrs. of Coahoma Co, at office of Ross-Clinton Co, Clarksdale, cleaning and enlarging 205,300 cu.yd. Main Ditch, Contr. 1; cleaning and enlarging Laterals 1, 2 and 5, and new work in Laterals 1, 1A, 2, 2A and 4A, total 147,100 cu.yd., Contr. 2; cleaning and enlarging Laterals 6 and 8, and new work in Laterals 6, 6A, 7, 7A, 7B and 8A, total 164,650 cu.yd., Contr. 3. C. G. Bobo, secy.

Ia., Estherville—Sept. 6, by Supervs. Emmet Co., at office J. J. Klopp, aud., constructing D. D. 121 ,Sect. 1, open ditch, 266,612 cu.yd. ecav.; Sect. 2 13,870 lin.ft. 6-18 in. tile, etc.

CONTRACTS AWARDED

Minn., Minneapolis — Judicial Ditch 2, 3,600 lin.ft. open ditch, 40,431 lin.ft. 6-36 in. drain tile, 10 surface water inlets, to Zaboral & Madsen, 2712 Pleasant Ave., $36,400. Noted Aug. 2.

Calif., Chico—Butte Creek D. D., cleaning out Butte Creek, to California Dredging Co., Hobart Bldg., San Francisco, 80,000 yd. excav. in outlet drains at $0.20 per yr., 20,000 yd. excav. in drainage canal $0.25. Noted Aug. 23.

Calif., Los Angeles—Bd. Harbor Comrs., dredging 100,000 cu.yd. fronting wharves, to United Dredging Co., Central Bldg., $0.244 per cu.yd.

Streets and Roads

PROPOSED WORK

Connecticut—State Hy. Dept., Hartford, plans repairing Post Rd. $1,000,000. State Hy. Dept., engr.

New York—See "Miscellaneous."

New York—State Hy. Comn., Albany, soon takes bids concrete paving 3 mi. road from Finley Lake to Pennsylvania State Line, 18 ft., $129,427. F. S. Greene, comr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids grading, curbing and laying sidewalks on Beach 92nd St. Will readvertise. Noted Aug. 23.

W. Va., Wayne—Union Dist., Wayne Co., election Sept. 10, to vote on $194,000 bonds for road work. H. Adkins, co. clk.

N. C., Beaufort—Plans 20,000 sq.yd. concrete or asphaltic paving, 10,000 sq.yd. sidewalk, curbing, guttering, etc. J. D. Spinks, Winston-Salem, engr.

N. C., Kinston—Plans repaving business section of Queen St. $50,000. W. B. Coleman, city clk.

N. C., Raleigh — Plans paving various streets in Cameron Park Suburb. $1,000,000. C C. Page, comr. Pub. Wks.

Fla., West Palm Beach—Palm Beach Co. voted $25,000 bonds two wheel roads 4 mi. paralleling St., Lucie Ave. and 2 mi. in Palm City and Stuart Annie Rd., etc.; $30,000 bonds constructing Gap in Stuart Annie Rd. and Stuart Annie to Halpatiokee Rd., also $25,000 bonds for 4 mi. Salerno-Stuart Annie Rd., all above Special Roads & Bridge Dist. 16. C. Holtslaw, co. engr.

Miss., Grenada—Grenada Co. rejected bids grading, graveling, constructing bridges, etc., on 7.6772 mi. Federal Aid Project 147, between here and Calhoun City. Will readvertise. W. W. Dunn, engr. Noted July 19.

La., Natchitoches — Having plans prepared and soon takes bids, 18 mi. dirt roads. $125,000. E. B. Welch, eng.

Tenn., Columbia—Maury Co. plans 16 mi. State Aid Highway, 16 ft., from Columbia to Lawrence Co. line via Mt. Pleasant and Rockdale, probably bituminous macadam, under supervision of State Hy. Dept., Nashville.

Tenn., Livingston — Overton Co. voted $300,000 bonds constructing State and Federal Aid roads. J. H. McDonald, co. judge. Noted May 3.

Kentucky—State Hy. Dept., Frankfort, plans grading 4.5 mi. Leitchfield-Elizabethtown Rd., Grayson Co., 4 mi. Western Dixie Highway, State Project 3, Warren Co., 26 mi. Burkesville-Glasgow Rd., State Project 40, Cumberland, Metcalfe and Barren Counties, 1.306 mi. Clay City-Virden Rd., State Project 4, Sect. C, Federal Aid Project 108, Powell Co., 3.971 mi. Henderson-Dixon Rd., Federal Aid Project 42, Henderson Co., all above 24 and 28 ft. wide; gravel surfacing Princeton-Marion Highway, State Project 10, Caldwell Co., 18 ft. J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, plans surfacing 4 mi. Princeton-Marion Rd., 18 ft., Crittenden Co.; having surveys made grading Campton-Jackson Highway, 24 and 28 ft., State Project 4, Wolfe Co., road from Springfield to Nelson Co. line, 24 and 28 ft., State Project 47, Washington Co. J. S. Boggs, state highway engr.

Kentucky — State Hy. Dept., Frankfort, plans reconstructing 5.795 mi. Calhoun-Owensboro Rd., 18 ft., McLean Co.; surfacing 3.796 mi. Louisville-Bardstown Rd., 20 ft., Jefferson Co. J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared surfacing 12.6 mi. Winchester-Clay City Rd., 18 ft., Clark Co. J. S. Boggs, state highway engr.

Ky., Owensboro — Plans widening and paving 4th St. from St. Ann to Frederica Sts. $25,000.

Ky., Paducah — McCracken Co. plans grading Lyon Ave. from city limits to county line. $30,000. J. M. Wetherington, co. comr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bid paving 3.02 mi. Sect. "C" Archibold-Defiance Rd., Defiance Co., rein.-con. $92,692, or bituminous macadam with asphalt or tar, $78,317. Noted Aug. 16.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids for paving 0.75 mi. Sect. "K-2" McConnelsville-Caldwell Rd., Morgan Co., bituminous macadam, asphalt or tar, $29,650; 1 mi. concrete curb Sect. "L" Bucyrus-Marion Rd., Crawford Co., $5,660; 0.23 mi. Sect. "E-1" Cleveland-East Liverpool Rd., plain concrete, $8,616; approaches to bridge, Sect. "A," Ripley-Hillsboro Rd., Brown Co., waterbound macadam, $3,329; bridge on Sect. "A," Ripley-Hillsboro Rd., Brown Co., $10,979. Noted Aug. 16.

O., Alliance — Plans curbing, guttering, laying sidewalks and paving 6th St. $32,500; also paving Terrace St. $28,000.

O., Canton—Soon takes bids brick gutters, widening and resurfacing 6 blocks McKinley Ave., N. W., asphalt. $40,000. W. E. Sarver city engr.

O., Canton—A. L. Wise, engr. Stark Co., Court House, (succeeding G. L. Sickafoose, after Sept. 5), takes bids in September, paving Whipple [illegible] from end of Fulton Rd., paving to Massillon-Canton Rd. $40,000. Noted July 26.

O., Cleveland—Cuyahoga Co. takes bids in fall concrete paving Fitzwater and Minerva Rds. $162,821. F. R. Lander, Court House, engr.

O., Massillon—Plans extending Plum St. through to Clay St. and erecting bridge over Ohio Canal at this point. To exceed $50,000. C. E. Rice, city engr.

Mich., Detroit—Having plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete 6,100 sq.yd. Cameron Ave., $36,830, 2,700 sq.yd. Marcus Ave., $16,380, 8,400 sq.yd. Normandy Ave., $50,590, 13,000 sq.yd. Canfield Ave., $77,810, 160 sq.yd. Pasadena Ave., $1,000, 4,000 sq.yd. Sylvester Ave., $24,310, 2,200 sq.yd. Frontenac St., $13,450, 3,100 sq.yd. Yosemite Ave., $18,120, 4,300, sq.yd. Glenwood Ave., $26,230, 12,400 sq.yd. Seven Mile Rd., $74,250; 3 in. sheet asphalt on 6 in. concrete 2,300 sq.yd. Longwood Ave., $11,980, also 3,300 sq.yd. one course concrete in 2 alleys, $8,850. J. W. Reid, city engr.

Ill., Alton — Making preliminary plans grading and paving with brick or concrete, about 16 blocks various streets. $115,000. J. E. Schwab, City Hall, engr.

Ill., Edwardsville—Madison Co. making preliminary plans grading and paving, probably concrete, 33 mi. roads in vicinity of Collinsville and Alton. $100,000. Address County Engineer, Court House.

Wis., Waukesha — Bd. Pub. Wks. soon takes bids curbing, guttering and concrete paving 10,000 sq.yd. Racine and Fairview Aves. Est. $25,000-$30,000. A. P. Kuranz, City Hall, engr. Noted March 22.

Kan., Anthony—Harper Co., making plans and soon takes bids, 9.5 mi. sand clay road in Federal Aid Project 155. Elderman & Marshall, Topeka, engrs.

Kan., Kinsley—Edwards Co. plans grading 7.741 mi. Sante Fe Trail, Federal Aid Project 115, Sect. B., 18 ft., E. B. Johnson, Kinsley, engr.

Neb., Wymore—Plans paving 32 blocks. $120,000. D. K. Windel, clk.

Mo., Clayton — St. Louis Co. making preliminary plans grading and paving several miles Ozark Trail, rein.-con., $90,000 also 5 mi. Creve Couer Mill Rd., 18 ft., tarvia, $90,000. W. Elbring, Court House, engr.

Mo., Joplin—Having preliminary plans prepared grading and paving 5,680 ft. Joplin Rd. one course concrete. $27,500.

Ark., Little Rock—Making plans grading and paving 45 blocks of various streets in Dists. 355, 370, 371 and 372. To exceed $100,000. Engineer not selected.

Tex., Baird—Callahan Co. election Sept. 15, to vote on $200,000 bonds completing Bankhead Highway in Precinct 1, hard surface. V. C. Gilbert, co. judge.

Tex., Coleman — Coleman Co. election Sept. 2, to vote on $200,000 bonds gravel surfacing State Highway 7, and lateral roads, 18 ft. Total cost $350,000. W. E. Dickerson, co. engr.

Tex., Dallas — Having plans prepared curbing, guttering, paving with rock asphalt, bitulithic, brick or wood block 10 blocks Cockrell, Bell, Simpson, Cadiz and Martinique Sts., $35,000-$40,000; 9 blocks Plowman, 10th, Wall and Willis Sts., $27,000; 12 blocks Willomet, Sears, Richmond, 12th and Windomere Sts.; 8 blocks Douglas, Fouraker, Federal, Jefferson, Parry and 9th Sts., $30,000. E. A. Kingsley, city engr.

Tex., Fairfield—Freestone Co. plans election to vote on $1,000,000 bonds improving R. Q. Mills and Exall Highways, also bridge across Trinity River. F. Roper, co. judge.

Tex., Hillsboro—Hill Co. having plans prepared grading and gravel surfacing 10.5 mi. State Highway No. 2-E, 18 ft. $124,850. G. W. Johnston, engr.

Tex., Mexia—Voted $50,000 bonds paving various streets. R. D. Morgan, Mexia, engr.

Tex., Palo Pinto—Palo Pinto Co. plans concrete curbing and brick paving 4 mi. State Highway 1, between Mineral Wells and Parker Co. line, 18 ft. $90,000. G. W. Courter, co. engr.

Tex., Sulphur Springs — Hopkins Co. voted $160,000 bonds improving State Highway 1, Rd. Dist. 8, from Sulphur Springs to Hunt Co. line. R. E. Bertran co. judge.

Tex., Waxahachie — Ellis Co. election Sept. 8, to vote on $75,000 bonds constructing Waxahachie Rd. H. R. Stovall, co. judge.

Okla., Claremore — Rogers Co. election Sept. 8, to vote on $650,000 bonds grading and paving 100 mi. roads, 18 ft. F. L Simmons, Capitol Bldg., Oklahoma City, engr.

Okla., Tahlequah—E. Covell, city clk., soon takes bids paving 8 blocks Muskogee Ave., 14,000 sq.yd. concrete, 4,000 lin.ft. curbing, etc. $35,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs.

Okla., Tulsa—Tulsa Co. plans 12 mi. paving, 18 mi. grading, bridges, etc. D. Patton, Tulsa, engr.

Okla., Weleetka—Had preliminary plans prepared grading, curbing and paving 8 blocks Creek, 7th, 8th and 10th Sts., 30 ft., 15,000 sq.yd. concrete. $60,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Streets and Roads (Continued)

Nev., Reno—Plans concrete curbing, guttering, laying sidewalks and paving 80 blocks, probably asphaltic concrete. J. B. Reese, city clk.

Calif., Eureka—Humboldt Co. plans election to vote on $2,000,000 bonds for highway system. A. J. Logan, co. surv.

Calif., Martinez—Contra Costa Co. having plans prepared paving Emeric, Bush, Pine and Sutter Sts., Rd. Dist. 1, 440,000 sq.ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Calif., San Diego—Had plans prepared paving with 1½ in. willite, warrenite or asphaltic concrete, Topeka, on 3 in. asphaltic concrete 20,092 s.yd. Imperial Ave. through Encanto; ½ in. asphaltic concrete on 4 in. and 5 in. concrete 13,550 sq.yd Ray, Weightman and Dwight Sts.; 1½ in. asphaltic concrete on 2½ in. asphaltic concrete 14,104 sq.yd. 3rd, Spruce, Front and Redwood Sts., 23,905 sq.yd. Grandad, 29th, Dale and Palm Sts.; 1½ in. asphaltic concrete on 4 in. concrete 9,501 sq.yd. Ivy, 31st and Fern Sts.; 1½ in. asphaltic concrete on 4 and 5 in. concrete 19,077 sq.yd. Hawthorn St. F. A. Rhodes, city engr.

Calif., San Luis Obispo—Plans paving 100,244 sq.ft. Osos St. To exceed $25,000.

Calif., San Rafael—Plans election to vote on $80,000 bonds for street improvements. H. K. Brainerd, city engr.

Calif., Santa Ana—Had plans prepared improving Fairview, South Flower and South Main Sts., 112,747 sq.ft. grading and 6 in. asphaltic concrete pavement, 3,170 ft. curb, etc. W. G. Knox, city engr.

Calif., Visalia—Tulare Co. had estimates prepared constructing 65 mi. Camp Nelson-Lone Pine Highway. $421,745. L. A. Moye, co. surv.

Que., Montreal—Plans to extend Sherbrooke St. E, 100 ft. wide, asphalt. $169,014. Work includes subway under property of St. Jean de Dieu Hospital, $55,263. E. Gauthier, asst. city clk.

Que., Montreal—Plans 21,797 ft. asphalt pavements on Savoie and Lapreque Lanes, Des Ormes Blvd., Sir George Atienne Cartier Sq., Smith, Emery, Clarke, St. James, Athletique, Duvernay, Letourneau, and College Sts., $301,015; concrete sidewalks on 13,284 ft. Hamilton, St. James, Boyer, Dufresne, St. Ambroise, Lacasse, Therriem, and Athletique Sts., Letourneaux Pl., and Sir George Atienne Cartier Sq., $79,539; cement slab sidewalks on 11,070 ft. Western Ave., St. James, Contrecoeur and Delanudiere Sts., $9,940. E. Gauthier, asst. city clk.

Ont., Toronto—Soon takes bids 8,000 sq.yd. asphalt pavement on Bancroft Ave., $7,244, Manning Ave., $3,344, Poplar Plains Crescent, $8,821, and Rountree Ave., $16,889; asphaltic concrete pavement on 2,100 sq.yd. Rountree Ave., $10,935; concrete curbs in Rosedale Heights Dr. and Rountree Ave., $2,500. R. C. Harris, city engr.

BIDS DESIRED

Vermont—Sept. 6, at office of T. W. Dix, ch. engr., Dept., Highways, Montpelier, paving 2.35 mi. road in Pownal, rein.-con.; adv. E. N.-R. Aug. 30. Noted Aug. 23.

Massachusetts—Sept. 11, by W. F. Williams, state highway comr., Boston, concrete paving 16,114 ft. highway, 18 ft., through Sheffield. To exceed $150,000.

Conn., Greenwich—Sept. 10, by Highway Comn. of Greenwich, at office of P. L. Minor, supt. of highways, Town Hall, grading, paving, etc., River Rd.; adv. E N.-R. Aug. 30.

N. Y., Niagara Falls—Sept. 15, by E. J. Fort, city engr., paving Sugar St., granite block $95,340, wood block $95,340, asphalt block $89,740 and sheet asphalt $78,540.

N. Y., New York—Sept. 6, by J. Miller, pres. Manhattan Boro. Municipal Bldg., repaving with sheet asphalt on concrete, roadways of West 149th, West 150th, West 153rd, East 79th, 77th and 74th Sts.

N. Y., New York—Sept. 6, by Park Bd., Municipal Bldg., repaving roadway West Drive north of 102nd St., in Central Park, sheet asphalt on existing concrete. F. D. Gallatin, pres.

N. Y., Tonawanda—Sept. 15, by Tonawanda Town Bd., at Village Hall, Kenmore, grading, curbing, building storm sewers and paving crosstown boulevard. G. C. Diehl, 575 Ellicott Sq., Buffalo, engr.; adv. E. N.-R. Aug. 30.

N. J., Point Pleasant Beach—Sept. 13, by H. L. Tindell, mayor, and Boro. Council, constructing concrete pavement and curbs on Arnold and Bay Aves.; paving and storm drains and appurtenances on Railroad Sq., Cincinnati and Arnold Aves. R. W. Morris, Point Pleasant, engr., adv. E. N.-R. Aug. 30.

N. J., Trenton—Sept. 7, resurfacing Princeton Ave., repaving 2 sections West Hanover St., removing one line of car tracks and paving Liberty St. $150,000. J. E. English, city engr. Noted Aug. 16.

Pennsylvania—Sept. 11, by State Hy. Dept., Harrisburg, improving roads, **(R. means Route and A. Application)** 5,292 ft. **R. 149,** and 7,210 ft. **R. 160, Berks Co.,** 19,934 ft. **R. 212 Bradford Co.,** 3,845 ft. **A. 1302 Bucks Co.,** 27,037 ft. **R. 79 Butler Co.,** 29,027 ft. **R 83 and A. 1558 Crawford Co.,** 11,720 ft. **R. 131 Delaware Co.,** 13,625 ft. **A. 1467 Erie Co.,** 1,603 ft. **R. 117,** 5,396 ft. **R. 116** and 1,125 ft. **A. 874, Fayette Co.,** 2,866 ft. **R. 268, Greene Co.,** 18,421 ft. **R. 54** and **A. 2157 Indiana Co.,** 3,276 ft. **R. 138** and **A. 1555 Lancaster Co.,** 3,526 ft. **A. 2557 Northampton Co.,** 2,104 ft. **R. 52** and **A 1361, Somerset Co.,** 3,304 ft. **R. 120 Westmoreland Co.,** 7,911 ft. **A 2002, York Co., resurfacing** 11,524 ft. **R. 69 Armstrong Co.** P. D. Wright, secy. highways.

Pa., Erie—Taking bids paving 1 mi. Cherry St., 20 ft., asphalt. $55,000. G. Lynch, city engr.

Pa., Windber—Sept 1, by Boro Council, paving 1,24[illegible] sq.yd. Main St., rein.-con. $25,000. W. J. Vick[illegible], 1209 Graham Ave., engr.

W. Va., Bluefield—Taking bids resurfacing various streets. $350,000 (ultimately $850,000). C. R. Ridley, city mgr.

Georgia—Sept. 7, by State Hy. Dept., at East Point, chert surfacing 104,680 cu.yd. Cedartown-Dallas road, Federal Aid Project 303, Polk Co. W. S. Dennis, Rome, engr. Noted April 26.

Fla., Sanford—Sept. 10, grading and paving about 13,914 sq.yd. Sanford Ave., $35,000; 10,500 sq.yd. Park, 6th and 7th Sts., $27,000; 10,900 sq.yd. French St., $28,000; 9,500 sq.yd. Mellonville Ave., Cypress, 10th, 9th and Commerce Sts., $25,000; 15,845 sq.yd. West 1st St., $40,000, all above various types of materials. F. T. Williams, Sanford, engr.

Fla., Sebring—Sept. 4, by Highlands Co. Comn., grading, shaping and sand-clay surfacing 15 mi. Lake Annie and Crewsville Rds., 16 ft. $40,000. Peacock & Hood, Sebring, engrs.

Ala., Albany—Sept. 7, asphalt paving 4th and 5th Aves. $30,000.

Miss., Belzoni—Sept. 3, by T. L. Gilmer, chn. Highway Comrs. Central Rd. Dist. 1, at office of Chancery Clerk of Humphreys Co., improving and graveling approximately 20 mi. roads. C. E. Miller, Belzoni, engr.; adv. E. N.-R. Aug. 30.

Miss., Carrollton—Sept. 24, by Carroll Co., grading and gravel surfacing 8.047 mi. Federal Aid Project 148, from Lexington to Holcomb, 16,782 cu.yd. gravel 1 mi. haul, 138,616 cu.yd. gravel ½ mi. haul, 32,633 lb. reinforcing, etc., also bridges on above road, incl. two 100 ft. steel truss spans, 32,920 ft. lumber, etc. H. C. Dietzer, Jackson, engr.

Kentucky—Sept. 26, by State Hy. Dept., Frankfort, scarifying and reshaping 10.7 mi. Georgetown-Cynthiana Rd., 14 ft., State Project 58½, Sect. B, Harrison Co.; constructing approaches to present bridge, over Livingston Creek, 0.333 mi. Marion-Princeton Rd., State Project 10, Sect. A, Crittenden and Caldwell Counties. J. S. Boggs, state highway engr.

O., Idlewood (Cleveland Heights P. O.)—Sept. 6, grading, laying 12 in. c.i. watermains, storm and sanitary sewers in Cedar Rd. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Lisbon—Sept. 12, by Comrs. Columbiana Co., improving 1.14 mi. East Palestine-New Waterford Rd., 20 ft. $28,000-$37,000. S. Kirk, co. engr.

O., New Philadelphia—Tuscarawas Co. taking bids and opens same about Sept. 1, improving 1.2 mi. Union-Hill-Baltic Rd. Div. 1, 20 ft., waterbound macadam or bituminous macadam. $27,500.

Michigan—Sept. 10, by State Hy. Dept., Lansing, grading and surfacing 4.495 mi. State Trunk Line Rd. 79-2, Barry Co., 46,360 cu.yd. excav., 42,314 sq.yd. gravel. F. F. Rogers, state comr.

Michigan—Sept. 12, by State Hy. Dept., Lansing, grading and surfacing 9.8 mi. Federal Aid Project 105, Sect. A, Iron Co., 93,429 sq.yd. gravel. F. F. Rogers, state comr.

Illinois—Sept. 5, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 4 mi. Route 2, Sect. 23, Fayette Co., 18 ft., with portland cement concrete, 4 in. monolithic or bituminous filled brick, bituminous concrete with or without binder course. C. H. Older, ch. highway engr.

Ia., Anamosa—Sept. 11, by Auditor Jones Co., grading 7.62 mi. Anamosa-Wyoming Rd., 26 ft. 116,760 cu.yd. excav., etc. F. S. Yetter, co. engr.

Kan., Wichita—Sept. 10, by City Comrs., paving 32 blocks of various streets, 780 sq.yd. vertical fibre brick. P. L. Brockway, City Bldg., Wichita, engr. Noted Aug. 2.

Missouri—Sept. 5, by State Hy. Dept., Jefferson City, grading 1,552,915 cu.yd. roads in Atchison, Buchanan, Bates, Ray, Carroll, Mercer, Cass, DeKalb, Newton, Miller, Douglas, Holt, Mississippi, Madison, Osage, Marion, Putman, Worth, Gasconade and Livingston Counties; [illegible]6,335 sq.yd. pavements in Jackson, Howard and St. Louis Counties; 318.2 cu.yd. concrete culverts in Barry Co. B. H. Piepmeier, ch. engr.

Mo., Sedalia—Sept. 3, by Mayor and City Clerk, grading and paving 11,200 sq.yd. Washington Ave., concrete. $26,400. C. O. Manker, city engr.

Tex., Dallas—Sept. 17, by A. C. Allen, judge Dallas Co., grading, paving with one of various types concrete, bituminous or brick, also construct rein.-con. bridge on 12.7 mi. Richardson Rd. from Dallas to Collin Co. line, 17 to 22 ft. $150,000. Nagle-Witt-Rollins Eng. Co., Court House, engrs.

Tex., Ft. Worth—Sept. 4, improving Irma Lee and Illinois Sts., 1,900 cu.yd. excav., 8,900 sq.ft. gutter, 4,450 ft. curb, 5,885 sq.yd. 2 in. bitulithic, rock asphalt, amesite or 3 in. brick. $25,000-$30,000. H. E. Snow, city engr.

Tex., Groesbeck—Sept. 10, by Limestone Co., surfacing with bituminous on macadam 4 mi. Exall Highway from Mexia south. A. G. McIntish, Humphreys Bldg., Mexia, engr.

Tex., Marlin—Sept. 18, by W. S. Hunnicutt, judge Falls Co., improving 6.98 mi. State Highway 44, 41,761 cu.yd. roadway excav., 28,570 cu.yd. borrow, 19,902 cu.yd. gravel, 92,033 lb. reinforcing and 94,500 lb. structural steel, etc. $121,315. J. F. Wehrung, Lott, engr.

Tex., Newton—Sept. 12, by J. C. Ramsey, judge Newton Co., improving 20.94 mi. State Highway 7, Federal Aid Project 33[illegible], 183,343 cu.yd. excav. in roadway, 91,[illegible] cu.yd. borrow, 48,750 cu.yd. gravel, 64,[illegible] lb. reinforcing, etc. $226,909. V. O. Ellis, co. engr.

Okla., Holdenville—Sept. 4, by M. Payne, city clk., grading and paving 9 various connecting blocks, 16,000 sq.yd. concrete, 6,3[illegible] lin.ft. curbing, 3,800 cu.yd. earth excav. $67,000. C. E. Edge, Holdenville, engr.

Washington—Sept. 11, by State Hy. Comn., Olympia, resurfacing 5 mi. Sunset Highway, Kittitas Co.; surfacing crushed rock or gravel 11.6 mi. Central Washington Highway, Franklin Co.; grading and paving 1 mi. Ocean Beach Highway, Cowlitz Co. J. Allen, ch. engr.

Wash., Seattle—Sept. 10, by Comrs. King Co., paving 4 mi. Maple Valley Rd. from Renton west, 47,080 sq.yd. concrete, 27,[illegible] cu.yd. earth excav. $135,000. T. R. Beeman, co. engr.

BIDS RECEIVED

Rhode Island—State Bd. Pub. Wks. Providence, Aug. 22, 2.65 mi. road in Westerly and Bradford, bituminous macadam, from G. E. Snell, Tiverton, $62,3[illegible]; 5,450 cu.yd. Noosenuk Hill Rd., in West Greenwich, concrete, from J. Bristow, Narragansett Pier, $109,533. Noted Aug. 9.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., sheet asphalt repaving (1) West 68th St. (2) West 69th St. (3) West 83rd St. (4) 93rd St. (5) East 97th St. (6) West 108th St. (7) West 158th St., from Sicilian Asphalt Paving Co., 41 Park Row, (1) $57,345 (2) $19,735 (6) $11,061; Cleveland Trinidad Paving Co., Flushing, (3) $67,878; Uvalde Asphalt Paving Co., 1 Bway, (4) $18,001 (5) $19,87[illegible]; C. D Beckwith, Inc., 2875 Bway, (7) $73,838. Noted Aug. 16.

New Jersey—State Hy. Comn., Trenton, concrete paving Route 4, Sect. 20 Manasquan River-Sea Girt, Monmouth Co., from McGreevey & O'Connor, Manasquan, 94% engrs. est. ($200,361); 6 mi. Route 13, Sect. 5, Trenton-Lawrenceville Rd. Mercer Co., from J. J. Barrett, Olden Ave., Trenton, 92.1% engrs. est. ($359,860). Noted Aug. 9.

New Jersey—State Hy. Comn., Trenton, Aug. 20, paving 35,400 sq.yd. Route 8, Sect. 4-A, Charlottesburg-Newfoundland Rd., Passaic and Morris Counties, from R. D. Richardson Constr. Co., Connell Bldg., Scranton, Pa., 99% engrs. est. ($242,978); 41,528 sq.yd. Route 14, Sect. 9, Ocean View-Seaville Rd., Cape May Co., from W. Eisenberg, Woodbine, 98% engrs. est. ($201,723); 35,672 sq.yd. Route 16, Sect. 5, South Somerville-Woods Tavern Rd., Somerset Co., from J. F. Burke, 309 Park Ave., Plainfield, 109.3% engrs. est. ($243,301). Noted Aug. 9.

Virginia—State Hy. Comn., Richmond, grading and paving 103,967 sq.yd. Route 39, Project F 276 A, Louis and Albemarle Counties, from Ellis, Brooks & Co., Staunton, bituminous macadam, penetration $324,397, from H. H. George Jr. & Sons, Richmond, concrete, $373,750; grading 8.7 mi. Route 114, Project S 263, 24-26 ft. Dickenson Co., 336,809 cu.yd. excav., etc. from McArthur & Hood and W. H. Anderson, Huntington, W. Va., $291,774; grading 8.9 mi. Route 18, Project F 222, 22 ft.,

Streets and Roads (Continued)

Campbell Co., 51,206 cu.yd. excav., etc., near C. B. Hester, Greensboro, N. C., $46,865; paving 1.8 mi. Route 394 Project S 328, 18 ft., Elizabeth Co., 19,055 sq.yd. one course concrete, from Gannaway-Hudgins Co., 18 North King St., Hampton, $51,004; 65 ft. reinforced and plain concrete bridge over Allens Creek, 24 ft., near Rose Mill, Route 18, Project S 248 C, Nelson Co., from Preston & Pollard, Bedford, $6,537; 103 ft. rein.-con. and steel bridge, over Piney River, 19 ft., near Canady, Route 18, Project S 248 B, Amherst and Nelson Counties, from R. B. Curtis, Lynchburg, $15,687; grading 0.57 mi. approaches to Craig Creek Bridge, 24-26 ft., Route 22, Project S 19f, Craig Co., from Preston & Pollard, Bedford, $9,472; 139 ft. reinforced and plain concrete bridge over South Anna River, 24 ft., Route 39, Project F 276, Louisa Co., from H. H. George Jr. & Son, Richmond, $19,187. Noted Aug. 2.

South Carolina—State Hy. Comn., Columbia from G. F. Bamberg, grading and sand-clay surfacing 10.83 mi. Federal Aid Project 208 A, Colleton Co., $56,323, 5.93 mi. Federal Aid Project 208 B, Colleton Co., $37,425.

Ohio—Dept. Highways and Pub. Wks., Columbus, Aug. 24, grading, bridging and paving roads as follows: (1) 1.106 mi. Sect. "Georgetown," Cincinnati-West Union Rd., Brown Co. (2) 1.004 mi. Sect. "H" Roundhead-Ada Rd., Hardin Co. (3) 0.721 mi. Sect. "Harrisville" Bridgeport-Cadiz Rd., Harrison Co. (4) 2.052 mi. Sect. "A" Hillsboro Ripley Rd., Highland Co. (5) 3.416 mi. Sect. B-1 Hillsboro-Ripley Rd., Highland Co. (6) 2.06 mi. Sect. "O" Ohio River Rd., Jefferson Co. (7) 0.687 mi. Sect. "Toronto" Ohio River Rd., Jefferson Co. (8) 0.687 mi. Sect. "Toronto" Ohio River Rd., Jefferson Co. (9) 2.809 mi. Sect. "M-1" Ohio River Rd., Lawrence Co. (10) 3.388 mi. Sect. "N" Ohio River Rd., Lawrence Co. (11) 5.785 mi. Sects. "G" and "L" Gilead-Galion Rd., Morrow Co. (12) 0.535 mi. Sect. "R" Zanesville-Dresden Rd., Muskingum Co. (13) 3.44 mi. Sect. "A" Newark-Coshocton Rd., Muskingum Co. (14) 0.537 mi. Sect. "G" Zanesville-New Lexington Rd., Perry Co. (15) 0.517 mi. Sect. "S-W" Newark-New Lexington Rd., Perry Co. (16) 2.602 mi. Sect. A Ottawa-Defiance Rd., Putnam Co. (17) 2.121 mi. Sect. "B" Ottawa-Defiance Rd., Putnam Co. (18) 0.556 mi. Sect. "H" Ottawa-Defiance Rd., Putnam Co. (19) 1.725 mi. Sects. "F" and "G" Canton-Massillon Rd., Stark Co. (20) 2.504 mi. Sect. "P" Youngstown-Warren Rd., Trumbull Co. (21) 1.815 mi. Sect. "M" Youngstown-Warren Rd., Trumbull Co. (22) 2.632 mi. Sect. "I" Niles-Ashtabula Rd., Trumbull Co. (23) 1.375 mi. Sect. "J-1" Niles-Ashtabula Rd., Trumbull Co. (24) 1.967 mi. Sect. "D" Morristown-New Athens Rd., Belmont Co. (25) 0.118 mi. Sects. "L" and "G" Cincinnati-West Union Rd., Clermont Co. (26) 4.04 mi. Sects. "G" and "H," Dayton-Chillicothe Rd., Greene Co. (27) 2 mi. Sect. "A" Marysville-Kenton Rd., Hardin Co. (28) 1.258 mi. Sect. "B" Dennison-Cadiz Rd., Harrison Co. (29) 1.01 mi. Sect. "A-1" Payne-Hicksville Rd., Paulding Co. (30) 1.887 mi. Sect. "A" Aurora-Warren Rd., Portage Co.; grading (31) Sect. "R" Zanesville-Bresden Rd., Muskingum Co. (32) 3.44 mi. Sect. "A" Newark-Coshocton Rd., Muskingum Co.; concrete curbing (33) 3.9 mi. Sect. "F" Coshocton-New Comerstown Rd., Coshocton Co. (34) 1.74 mi. Sect. "G," Lima-Sandusky Rd., Hancock Co.; (35) 8.13 mi. Sect. "N-O-P-R2" Akron-Youngstown Rd., Mahoning Co.; (36) concrete widening 2.481 mi. Sect. "J-1" Mansfield-Shelby Rd., Richland Co.; (37) 0.189 mi. Sect. "J-2" Project 2, Mansfield-Shelby Rd., Richland Co.; (38) bridge over Sect. "N" Ohio River Rd., Lawrence Co., with (a) bituminous macadam, tar, (b) rein.-con., (c) rein.-con., oil, (d) rein.-con., tar, (e) rock asphalt (f) bituminous macadam, asphalt (g) brick, incl. brick (h) sheet asphalt (i) brick (j) waterbound gravel (k) brick with concrete curb, from Burris, Hannan & Jones, Hammersville, (1a) $30,650; N. B. Putnam, Van Wert, (2c) $23,499 (2d) $23,926 (27f) $55,500; J. F. Stambaugh, Ada, (2e) $33,050 (11b) $152,719; Seaborn Bros., Youngstown, (3f) $19,859 (28f) $40,763; A. K. Grandle, Leesburg, (4f) $51,349 (5f) $70,856; J. H. Strain, Hillsboro, (4e) $50,864 (5a) $71,106; E. A. Freshwater, Painesville, (6b) $133,000 (6g) $150,000 (7g) $37,800 (8g) $29,500; Stevens & Wood, Youngstown, (6h) $147,441; Weeks Constr. Co., Dayton, (9f) $67,801 (10f) $81,348 (38) $13,327; G. C. Hardin, Ironton, (9a) $70,287 (10a) $81,206 (38) $13,327; H. F. Ault & Son, Mt. Gilead, (11e) $172,815; W. D. Winchell Co., 337 Siebert St., Columbus, (11i) $209,622 (12j) $3,304 (31) $1,854; Keystone Constr. Co., Columbus, (13j) $27,120; J. W. Carey, Ada, (14a) $18,490 (15a) $15,396; W. M. Gray, Columbus, (15f) $15,839; O. L. Smith, Liepsic, (16e) $61,315 (17e) $50,545 (18e) $13,042; R. Doaust, Defiance, (16b) $72,521 (17b) $60,232 (18b) $15,045; G. W. Hadley, 204 Goldberg Bldg., Canton, (19g) $75,721; Reedy Bros., Warren, (20i) $138,203 (30a) $19,790 (30f) $19,790; F. George, 1657 Mahoning Ave., Youngstown, (20b) $119,729 (21k) $57,345; G. A. Stein, Niles, (22b) $97,804; H. L. Sharp Co., Kinsman, (23f) $33,812; Mahoning Constr. Co., Warren, (23a) $35,047; B. C. Stringer Co., Rayland, (24f) $63,317; C. Graber, Owensville, (25a) $17,577 (25f) $17,577; W. M. Brode, New Comerstown, (33) $18,112; A. C. Pickleheimer, Cincinnati, (26a) $37,847 (26f) $36,119; W. H. and H. A. Souder, Fostoria, (34) $8,244; N. B. Putnam, Van Wert, (27a) $56,352; H. F. Dougherty, Steubenville, (28a) $41,979; Putnam & Sunday, Van Wert, (29a) $9,419 (29f) $9,419; J. F. Phillips, North Jackson, (35) $35,882; H. E. Johnson, Mansfield, (36) $34,144 (37) $2,887. Noted Aug. 24.

O., Cleveland—Paving, etc., East 131st St., from Gould & Maybach, 16311 Saranac Rd., $20,307; East 111th St., from Baldwin Bros., 4500 Euclid Ave., $9,244; West 17th St., Laflin and Ruby Aves., from Roehl Bros., West 25th St. and Clark Ave., $1,946, $3,846 and $16,787 respectively. Noted Aug. 2.

O., Warren—Improving Hoyt St., from Smith Eng. Co., Warren, stone curbing, brick paving, asphalt filler, 8 in. slag foundation. $28,323, with 6 in. concrete foundation $30,204. Engrs. est. $35,400.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.523 mi. State Trunk Line Rd. 43-4, Montcalm Co., 32,652 cu.yd. excav., 51,923 sq.yd. gravel from Helerman & Lewis, Rockford, O., $62,600.

Michigan—State Hy. Dept., Lansing, grading and surfacing 3.345 mi. State Trunk Line Rd. 43-3, Ionia Co., 65,112 cu. yd. excav., 31,675 sq.yd. gravel, from J. A. Swanson, Leroy, $57,171. Noted Aug. 9.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.977 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co., 56,036 sq. yd. waterbound macadam, from D. N. McLeod, Newberry, $71,590. Noted Aug. 9.

Mich., Detroit—From Detroit Asphalt Paving Co., 20 McGraw Bldg., grading and paving with 3 and 3½ sheet asphalt, Granville Pl., $6,172, Wilshire Ave. $49,051, Fairchild Ave. $32,290, Green Ave. $14,554, Holmur Ave. $22,230, Lakeview Ave. $31,233, Lakewood Ave. $34,189, Pitt St. $42,512, Post St. $53,587, Shoemaker Ave. $9,449, Webb Ave. $28,424.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving 6.53 mi. **2-77-64 Woodford means (Route 2, Federal Aid Project 77, Sect. 64, Woodford Co.)** 6.92 mi. 2-77-65 Woodford, and 6.13 mi. 8-78-35 Tazewell-Woodford, from Keokuk Quarry & Constr. Co., Keokuk, Ia., $124,862, $133,794 and $122,238 respectively; 13.45 mi. Route 2, Federal Aid Project 77 Combination A, Woodford, from L. S. Kuhn, Bloomington, $259,000; 5.62 mi. **16-6 Coles means (Route 16, Sect. 6, Coles Co.)**, 4.7, 16-7 Coles and 10.32 mi. Route 16, Combination B, Coles, from Etchison & Patterson, Casey, $140,106, $45,872 and $184,800 respectively. Noted Aug. 9.

Calif., Fresno—Fresno Co., from Blanco & Taylor, Los Banos, 4.25 mi. recrowning and spreading 3 in. rock and 5.75 mi. widening, recrowning and spreading 3 in. rock, 16 ft. wide, on Trimmer Rd., 10,000 cu.yd. earthwork at $1.40 per cu.yd., 10,000 tons rock $2.80; from Thompson Bros., G and Divisadero St., spreading 12,000 tons rock 4 in. thick, on 8.75 mi. Tollhouse Rd., 16 ft., at $2.98 per ton; California Constr. Co., 58 2nd St., San Francisco, grading and paving 4 mi. Route 16, Sect. B, 6,116 cu.yd. earthwork at $1.10 per cu.yd., 334,940 sq.ft. 5 in. asphalt $0.197; from T. A. Hanrahan, Brix Bldg., grading and paving 6.7 mi. Route 2, Sect. A, 16,107 cu.yd. earthwork at $0.65, 547,689 sq.ft. 4 in. asphalt $0.174, 4.4 mi. Route 5, Sect. B, 9,685 cu.yd. earthwork $1.20, 380,618 sq.ft. 4 in. asphalt $0.18, 2 mi. Route 27, Sect. A and 0.62 mi. Route 28, Sect. A, 3,857 cu.yd. earthwork $1.50, 219,892 sq.ft. 5 in. asphaltic concrete $0.215. Noted Aug. 9.

Calif., Glendale—Improving Sycamore Ave. from E. L. Fleming, 1007 Boynton Ave., 2,295 lin.ft grading at $3.80, 3,726 sq. ft. gutter at $0.21, 55,830 sq.ft. 5 in. oil macadam $0.13, 2,098 ft. 8 in. c.i. water pipe $6,650, etc. Noted Aug. 9.

Calif., Los Angeles—Improving Topango Canyon Ave., from Boulevard Land Co., 111 West 4th St., total for grading $53,768, 94,062 sq.ft. concrete at $0.35 per sq.ft., 14,936 ft. heavy curb $0.60, 438,947 sq.ft. concrete walks $0.20, 72,503 ft. light curb $0.46, etc.

Calif., San Francisco—Improving Liberty and Sanchez Sts., 56,897 sq.ft. concrete, 4,670 sq.ft. asphaltic concrete, 20,556 sq. ft. artificial stone walks, 3,267 lin.ft. concrete curbs, etc., from Municipal Constr. Co., 112 Lyon St., $23,443; Ulloa St., 2,778 lin.ft. concrete curb, 2,642 sq.ft. artificial stone walks, 79,573 sq.ft. asphaltic concrete, etc., from Fay Impvt. Co., Phelan Bldg., $28,210. Noted June 28.

Que., Montreal—Asphalt pavements from Sicily Asphaltum Paving Co., 60 St. Viateur St., 4,950 sq.yd. Bordeaux St., $20,953, 1,740 sq.yd. LaSalle St., $7,698, 2,601 sq. yd Lajeunesse St., $17,180, 1,300 sq.yd. Lalonde St., $5,288; concrete sidewalks from Rondou Corlier & Co., 3506 Christophe Colomb St., 7,400 sq.yd. Berri St., $27,534. Noted Aug. 2.

CONTRACTS AWARDED

Me., Portland—Dept. Pub. Wks., paving 1,780 ft. Forest Ave., 8,100 sq.yd. spl. redressed and 4,000 sq.yd. new granite block, 1,675 lin.ft. reset and 890 lin.ft. set granite curbing, to Forgione & Romano Co., South Portland, $50,746. Engrs. est. $65,100.

Massachusetts—State Hy. Dept., Boston, 15,056 ft. road, 18 ft., bituminous macadam, in Yarmouth, to W. A. Jones and H. L. Thomas, Yarmouth, $32,452; 8,700 ft., 18 ft., in Rockport, to Hamlin & Ballyntine, Rockport, $44,727; 9,330 ft., 20 ft., in Mashpee and Sandwich, to S. W. Lawrence, Woods Hole, Falmouth, $34,847; 900 ft., cement concrete, 30 ft., in Webster, to Hassam Paving Co., 17 Federal St., Worcester, $24,462; 22,280 ft. gravel road, 18 ft., in Worthington, to J. McCormick, East Providence, R. I., $165,912.

Mass., Boston—Paving Talbot Ave., in Dorchester, 18,000 sq.yd. recut granite block, to J. McCourt Co., 46 Wait St., Brookline (Boston P. O.), $53,695.

New York—State Hy. Comn., Albany, concrete paving 7.7 mi. Spencer-West Danbey Rd., 16 ft., to Cleveland & Sons Co., Adams St., Brockport, $296,453. Engrs. est. $329,147.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Uvalde Asphalt Paving Co., 1 Bway., New York, paving Chester, Douglas and East 15th Sts., repaving Hancock St. and Meserole Ave., all above asphalt, also curbing and asphalt paving Westminster Rd., $6,939, $12,241, $3,981, $22,101, $3,804 and $6,858 respectively; to Castle Bros., Inc., John Pl. grading, curbing and flagging Kingshighway $95,311; to W. J. McHale Contg. Co., 1250 Jefferson St., Lenox Rd., $1,068. Noted Aug. 23.

N. Y., Lockport—Niagara Co., concrete paving 4.6 mi. Coomer Rd., 20 ft., in Newfans, to Stapell, Mumm & Beals Contg. Co., Church Rd., West Seneca, $89,504. Engrs. est. $92,085. Noted June 28.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Park Lane, to H E. Kordes Co., 2577 Cooper St. Brooklyn, $18,920; grading, curbing and laying sidewalks on Graham Ave., to Uvalde Asphalt Paving Co., 1 Bway., New York, $26,149; 45th St., to R A. Hess, Inc., 14 Queens St., Astoria, $12,524; 87th and 89th Sts., to Kennedy & Smith, Inc., 93 Amity St., Flushing, $28,521 and $13,277 respectively; 127th St. to J. J. O'Brien, Jr., William St., Jamaica, $5,271; asphalt paving Jackson Ave., to Cleveland Trinidad Paving Co., Flushing, $21,418; 89th and 127th Sts to Cranford Co., 52 9th St, Brooklyn, $24,670 and $8,328 respectively; sheet asphalt repaving Sheridan Blvd. to Sicilian Asphalt Paving Co., 41 Park Row, New York, $29,950. Noted Aug. 23.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing and laying sidewalks on (1) West 171st St. (2) Muliner Ave. (3) Montgomery Pl. (4) Wythe Pl., repaving (5) Park Ave. W., (6) Fordham Rd; granite block (7) Mosholu Parkway (8) River Ave., both sheet asphalt, to M. Del Balso, 660 East 221st St., (1) $5,990; I. F. Cavaluzo, 1538 Walton Ave., (2) $20,027 (4) $7,331; Burnside Contg. Co., 270 Burnside Ave. (3) $3,720; Astoria Contg. Co., 169 Hunter Ave., Long Island City (5) $86,869; P. J. Kearns Contg. Co., 2306 Creston Ave. (6) $36,861; Brusstar Constr. Co., Harlem River and 150th St., (7) $8,702; J. E. Gaffney, 438 East 91st St., (8) $35,280. Noted Aug. 23.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. 211 McKean means Route 211 McKean Co.)**, 15,563 ft. R. 211 McKean, to D. L. Dennis, Eldred, $139,729; 16,310 ft. R. 133, Delaware, to Highway Constr. Co., Phila., $122,749; 23,775 ft. R. 295 Erie, to C. H. Fry Constr. Co., 609 West 19th St., Erie, $176,826; 27,875 ft. R. 258 Erie, to

Streets and Roads (Continued)

Johnson, Drake & Piper, Slippery Rock, $208,189; 7,731 ft. R. 258 Washington Twp., Erie, to W. B. Constr. Co., 909 Cascade St., Erie, $61,968; 3749 ft. R. 124 York, to Warren Bros., 9 Cambridge St., Boston Mass., $73,379; 15,659 ft. R. 2, Northumberland and Montour, to T. B. Evans, Danville, $182,878; 14,953 ft. R. 95, McKean, to J. C. Devine Co., Alliance, O., $154,271; 13,977 ft. R. 196 Tioga, to A. W. Minaman, Canton, O., $119,092; 21,653 ft. R. 86 and 272, Erie, to Mayer Bros. Constr. Co., 132 Commerce Bldg., Erie, $151,595; 12,994 ft. R. 247, Fayette, to Garvey Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $68,610; Application 2431 Indiana, to A. R. Cooper, Idamar, $14,254; 7,880 ft. Application 1242 and 1249 Delaware, to Highway Constr. Co., Phila., $81,601. Noted Aug. 16.

Pa., Greensburg—Comrs. Westmoreland Co., 1 mi. Bolivar Rd., 16 ft., rein.-con., to Mt. Pleasant Constr. Co., Mt. Pleasant. Engrs. est. $30,000. Noted July 26.

Pa., Phila.—Asphalt pavements on Mt. Airy and Emlen Aves., and asphalt paving mixtures to Union Paving Co., 30th and Lancaster Aves., $24,232 and $27,325 respectively.

Maryland—State Hy. Dept., Baltimore, concrete paving 9,000 sq.yd. Contr. Ho-40, and 9,400 sq.yd. Contr. Ho-41, to M. J. Grove Lime Co., Lime Kiln, $31,308 and $35,149 respectively; 9,100 sq.yd. Contr. Ho-42 to Continental Contg. Co., Knickerbocker Bldg., Baltimore, $39,448, all foregoing Howard Co.; gravel surfacing road in Anne Arundel Co., Contr. AA-34, to Taylor & Trueman, Sollers, $24,109. Noted July 5 and Aug. 23.

Md., Baltimore—Paving Orleans St. from Wolfe St. to Patterson Park Ave., and Lexington St. from Eutaw to Pearl St., sheet asphalt, to Amer. Paving Co., Montebello, $53,859. Noted Aug. 23.

Md., Hagerstown—Repaving South Potomac St. between Antietam and Willow Lane, vitr. brick, to Bester & Long, Hagerstown, $61,625. Noted Aug. 23.

W. Va., Bluefield — To Mur-Mun Co., Knoxville, Tenn., resurfacing brick streets with asphalt Project 1, $42,132; bituminous concrete paving Projects 2 and 3, $53,426. Noted July 26.

W. Va., Clarksburg — Harrison Co. concrete paving 2 mi. Robinsons Run Rd., to Ferguson Bros., Shinnston, $63,840; 4,000 ft. road to E. J. Kersting, Clarksburg, $27,413.

W. Va., Huntington—Surfacing 3rd Ave. brick on sand and gravel, to Harrison & Dean, Old Walton Bldg., $31,932. Noted Aug. 9.

W. Va., Spencer — Roane Co. grading Huricane-Newton Rd., to Cooper, Piper & Co., Spencer, $101,530.

S. C., Seneca—For 13,000 sq.yd. concrete paving to Ballinger Paving Co., Greenville, $40,000.

Georgia—State Hy. Dept. at East Point, grading 2.014 mi. Federal Aid Project 320, Habersham Co., to J. S. Wright, Nicholson, $23,017; 14.06 mi. Federal Aid Project 334, and 6.124 mi. Federal Aid Project 337, both Ware Co., to Beauman & White, Manor, $97,972 and $62,665 respectively. Noted July 20.

Ala., Albany—Bitulithic paving 12 blocks Jackson and Johnson Sts., 6th, 7th and 8th Aves., 30 ft., to Independent Paving Co., Amer. Trust Bldg., Birmingham, $59,537. Engrs. est. $65,000.

Miss, Vicksburg—Warren Co. 5.115 mi. gravel road between here and Rolling Fork, Federal Aid Project 146, to Clark & Judkins, Vicksburg, $63,593. Noted July 19.

Louisiana—State Hy. Dept., Baton Rouge, grading and graveling 9.5 mi. Shreveport-Minden Highway, Calcasieu Parish, to Spenser Bros., Minden, $54,389, also gravel surfacing Sect. B, Project 350 and Sect. B, Project 43, Walker-Gonzales Rd., Calcasieu Co., to Banta & Mutersbaugh, Lake Charles, $50,650. Noted July 26.

La., Baton Rouge—Comn. Council at office Mayor, City Hall, paving 22,800 sq. yd. St. Louis and Government Sts., warrenite on 5 in. cement, to Southern Roads Co., Amer. Trust Bldg., Birmingham, Ala., $72,000. Noted July 26.

La., Napoleonville — Hard surfacing 8½ mi. Attakapas Canal Rd. in Dist. 1. Assumption Parish, to H. M. Weber, Thibodaux, $41,484.

La., Ruston—Grading and gravel surfacing 8.8 mi. from Oak Grove to Simsboro, also grading and hard surfacing 4.61 mi. Ruston Rd. from Choudrant to Sibley, to Alexandria Contg. Co., Ruston, $30,816 and $21,114 respectively.

Tennessee — Dept. Highways and Pub. Wks., Nashville, paving 8.6 mi. State Project 128, Jefferson Co., bituminous macadam on reconstructed base course limestone, to W. C. Anderson Constr. Co., Harriman, $112,852.

O., Akron—Bd. Control, resurfacing with asphalt Johnson St., to Columbus Asphalt Co., 304 Buckeye Bldg., $64,873. Noted Aug. 23.

O., Akron—Paving Rentschler Court and Power St., to T. E. McShaffrey Constr. Co., 173 South Forge St., $26,951, engrs. est. $27,500. Noted July 26.

O., Alliance — Widening and repaving Main St., asphalt on solid concrete, to C. S. Biery, South Union Ave., $39,776, engrs. est. $41,000; Arch St., asphalt on concrete, to J. Wilson, 62 East Summit St., $107,213, $110,000. Noted Aug. 2.

O., Barberton—Paving 1st St. from Park to Hopocan Aves., vitr. brick, to W. Bernard, Barberton, $26,186, engrs. est. $27,500.

O., Cincinnati — Hamilton Co. paving Sheed Rd., to W. S. Nugent, Mt. Hope Rd., Harrison, $101,641, engrs. est. $109,111; Benson Rd. to Byrnes Conway Co., 32 Bodman Bldg., Cincinnati, $26,465, $29,070. Noted Aug. 15 and 16.

O., Cleveland—Cuyahoga Co., paving 11,150 sq.yd. Sprague Rd. 1, concrete, to Lake Erie Constr. Co., Perry Payne Bldg., $41,322, engrs. est. $43,612; 16,250 cu.yd. Sprague Rd. 3, concrete, to Lane & Freeman, Newman-Stern Bldg., $65,943, $72,177. Noted Aug. 16.

O., Cleveland—Paving Thames Ave., 7,575 sq.yd. vitr. brick, 5,060 lin.ft. stone curbing, 5,060 lin.ft. 4 in. tile sewer, 4,610 cu. yd. earth excav., to Gould & Maybach, 16311 Saranac Rd., $50,395; Mt. Auburn Ave., vitr. brick, to Garland Bros., 5806 Franklin Ave., $61,632; East 112th St. and Corbus Ave., vitr. brick, to Fischer & Williams, Lorain Rd., $10,277. Noted Aug. 23.

O., Cleveland Heights (Warrensville, P. O.)—Asphalt paving Rushleigh and Pembrook Rds., to Spence Bros., 2028 Random Rd., Cleveland, $51,095; Winsford and Dresden Rds., to Rieley Bros., The Arcade, Cleveland, $34,567. Noted Aug. 16.

O., East Liverpool — Resurfacing West 5th St., 6,730 sq.yd. asphalt, 60 yd. brick pavement, etc., to Willite Paving & Surfacing Co., East Liverpool, $27,521. Engrs. est. $35,000.

O., Lakewood (Cleveland P. O.—Paving one street, to Ohio Eng. Co., Elyria, $33,914; 2 streets, to W. E. McHugh, West 73rd St. and Wheeling & Lake Erie R.R., Cleveland, $37,800; 2 streets to Highway Constr. Co., 903 Lorain Co., Bank Bldg., Elyria, $42,140. Noted Aug. 9.

Ind., New Albany—Curbing, laying sidewalks and concrete paving, etc., Charlestown Ave., to McCullough & Condra, New Albany, $4.94 per lin.ft. Engrs. est. $25,000. Noted Aug. 9.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.451 mi. State Trunk Line Rd. 47-8, and 21-10, Sect. A, Shiawassee Co., 6,030 cu.yd. excav., 16,564 sq.yd. concrete, to Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $32,037.

Michigan — State Hy. Dept., Lansing grading and surfacing 3.237 mi. Federal Aid Project 120, Ottawa Co., to J. R. Edelman, Muskegon, 12,018 cu.yd. excav., $0.75, 34,231 sq.yd concrete pavement, $1.64, total $69,713; grading 10.605 mi. Federal Aid Project 67, Sect. E. Washtenaw Co., to Pickett, Armintrout & Goodwin, Bros., Pullman, $47,027; 0.833 mi. State Trunk Line Rd. 47-10, Sect. B, Saginaw Co., to Taylor Constr. Co., Birmingham, $18,546; grading and concrete surfacing 1.324 mi. State Trunk Line Rd. 37-2, Sect. A, Barry Co. to A. E. Greene, 47 Union St. N. E., Grand Rapids, $21,292. Noted Aug. 16.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.83 mi. Federal Aid Project 119, Ottawa Co., to H. A. Hoxie, 1426 4th St., Grand Rapids, 24,520 sq.yd. 8 in. special rein.-con. pavement, $1.67, 26,342 sq.yd. 8 in. rein.-con. pavement, $1.51, total $87,018. Noted Aug. 23.

Ill., Maywood — Grading and concrete paving 2,800 ft. South 3rd St., to Smith & Brown, 128 North La Salle St., Chicago, approximately $30,000.

Wis., Eau Claire—Curbing and concrete paving 13,383 sq.yd. Roosevelt and McKinley Aves., Eau Claire and State Sts., to A. Larson & Co., 418½ South Barstow St., $31,450.

Wis., North Milwaukee—Concrete paving 16,798 sq.yd. 29th, 34th, 38th, 40th and 41st Sts., and 3 alleys, to Kroening Constr. Co., 39th Ave. and Mitchell St. $63,393. Noted Aug. 23.

Ia., Denison—Crawford Co. grading 7.268 mi. Denison-Vail Rd., to E. J. Wilson, Omaha, Neb., 98,488 cu.yd. excav., $0.235, per cu.yd., 15,100 cu.yd. channel change $0.35, etc.; to H. Reimers, Rock Rapids, 1,300 lin.ft. 8 in. and 1,350 lin.ft. 6 in. tile, $0.18 and $0.135 respectively.

Ia., Des Moines — Paving 43,324 sq.yd. Keosauqua Way, vitr. brick on 6 in. concrete, to Wright Constr. Co., 211 Flynn Bldg., $3.52 per sq.yd.

Ia., Knoxville—Marion Co. grading 12.27 mi. road northeast and southeast of Pella, to T. Mickle, Newton, 111,614 cu.yd. excav., $32,591; Paulson & James, Thornton, 10,730 lin.ft. 6-12 in. tile, etc., $1,861. Noted July 26.

Ia., Spencer—Clay Co. grading Primary Rds. 256 and 259, 26 ft., to Giep & Claussen, Spencer, 4,308 cu.yd. excav., $1,206; to J. G. McCarty, Sioux City, 59,483 cu.yd. excav., $19,575; to Scothorn & Hartzell, Early, 41,255 cu.yd. excav., $15,058; to F. Miller, Glidden, 66,300 lin.ft. 6 in., 3,700 lin.ft. 8 in. and 3,490 lin.ft. 12 in. tile, etc., $10,665.

Ia., Wapello—Louisa Co. grading 9.95 mi. road southeast and north of Grand View, 26 ft., to Littig Constr. Co., 1st Natl. Bank Bldg., Davenport, 89,887 cu.yd. excav., 528 lin.ft. 15 and 18 in. culvert pipe, $26,861; to V. Hendrix, Letts, installing 8,440 ft. 6-12 in. tile, $1,722. Noted July 26.

Minn., St. Paul—Ramsey Co., grading and gravel surfacing 3,103 cu.yd. Frost Ave., to C. F. Sculley Equipment Co., 212 Dakota Bldg., $25,573; grading and gravel surfacing, etc., 6,301 cu.yd. South Robert St., to D. W. Moore, 894 Edmund St., $76,163. Noted July 19 and 26.

Minn., White Bear (White Bear Lake, P. O.)—Ramsey Co., (St. Paul), grading and paving, etc., 26,000 sq.yd. North Birch Lake Blvd. between Centerville and Bald Eagle Aves., concrete, Class B (limestone), here, to Hanlon & Okes, 338 Lumber Exchange, Minneapolis, $73,000. Noted July 26.

Kan., Wichita—See Sewers.

Kan., Yates Center—For 6,972 sq.yds. vertical fibre brick paving, to J. K. Shinn, Independence. $28,447.

Mo., St. Louis—Paving Kingsbury and Garrison Sts., asphalt, to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $22,620 and $30,836 respectively; Lucas Ave., asphalt, to Bridges Street Paving Co., Arcade Bldg., $76,249; Loughborough Ave., Willite asphalt, and Channing Ave., asphalt, to Central Paving Co., Fullerton Bldg., $29,93 and $13,148 respectively; Palm St., bitulithic, to Granite Bituminous Paving Co., Railway Exch. Bldg., $9,991; Quincy Ave., rock asphalt, to J. E. Perkinson, 3237 Carter St., $22,984. Noted Aug. 22.

Mo., St. Louis — Bd. Pub. Serv., City Hall, grading, surfacing and installing water pipe along private right of way from Hog Hollow Rd. to new waterworks at Howards Bend, to Frazier-Davis Constr. Co., Arcade Bldg., $46,332. Noted Aug. 16.

Ark., Walnut Ridge—To C. L. Hager, Walnut Ridge, grading and paving in Impvt. Dist. 2, 15,000 sq.yds. Topeka top, concrete base $3.05 per sq.yd., 5,450 cu. yds. excav. $0.60, 42,000 sq.yds. gravel $0.58, etc.

Tex., Dallas — Curbing, guttering and warrenite bitulithic paving Haskell St. from State to Cole Sts., to Central Bitulithic Co., Praetorian Bldg., $47,212. Engrs. est. $47,000.

Tex., Nacogdoches—For 17,000-18,000 sq. yd. brick paving with asphalt filler, on various streets, to Panhandle Paving Co., Lubbock, $65,000.

Okla., Barnsdall—Grading and paving 5 blocks 4th and 7th Sts., 26 ft., to M. R. Ammerman, 246 North Market St., Wichita, Kan., 5,300 sq.yd vertical fibre brick at $3.68 per sq.yd., 2,200 cu.yd. earth excav. $0.85, 3,200 lin.ft. curbing and 3,200 lin.ft. gutter $1, etc., total $28,166. Noted Aug. 16.

Arizona—State Hy. Dept., Phoenix, grading, gravel surfacing, etc., 10 mi. Phoenix-Yuma Highway, Federal Aid Project 64-A, to Casion-Caldwell Constr. Co., 39,511 cu. yd. excav., $0.24, 17,896 cu.yd. borrow, $0.21, 23,250 cu.yd. gravel, $0.42, etc., total incl. state furnished cement, $77,373. Noted July 26.

Wash., Montesano—Grays Harbor Co., improving 6.4 mi. Porter-Oakville Highway, 7,500 cu.yd. gravel, to J. L. Quinn, Satsop, $29,138, engrs. est. $30,000.

Wash., Seattle — Bd. Pub. Wks. paving 21st Ave. N. E. et al., 10,520 sq.yd. 6 in. concrete, 750 ft. asphaltic concrete curb, 6,300 ft. concrete curb, etc., to J. L. Smith, Pioneer Bldg., $34,998. Noted Aug. 23.

Wash., Seattle—Bd. Pub. Wks., paving 4th Ave. S. and Spokane St., 7,500 sq.yd. brick block, replace 400 sq.yd. 7 in. con-

Streets and Roads (Continued)

crete, 500 cu.yd. subgrade, to C. L. Creelman; 1079 25th St. N., $42,323. Noted Aug. 23.

California—State Hy. Comn., Sacramento, grading and gravel surfacing 4.5 2 mi. highway between 5 mi. east of Gilroy and San Felipe, Santa Clara Co., to J. P. Holland, 540 Brannan St., San Francisco, $83,104. Engrs. est. $76,755. Noted Aug. 23.

Calif., Corte Madera—Grading, curbing, guttering, laying walks and warrenite paving various streets, to Warren Constr. Co., Bacon Bldg., Oakland, $55,000.

Calif., San Diego—Common Council, improving Imperial Ave. through Encanto Dist., to G. R. Daley, 4430 Boundary St., 180,832 sq.ft. 1½ in. topeka on 3 in. bituminous at $0.17 per sq.ft., etc., total $36,538. Noted Aug. 9.

Calif., San Jose—Grading, concrete curbing, guttering, walks and paving with 1½ in. warrenite bitulithic on 3 in. bituminous, portions Palm, Martha and St. John Sts., to R. H. Crummey, 121 Pearl St., Oakland, to exceed $25,000.

Calif., Yreka — Siskiyou Co. grading Forest Mountain House Rd., to Siskiyou Constr. Co., Yreka, 36,000 cu.yd. excav. at $1.125 per cu.yd., etc. Noted Aug. 23.

Ont., Ford—Concrete paving 10,500 sq. yd. Pellette Rd., to Cadwell Sand & Gravel Co., 228 Sandwich St. W., Windsor, engrs. est. $30,000.

Ont., Ottawa—Carleton Co., 1 mi. bituminous macadam pavement, 20 ft., in Goulbourn Twp., to H. A. McDonald, 36 Bank St., Engrs. est. $40,000. Noted July 19.

Ont., Sandwich — To Cadwell Sand & Gravel Co., 228 Sandwich St., Windsor, concrete paving Fanchette St., $4,341; to S. P. West, Sandwich, Detroit St., $6,513, Rosedale Ave., $9,866, Peter St. $4,785, King St., $14,921, Alexander Ave., $6,897, Bloomfield Ave., $5,271.

Industrial Works

PROPOSED WORK

Conn., Middletown—Wilcox, Crittenden & Co., 3 South Main St., plans 3 story and basement 60 x 60 ft., brick and steel factory, plain foundation. To exceed $40,000. Private plans.

Conn., New London—S. Sulman, 55 Summer St., having plans prepared by F. De Grange, 28 Ocean Ave., 1 story, 60x90 ft. brick and steel garage, plain foundation, Church St. $40,000.

N. Y., Jamestown—Standard Table Co., 92 Steele St., plans repairing and rebuilding 3 story, 40 x 100 ft. plant recently destroyed by fire. $60,000.

N. Y., New York—I. Schwab, c/o C. Schaefer, Jr., archt. and engr., 394 East 150th St., having plans prepared 1 story, 100 x 100 ft., rein.-con., brick and steel garage, West 158th St., $50,000.

N. Y., New York—M. Wertheim c/o Meisner & Uffner, archts., 501 East Tremont Ave., having plans prepared 2 story, 100 x 145 ft., rein.-con., brick and steel garage, Bradhurst Ave. $100,000.

Pa., Johnstown—Penn. Pub. Service Co., 535 Vine St., having plans prepared 2 story and basement, 56 x 106 ft., brick, steel and tile garage, Find St. $70,000. C. J. Lane, c/o owners, engrs.

Pa., Munhall—Mervis Garage, Munhall, having plans prepared by A. G. Wickerham, 517 McClure Ave., Homestead, 2 story and basement, 25 x 110 ft., brick and steel addition to garage, 414 East 8th Ave., $40,000.

Pa., Phila.—Ford Motor Co., Highland Park, Detroit, having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story, 400 x 920 ft., brick and steel plant, plain foundation, 63rd St., here.

Pa., Phila—R. W. Hartnett Co., 1010 Race St., had plans prepared for 3 story and basement, 49 x 93 ft., brick factory, 1025-1027 Cherry St. Private plans.

N. C., Durham—Morven Cotton Mills Co. plans to enlarge plant and purchase new machinery. $100,000.

N. C., Mooresville—Cascade Mills, Inc., having plans prepared by Lockwood, Greene Co., archts. and engrs., Piedmont Bldg., Charlotte, addition to cotton mill. To exceed $50,000.

N. C., Norwood—Norwood Mfg. Co. plans to enlarge plant. $50,000.

Fla., Orlando—See "Waterworks."

Ky., Georgetown—City plans 1 story electric light plant. $40,000. Engineer and architect not selected.

Ky., Paducah—Magle Packing Co., having plans prepared by M. P. Burt, Falls Bldg., Memphis, Tenn., 2 story, 60 x 135 ft., meat packing plant. $75,000.

O., Cleveland — Ormiston Bros., 2708 Franklin Ave., had plans prepared 2 story, 65 x 65 ft. brick and steel factory, 2487 West 25th St. $40,000. Private plans.

O., Steubenville — Standard Oil Co. of Ohio, c/o J. H. Watterson, East Ohio Gas Bldg., Cleveland, plans 1 story brick and steel garage and warehouse, here. $40,000. Private plans.

Ind., Muncie—Muncie Malleable Fdry. Co., Highland Ave., plans 1 story, 70 x 100 ft. addition to foundry. $40,000.

Ind., South Bend — Studebaker Corp., Main and Bronson Sts., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 4 story, 80 x 130 ft. addition to kiln building, brick and rein.-con., flat slab construction, plain foundation.

Mich., Iron River—Peninsular Power Co., 102 North Carroll St., Madison, Wis., having plans prepared by Mead & Seastone, Journal Bldg., Madison, Wis., 1 story, 44 x 60 ft., rein.-con., brick and steel power plant, plain foundation, here. $250,000. Noted Aug. 9.

Ill., Chicago—S. Shobel, 802 Windsor Ave., plans 2 story, 80 x 190 ft., auto sales and garage, rein.-con., brick and steel, 4628-46 Clifton Ave., $80,000. D. D. Meredith, 4750 Sheridan Rd., archt.

Wis., Medford—O. H. Maurer plans 2 story and basement, 60 x 100 ft., rein.-con. and brick factory, plain foundation. $50,000. Engineer and architect not selected.

Wis., Menominee—Bd. of Normal Regents, Capitol, Madison, having plans prepared 1 story, rein.-con., brick and steel power plant and switchboard, plain foundation, here. $74,000. J. C. White, c/o State Power Plant, Madison, engr. Noted Aug. 2.

Wis., Richland Center—L. Trager plans 1 story, 60 x 90 ft. cold storage plant, brick and concrete, plain foundation. $40,000. Engineer and architect not selected.

Minn., St. Paul — Service Oil Co., 322 Hamm Bldg., had plans prepared 3 story rein.-con. and brick warehouse, Chicago, Milwaukee & St. Paul Ry. right of way. $150,000.

Mo., Hannibal — Hamilton-Brown Shoe Co., 12th and Washington Sts., St. Louis, having preliminary plans prepared by W. A. Thun, Granite Bldg., St. Louis, 3 story and basement, 60 x 225 ft., brick factory, Main St. here. $150,000.

Tex., Celina—See "Miscellaneous."

Tex., Edgewood—See "Waterworks."

Tex., Sweetwater—Sweetwater Milling Co. plans to rebuild grain mill and warehouse, recently destroyed by fire. $60,000. Engineer and architect not announced.

Okla., Enid—City plans ice plant. $75,000.

Calif., Beverly Hills—Holsum Bakery, 1802 Hooper St., Los Angeles, plans baking plant. To exceed $100,000.

Calif., Blythe—Southern Sierras Power Co., Pacific Finance Bldg., Los Angeles, plans power plant on Mill Creek, here. To exceed $250,000.

Calif., Los Angeles — Volker Furniture Co. having plans prepared by A. C. Martin, Higgins Bldg., 4 story and basement, 90 x 250 ft., rein.-con. factory, East 7th St.

Calif., San Francisco—Amer. Laundry Co., 3338 17th St., having plans prepared by Shea & Shea, Chronicle Bldg., laundry, fireproof. $100,000.

Ont., Brampton—Brampton Tire & Rubber Co., plans 2 or 3 story and basement, rein.-con., brick and steel factory, plain foundation, $150,000. Engineer and architect not appointed.

Ont., Hamilton—Hamilton Hydro Electric Comn., King St. E., having plans prepared by B. H. Prack, 1 Main St. E., 1 story, brick and steel substation. $50,000.

Ont., Sarnia—Sarnia Oil & Gas Co., Sarnia, having plans prepared for plant. $100,000. E. Wilson, Sarnia, engr.

Ont., Woodstock—W. Wishnack & Son, 3 Mill St., Paterson, N. J., plans plant, here. $50,000.

BIDS DESIRED

Pa., Lewistown—Lewistown Motor Co., South Main St., taking bids 3 story and basement, 88 x 180 ft. cement block and steel garage, South Main St. $100,000. Address D. and B. Wollner, c/o owner.

Wis., Green Bay — Sept. 1, by Foeler, Schober & Stephenson, archts., Nicollet Bldg., 3 and 2 story, brick and concrete, boiler house, laundry and hospital, plain foundation, for St. Josephs Orphanage, Route 5. $150,000.

Wis., Milwaukee — W. J. Jens, branch mgr., International Harvester Co., 217 Oregon St., taking bids and opens same about Sept. 3, 4 story and basement, 100 x 150 ft., brick and concrete warehouse and assembling plant plain and wood pile foundation. Owners Architectural Dept., 606 South Michigan Ave., Chicago, archts. Noted Aug. 2.

Wis., Milwaukee—F. Luber, archt., c/o Milwaukee Electric Ry. & Light Co (owner), 2nd and Syracuse Sts., taking bids 2 story, 52 x 70 ft., brick and concrete boiler house, plain and woodpile foundation, Edison Ave. $65,000.

Wis., Wausauka—Polomis Bros. Co., c/o F. Polomis, Wausauka, taking bids 1 story, 50x90 ft., rein.-con., brick and steel factory, plain foundation. $40,000. Private plans.

Calif., Los Angeles—S. C. Levi, archt., Douglass Bldg., receiving bids 2 story, packing plant, rein.-con., Willow St., for J. Morrell Co., 823 Traction St. $100,000.

Calif., San Francisco—Morrow & Garren, archts., Chronicle Bldg., receiving bids for steel work for 1 story, foundry, steel, concrete and corrugated iron, Spear and Folsom Sts., for Great Western Smelting & Refining Co., Spear and Folsom Sts. $70,000. Bids for balance of work will be taken soon. Noted Aug. 9.

CONTRACTS AWARDED

Mass., Boston — Basil & Hutchins, Tremont and Camden Sts., 1 story and basement, 59x184 ft. concrete garage, wood pile foundation, Columbus Ave., to R. Gauvreau, 71 Marston St., Medford, $50,000.

Conn., Waterbury—Dexter Bakery Co., 1092 North Main St., 3 story, 60 x 100 ft., brick and steel addition to bakery, plain foundation, North Main St., to Tracy Bros. Co., Watertown Rd. Archts. est. $80,000. Noted Aug. 2.

N. Y., Elmira—Amer. La France Co., 2½ story rein.-con. addition to plant, Southside, to F. H. Johnston, 306 West Church St., $75,000.

Pa., Glassmere — Allegheny Plate Glass Co., c/o Ford Motor Co., Highland Park, Detroit, general contract 2 story and basement, 105 x 123 ft. factory, to Cuthbert Bros., Bessemer Bldg., Pittsburgh. Engrs. est. $150,000.

Pa., Phila. — Budd Mfg. Co., 25th and Hunting Park Aves., 6 story 100 x 325 ft. factory with 1 story, 75 x 325 ft. annex, Hunting Park and Wissahickon Aves., to Wark & Co., 219 South Broad St., $600,000. Noted Aug. 9.

Pa., Phila.—H. A. Dreer Inc., 711 Chestnut St., 8 story and basement, 60 x 100 ft., rein.-cin. and brick warehouse and store, 1304-1312 Spring Garden St., to J. N. Gill Contg. Co., Otis Bldg., $175,000.

N. C., Greensboro—Greensboro Warehouse & Storage Co., additions to warehouses, brick and concrete, between 2nd and 3rd Sts., to Southeastern Constr. Co., Trust Bldg., Charlotte. $60,000.

N. C., Henderson—Harriet Cotton Mills, 2 story, 100 x 104 ft. extension to Mill No. 3., to Fiske-Carter Constr. Co., Greenville, S. C.

S. C., Greenville—C. O. Allen, 3 story, 60 x 116 ft., garage and show room, rein.-con. and brick, East Washington St., to Potter & Shackelford Inc., Greenville.

La., New Orleans—Louisiana Oxygen Co., 649 South Front St., 1 and 2 story plant, Eves, Dupre and White Sts., to C. A. Bayley & Co., Interstate Bank Bldg., $45,000.

Ky., Benton — Dark Tobacco Growers Assn., Owensboro, 1 story, brick warehouse, here, to J. Cole, Paducah. Archts. est. $40,000.

O., Cleveland—Amer. Stove Co., 4415 Perkins Ave., 1 story, 72 x 132 ft., brick and steel plant, Hough Ave., to Forest City Steel & Iron Co., 1500 West 110th St. Archts. est. $50,000. Noted Aug. 16.

O., Cleveland—Independent Towel Supply Co., 1822 Central Ave., 1 story, 35 x 80 ft boiler house, brick, steel and concrete, to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $50,000. Noted Aug. 16.

O., Cleveland—Rehmar Fruit Products Co., 6200 Woodland Ave., 2 story and basement, 52 x 66 ft. factory and commercial, brick and timber, to Baker & Cohen, 2283 East 97th St. Archts. est. $40,000.

O., Cleveland—Standard Oil Co., East Ohio Gas Bldg., 1 story, 24 x 24 x 58 x 60 ft. garage and pump house, brick, steel and timber, Berea Rd., to W. Dunbar Co., 8201 Cedar Ave., engrs. est. $40,000; 1

Ind. Work (Continued)

story, 28 x 80 ft. and 32 x 92 ft., brick and steel garage, pump house, stable and wagon house, Babbitt Rd., to J. C. Shafer Co., Erie Bldg. Engrs. est. $50,000.

Mich., Detroit—Berry Bros. Inc. 211 Lieb St., 4 story and basement, 50 x 80 ft. rein.-con. and brick addition to factory, plain foundation, to F. H David Co., 1860 Penobscot Bldg. Noted July 26.

Mich., Ramsey—Ogeloy, Norton & Co. 1 story, 75 x 250 ft. rein.-con., brick and steel power house, plain foundation, to The Foundation Co., 120 Liberty St., New York City. Archts. est. $600,000.

Wis., Madison—Chicago & Northwestern Ry. Co., c/o B. R. Kulp, 2015 South Blair St. 1 story, 50 x 104 ft., brick, rein.-con. and steel power house, plain foundation, to C. W. Gindele Co., 4217 Belle Plaine Ave., Chicago.

Wis., Milwaukee — Shapiro & Weinberg, 31st St. and Auer Ave., 2 story, 45 x 100 ft., brick and timber warehouse, plain foundation, to M. Wachofsky, 539 4th St., Milwaukee. Archts. est. $40,000.

Minn., Minneapolis—O. R. Emruch, 2423 Bloomington Ave., 2 story and basement, 28 x 95 x 123 ft. bakery, garage, etc., brick, concrete and tile, 2601-07 Bloomington Ave., to N. Bruce, 412 McKnight Bldg., $40,000.

Tex., Dallas—Dallas Power & Light Co., Interurban Bldg., will build power plant, concrete and brick, North Dallas and Tuttle Sts., by day labor. $50,000. J. Oran, c/o owner, engr.

Calif., Oakland—H. L. McCoy, c/o A. W. Smith, archt., 1010 Bway., 1 story and mezzanine, concrete garage, 8th Ave. and East 12th St., to G. A. Scott, 685 23rd St., $40,000.

Calif., Sacramento — Ochsner Estate, Ochsner Bldg., 1 story, brick garage and salesroom, 14th and K Sts., to W. Murcell, Ochsner Bldg., $40,000. Reo Motor Car Co., 1309 K St., lessee. Noted July 12.

Calif., San Francisco—Bekins Fireproof Storage Co., 13th and Mission Sts., 7 story and basement, rein.con. warehouse, Geary and Emerson Sts., to Clinton Constr. Co., 923 Folsom St., cost plus percentage basis. Noted Aug. 9.

Calif., San Francisco — Hotel Owners Laundry Assn., 722 York St., 1 story and mezzanine, 90 x 160 ft., laundry, rein.-con., Howard and Falmouth Sts., to Fennell & Chisholm, 180 Jessie St., $47,675. Noted Aug. 23.

Calif., San Francisco—Nucoa Butter Co., Bryant & Mariposa Sts., general contract, 2 and 3 story, factory, rein.-con., Mariposa St. near Bryant St., to J. A. Bryant, 180 Jessie St., cost plus percentage basis. Noted June 28.

Calif., San Francisco — Pacific Gas & Electric Co., 445 Sutter St., steel for 1 story, 70 x 100 ft. steam plant, rein.-con. and steel, Stevenson St. near 6th St., to Brode Iron Wks., 37 Hawthorne St. Noted Aug. 23.

Calif., San Francisco—C. E. Phillips Co., 907 Bryant St., 2 story, concrete warehouse, Brannan and Gilbert Sts., to Coast Constr. Co., 918 Crocker Bldg., $40,000. Noted Mar. 15.

Calif., San Francisco—S. Schell, 180 Jessie St., will build 3 story, brick and steel factory, 11th and Natoma Sts., by day labor. $55,000. Private plans.

Calif., San Jose—Santa Clara Co., rein.-con. power house on county hospital grounds, to D. J. Bryon, 1249 Alameda St., $18,587; mechanical equipment to J. E. O'Mara, 218 Clara St., San Francisco, $78,-166 (omitting fire apparatus. Noted May 31.

Ont., Ford—Ford Motor Co. of Canada, 112 x 148 ft. rein.-con., brick and steel power plant, plain foundation to S. E. Dinsmore Co., Giles Bldg., Windsor, $400,-000, also 2 and 4 story, rein.-con., brick and steel byproducts building and coal bunker, plain foundation, to J. V. Gray Constr. Co., Confederation Life Bldg., Toronto. Archts. est. $200,000. Noted July 26 and Aug. 24.

Ont., Timmins — Hollinger Consolidated Gold Mines Ltd., two 12,500 hp. 60 ft. head vertical turbines in connection with hydroelectric power plant at Island Portage on Abitibi River, to Dominion Eng. Co. Ltd., Lachine, Que. Noted Aug. 2.

Buildings

PROPOSED WORK

Mass., Brighton (Boston P. O.)—Schools—Schoolhouse Dept., Boston, having plans prepared by F. I. Cooper Corp., 172 Tremont St., Boston, 4 story, brick, concrete and stone addition to Winship School, wood pile foundation, here, $225,000; having plans prepared by O'Connell & Shaw, 134 Newbury St., Boston, probably 5 story, brick, concrete and stone, wood pile foundation, here, $1,200,000. T. P. Glynn, Boston, chn.

Mass., Dalton — High School — Schoolhouse Dept., Boston, having plans prepared by Newhall & Blevins, 9 Park St., Boston, probably 4 story, brick, concrete and stone, wood pile foundation, here. $240,000. T. P. Glynn, Boston, chn.

Conn., Hartford—Church—Church of St. Ann rejected bids 50 x 130 ft., brick and terra cotta, plain foundation, Park and Putnam Sts. $165,000. Will readvertise. H. F. Ludorff, 122 Main St., New Britain, archt. Noted June 21.

Conn., Torrington—Business—G. D. Lyford, 43 Main St., plans 3 story, 115 x 130 ft., brick, plain foundation, East Main St. To exceed $150,000. Engineer and architect not selected.

N. Y., Buffalo—Store and Office—Tri-State Realty Corp., Cleveland, O., plans remodeling Hotel Iroquois, 5 story, brick, into store and office, Main St., here. $500,000. A. H. Bramson, pres.

N. Y., New York City—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, 5 story, 200x 216 ft., brick and stone, Boynton Ave. and 172nd St. $2,300,000.

N. Y., Rochester — Club — Elks' Home Buildings Assn., Clinton St., having plans prepared by J. F. Jackson, 137 East 45th St., New York City, 2 story, brick and steel addition, $325,000. R. Decker, pres. F. Frey, E & B Bldg., engr.

N. J., Collingswood — Exchange — Bell Telephone Co., 19th and Arch Sts., Phila., having plans prepared by J. T. Windrim, Commonwealth Bldg., Phila., 3 story and basement, 50 x 115 ft., brick, steel and stone, Haddon Ave., here. $165,000.

Pa., Phila.—Office, etc.—Fleischman Co., 1223 Race St., having plans prepared by L. L. Tieman, 693-701 Washington St., New York City, 2 story and basement, 86 x 154 ft., concrete, brick and steel office and garage, 20th and Venango Sts., here. $150,000.

Md., Baltimore — Store — Bernheimer-Leader Stores Co., Howard and Lexington Sts., having plans prepared by Smith & May, Calvert Bldg., 8 story, 122 x 156 ft., concrete and brick, concrete pile foundation, Lexington and Howard Sts, $1,500,-000. Noted Aug. 2.

W. Va., Bluefield—Municipal—C. R. Ridley, city mgr., receiving plans and sketches until Oct. 9, for 3 story and basement. $175,000.

W. Va., Huntington—High School—Bd. Educ. having plans prepared by R. M. Bates, Jr., 416 11th St., Lincoln High School, 2 story and basement, 100 x 130 ft., brick, tile, stone and steel, 25th St. and 10th Ave. $150,000.

N. C., Birmingham — Office — Southern R.R. Co., 4th and Sycamore Sts., Cincinnati, O., having plans prepared by G. H. Godley, Southern Railroad Bldg., Cincinnati, O., 10 story, here. $150,000.

N. C., Charlotte—Office—Southern R.R. Co., 4th and Sycamore Sts., Cincinnati, O., takes bids early in Sept., 3 story, rein.-con., brick and stone, here. G. H. Godley, Southern Railroad Bldg., Cincinnati, O., archt. Noted July 12.

N. C., High Point—Dormitories—Methodist Protestant College plans 2 dormitories, on campus, $75,000 each, also plans to install central heating plant, $28,000.

N. C., Raleigh—Library—State College having plans prepared by H. Upjohn, Grand Central Terminal Bldg., New York City, library, on campus. $200,000. E. C. Brooks, pres.

N. C., Wilson—Courthouse and Jail—Wilson Co. takes bids about Nov. 1, 3 story, 145 x 145 ft., Indiana limestone, granite and marble. $350,000. F. A. Bishop, Petersburg, Va., archt. Noted Aug. 16.

Ga., Columbus — High School — Plans election early in November to vote on $450,000 bonds for modern high school.

Fla., Frostproof — Hotel — Fort Clinch Hotel Co., having plans prepared by M. L. Elliott, Citizens Bank Bldg., Tampa, 3 story, 50 room, rein.-con., brick and steel. $150,-000.

Fla., Jacksonville—Hotel—N. L. Bedford and associates, United States Trust Bldg., having plans prepared by Greely & Benjamin, Bisbee Bldg., for hotel. $500,000.

La., New Orleans—Sunday School—C. A. Ramsey, chn. Building Com. of First Baptist Church, St. Charles and Delachaise Sts., having plans prepared by F. J. McDonnell, Hibernia Bank Bldg., and soon takes bids for 5 story, 47 x 1[illegible] ft., brick annex to church used as Sunday School $150,000 to $175,000.

Ky., Hazard—Hotel—Combs Hotel Co. plans 4 story, 80 x 120 ft., marble and tile. $300,000.

Ky., Louisville—Medical—University of Louisville, 111 West Chestnut St., plans medical school. $500,000. Engineer and architect not selected.

O., Akron—Club House—Ohio Athletic Club plans 10 story club house, $400,000. W. H. Curley, secy. of Commercial Savings & Loan Co., South Main St., secy.

O., Ashtabula—Office—Premier Mortgage Co., Johnson Blk., plans 6 story, 72 x 220 ft., Center St. $160,000. P. N. Berner, pres.

O., Cincinnati—School—Bd. Educ., 511 West Court St., plans 2 story, rein.-con. and brick, Waverly St. $180,000. A. L. Ficheimer, 325 East 4th St., archt.

O., Cleveland—Apartment—A. L. and C. Freeman, 10829 Earle Ave., had plans prepared by L. R. Walker and J. L. Mayer 1900 Euclid Ave., 3 story and basement, 58 x 132 ft., brick, 11420 Euclid Ave. $150,000.

O., Cleveland—Apartment—M. Helper, 1900 Euclid Ave., having preliminary plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 4 story, 70 x 100 ft., brick, 1858 East 20th St. $150,000.

O., Cleveland—Apartment—J. Nozik, 996 Linn Dr., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 87 x 132 ft., brick and timber, 1924 East 75th St. $200,000.

O., Cleveland—Bank and Office—United Banking & Saving Co. having preliminary plans prepared by Walker & Weeks, 1900 Euclid Ave., 6 story, brick, steel and concrete, West 26th St. and Lorain Ave. $350,000. A. H. Serbig, 2000 West 25th St., pres.

O., New Philadelphia — Theatre, etc. — New Philadelphia Amusement Co. having plans prepared by C. J. Marr, New Philadelphia, and takes bids about Oct. 1. 4 story, 66 x 264 ft., brick, concrete and steel, West High St. $250,000.

O., Willoughby—Club—Olympic Country Club Co., 420 Haima Bldg., Cleveland, plans 3 story, brick, steel and concrete, Lake Shore Blvd., here. $300,000. Wright & Hohl, 4614 Prospect Ave., Cleveland, archts.

Mich., Detroit—Apartment—B. S. Fineman, 416 Book Bldg., having plans prepared by M. H. Finkel, 1333 Book Bldg., 4 story and basement, 5 wings about 50 x 70 ft., 4 courts, brick, steel and stone, plain foundation, Epworth Blvd. and Vancouver Ave.

Mich., Detroit—Office—Conductors Protective Assurance Co., 2222 1st Natl. Bank Bldg., having plans prepared by A. E. Harley, 2631 Woodward Ave., 6 story and basement, 57 x 108 ft., rein.-con. and brick, plain foundation, 14th and Michigan Aves. $150,000.

Mich., Detroit—Sales and Show Room—Packard Motor Co., 574 East Woodbridge Ave., having plans prepared by A. Kahn, 1060 Marquette Bldg., 2 story, 25 ft. high, 104 x 144 ft., rein.-con., brick and steel, plain foundation, Jefferson Ave. $150,000.

Mich., Detroit—School—Liggett School, 155 Stimson Ave., had plans prepared by A. Kahn, 1000 Marquette Bldg., 2 story and basement, 55 x 182 ft. rein.-con., brick and steel, plain foundation, Burns Ave. $175,000.

Mich., Flint — Administration — Durant Motor Co., having plans prepared by A. Kahn, 1000 Marquette Bldg., 3 story and basement, 48 x 217 ft., rein.-con., brick and steel, plain foundation, $150,000.

Mich., Lansing—Office—United Cigar Co., 44 West 18th St., New York City, having plans prepared by W. S. Holmes & Co., Tussing Bldg., 4 story, 75 x 135 ft., South Washington St., here. $200,000.

Mich., Ypsilanti—School—Bd. Educ. having plans prepared by W. S. Holmes & Co., Tussing Bldg., Lansing, 2 story and basement, brick. $175,000.

Ill., Chicago—Apartment—P. F. Olsen, archt., 720 Cass St., preparing plans 3 story and basement, 110 x 163 ft., rein.-con., brick and steel, University Ave., $225,000. Owners name withheld.

Ill., Chicago — Hotel — Oldefest & Williams, archts., preparing plans 605 North Michigan Ave., 3 story and basement, 50 x 150 ft., rein.-con., brick and steel, Bryn Mawr & Winthrop Aves., $225,000. Owners name withheld.

Ill., Chicago—School—St. Cyril's Catholic Parish, 6411 Dante Ave., plans 1 and 2 story, 120 x 135 ft., rein.-con., brick and steel, 64th St. and Dante Ave., $150,000.

Buildings (Continued)

Z. T. Davis, 400 North Michigan Ave., archt.

Wis., Ashland—College—Northland College having preliminary plans prepared by Ceas, Shepherd & Ceas, 445 Milwaukee St., Milwaukee, brick and concrete, incl. dormitory, gymnasium, library, administration bldg., etc. $300,000. J. D. Brownell, pres.

Wis., Kenosha—High School—Bd. Educ. had plans prepared by J. D. Chubb, 109 North Dearborn St., Chicago, and takes bids about Oct. 1, 3 story and basement, 248 x 250 ft., brick, tile and concrete. $1,000,000. E. F. Powers, secy.

Wis., Milwaukee—Apartment—Wisconsin Building & Investment Co., c/o E. G. Schroeder Co., archts., 405 Bway., plans 3 story and basement, 60 x 145 ft., brick and concrete, plain foundation, 31st and Wells Sts. $150,000.

Wis., Wausau—Hotel—Bellis Hotel Co., 3rd and Scott Sts., having preliminary plans prepared by A. C. Eschweiler, 141 Wisconsin St., 3 story and basement, 52 x 120 ft., brick and concrete addition, plain foundation. $150,000. Noted May 31.

Ia., Iowa City—Fraternity House—S. A. E. Fraternity, having plans prepared by H. E. Hunter, 503 Security Bldg., Cedar Rapids, brick and stone, here. $150,000.

Ia., Ottumwa—Young Men's Christian Assn., having plans prepared by Croft & Boerner, 1006 Marquette Ave., Minneapolis, Minn., 4 story and basement, rein.-con. and brick. $150,000.

Minn., Benson—School—Bd. Educ. plans 2 or 3 story and basement, rein.-con., brick and tile. $150,000. E. H. A. Danetz, clk. Engineer and architect not selected.

Minn., Minneapolis — Church — Hope Lutheran Church, c/o L. E. Rosholt, 5108 Dupont Ave. S., having plans prepared by Sund & Dunham, 512 Essex Bldg., brick church. $150,000.

Minn., Minneapolis — Church — Central Lutheran Church, c/o O. L. Loberg, 2020 Elliot Ave., plans 110 x 130 ft., stone, 4th Ave. S. and Grant St. $170,000. Engineer and architect not announced.

Kan., Ft. Scott — Church — First Presbyterian Church, 3rd and Crawford Sts., having revised plans prepared by C. O. Brostrom, 621 Reliance Bldg., Kansas City, Mo., and soon takes bids 2 story and basement, native stone. $150,000. Noted March 1.

Kan., Leavenworth—City Hall—Sept. 6, to vote on $200,000 bonds for 2 or 3 story, 90 x 125 ft. city hall. Noted Aug. 23.

Kan., Salina—Schools—Bd. Educ. plans election to vote on $225,000 bonds to complete Theodore Roosevelt Junior High School and erect 2 grade schools.

Ark., Hot Springs — Hospital — Baptist Natl. Hospital, Inc., plans 5 story hospital. $2,000,000. W. Cooksey, 722 Garland Ave., Hot Springs Natl. Park, vice pres. and genl. mgr.

Tex., Lubbock—College—Texas Technical College, Ft. Worth, plans college, here. $850,000. Engineer and architect not selected.

Tex., Lubbock—High School—Bd. Educ. plans 3 story and basement, brick and concrete. $200,000. Engineer and architect not announced. S. Sanders, city engr.

Tex., Marshall—Hotel—J. Kieffer having plans prepared and takes bids after Jan. 1, 4 story and basement, 85 x 150 ft., rein.-con., brick and stone, plain foundation. $150,000. Engineer and architect not named.

Tex., San Antonio—Bank—San Antonio Natl. Bank, 213 West Commerce St., and San Antonio Loan & Trust Co., 215 West Commerce St., receiving tentative plans from architects for 6 story, 70 x 100 ft., rein.-con., brick, stone and steel, 215 West Commerce St. $400,000.

Okla., Marble City—Dormitories, etc.—Dwight Mission soon takes bids 2 and 3 story, two dormitories and superintendents residence, brick and concrete. $150,000. C. W. Dawson, 201 Merchants Natl. Bank Bldg., Ft. Smith, Ark. archt.

California — Hospitals — State Hospital Comn., Sacramento, having plans prepared by B. G. McDougall, Forum Bldg., Sacramento, additional buildings at 6 state hospitals. $700,000.

Calif., Los Angeles—Apartment—Central Investment Co., 5006 South Vermont St., having plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 12 story, concrete, brick and steel, Grand Ave.

Calif., Los Angeles—Apartment—Graystone Apartment Co., having plans prepared by Curlett & Beelman, Union Bank Bldg., 14 story, 140 x 200 ft., rein.-con., Sycamore Ave. $1,500-000.

Calif., Los Angeles—Apartment—C. G. Guthrie, 1326 Brand Blvd., plans 6 story and basement, probably rein.-con., Central Ave. and Bway. St. To exceed $250,000. Engineer and architect not selected.

Calif., Los Angeles—Apartment—D. M. Merris, c/o H. G. Johnston, archt., 301 Pacific Finance Bldg., had plans prepared 13 story and basement, rein.-con., Wilshire and Catalina Sts.

Calif., Los Angeles—Hotel and Apartment—H. A. Pierce, c/o Ransford-Goble Co., archts., 1643 Highland Ave., having plans prepared 4 story and basement, concrete and brick, Orange St. $150,000.

Calif., Los Angeles—Store and Loft—Wayside Press, c/o Norenberg & Johnson, archts., Los Angeles Ry. Bldg., having plans prepared 4 story and basement, 150 x 150 ft., rein.-con., 9th and San Pedro Sts.

Calif., Marysville—Memorial—Yuba Co. plans to appropriate $150,000 or more for soldiers memorial.

Calif., Oakland — Apartment — Colt Investment Co., 306 14th St., having plans prepared by L. H. Ford, 306 14th St., 3 story and basement, brick, 15th and Madison Sts. $170,000.

Calif., Oakland—Auto Sales—Schirmer-Bugbee Co., archts., Thayer Bldg., preparing plans 3 story and basement, rein.-con., 12th and Oak Sts. $175,000. Owners name withheld.

Calif., Oakland—College—St. Marys College, Bway. and Hawthorne Sts., had preliminary plans prepared by J. J. Donovan, Tapscott Bldg., group of fireproof buildings, Foothill Blvd. $2,000,000.

Calif., Oakland—Store—Jackson Furniture Co., 14th and Clay Sts., having plans prepared by H. H. Meyers, Kohl Bldg., San Francisco, 4 story and basement, rein.-con., 13th and Clay Sts. $150,000.

Calif., Sacramento—Store and Loft—H. H. and W. S. Hart, 2199 3rd Ave., plans 3 story and basement, brick, K St. between 11th and 12th Sts. $250,000. Engineer and architect not selected.

Calif., Santa Monica — Schools — Voted $600,000 bonds for schools. Noted June 7.

Calif., Santa Rosa—Schools—Santa Rosa High and Santa Rosa Grammer School Dists. take bids about Sept. 1, rein.-con. and brick high school group and rein.-con. grammer school. To exceed $400,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Mar. 29.

Calif., San Francisco—Apartment—J. J. Angeli, 875 Bush St., had plans prepared by C. H. Barrett, 342 Grant Ave., 6 story and basement, concrete, Bush St. near Mason St. $150,000.

Calif., San Francisco—Apartment—C. Johnson, 36 Steiner St., having preliminary plans prepared by H. C. Baumann and E. Jose, 251 Kearny St., 6 story and basement, rein.-con., Jones and Sacramento Sts. $200,000.

Calif., San Rafael—Schools—City having plans prepared by Shea & Shea, Chronicle Bldg., San Francisco, 2 story, rein.-con. or brick high school, also gymnasium and auditorium additions to present schools. To exceed $350,000.

Calif., Santa Ana—Store and Office—M. E. Durfee, archt., Kraemer Bldg., Anaheim, preparing plans about 10 story, fireproof, 4th and Bush Sts. Owner's name withheld.

Que., Notre Dame De Grace—Hospital—Homeopathic Hospital of Montreal, 44 McGill College Ave., Montreal, plans hospital here. $250,000.

Ont., Ottawa—Bank—Bank of Nova Scotia, 39 King St., W., Toronto, having plans prepared by J. M. Lyle, 230 Bloor St. W., Toronto, 1 story and basement, 60 x 100 ft. rein.-con., brick, steel and stone, plain foundation, here. $150,000.

Ont., Toronto — School — Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, Turnberry Ave. $150,000.

Ont., Woodstock—School—J. H. Grenfell, archt., 421 Dundas St., preparing plans and soon takes bids for 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, for Bd. Educ. $150,000.

BIDS DESIRED

N. Y., Buffalo—School—Sept. 5, by Bd. Educ., 1401 Telephone Bldg., 2 story and basement, 175 x 200 ft., rein.-con. and brick addition to P. S. 42, Grant St. To exceed $200,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., New York — Apartment — J. H. Taylor Constr. Co., c/o Delano & Aldrich, archts. and engrs., 126 East 38th St., will build 14 story, 100 x 133 ft., brick, steel and stone, Park Ave. and 86th St. Work will be done by separate contracts under supervision of architects.

N. J. Atlantic City—Hotel—Sept. 23, by F. B. Off, Hotel Brighton, 5 story and basement, rein.-con., brick, steel, granite, limestone, terra cotta and granite addition to Hotel Brighton, $400,000-$500,000. L. Titus, Hotel Strand, archt.

N. J., New Brunswick—Recitation—Sept. 6, by B. G. Lewis, Dept. Agencies and Institutions, Trenton, 3 story, 58x180 ft., rein.-con., brick and steel, at State Agricultural College for Women, here. $250,000. A. B. Mills, State Office Bldg., Trenton, archt. Noted Aug. 23.

Pa., Phila. — Apartment — Hawthorn Realty Co., 1619 Chestnut St., will build 4 story and basement, 115 x 176 ft., brick, steel and stone, 42nd and Walnut Sts. $500,000. Work will be done by separate contracts. C. E. Oelschlager, 1621 Walnut St., archt.

Pa., Phila.—Clubhouse—Tyrians of Phila., 3320 North Broad St., taking bids 50 x 200 ft., brick, steel and stone, 3320 North Broad St. G. J. Reich, 5126 North 10th St., engr.

Ga., Atlanta—High School—Sept. 7, by Bd. Educ., c/o W. P. Price, purch. agt., City Hall, 3 story, rein.-con., brick and steel, rock foundation. Edwards and Sayward, Chamber Commerce Bldg., archts, Lockwood, Green & Co., Forsyth Bldg., engrs. Noted May 31.

Ala., Birmingham—Sanitarium—Oct. 10, by B. Price, archt., Jefferson Co. Bank Bldg., steel, Salter Rd. and Shades Creek, for Jefferson Co. $150,000-$200,000.

Ky., Louisville—Infirmary—Sept. 10, by D. X. Murphy & Bros., archts, 714 Louisville Trust Bldg. 6 story Preston St. and Eastern Parkway, for St. Josephs Infirmary, 4th St. $1,500,000 Noted May 31.

O., Athens—Schools—Sept 12, by Bd. Educ., two 2 story, brick, steel and concrete. $185,000. F. R. Burgess, pres. F. J. Porter, Keith Bldg., Cleveland, archt.

O., Cincinnati—Exchange—Sept. 4, by H. Hake, archt., Telephone Bldg., 2 story, 55 x 109 ft., rein.-con. and brick, plain foundation, Harrison and Epworth Sts., known as Western Hills Exchange, for Cincinnati & Suburban Bell Telephone Co., Telephone Bldg. $300,000. Noted Aug. 23.

O., Cleveland—Commercial and Apartments—L. B. Cahn, 10615 Grantwood Ave., taking bids 3 story and basement, 51 x 133 ft., brick and timber, Euclid and Stanwood Aves. $150,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Oakwood (Dayton P. O.)—School—Sept. 20, by Bd. Educ., 3 story, rein.-con., brick and stone, plain foundation, Far Hills Ave. $450,000. A. E. Clagett, supt. schools.

Mich., Detroit—School—Sept. 10, by Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 83 x 244 ft. and 46 x 101 ft., rein.-con., brick and steel addition, plain foundation, Cortland Ave. $300,000. Malcomson & Higginbotham, Industrial Bank Bldg., archts.

Ill., Chicago—Hotel—S. Olson c/o C. W. Westerlind, archt., 179 West Washington St., receiving bids 3 story and basement, 75 x 125 ft., rein.-con., brick and steel, 723 Belmont Ave., $200,000.

Wis., Gratiot — Church — St. Josephs Catholic Congregation c/o A. Garrity, pastor, taking bids 2 story, 75 x 110 ft., brick, rein.-con. and steel, plain foundation. $150,000. Private plans.

Wis., Green Bay—Hospital—See "Industrial Works."

Wis., Milwaukee—Apartment—Sept. 4, by Leenhouts & Guthrie, archts., 424 Jefferson St., 4 story, 90 x 107 ft., brick, tile and concrete, plain foundation, Prospect Ave. $200,000. Owner's name withheld.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., taking bids 3 story and basement, 47 x 136 ft., rein.-con. and brick, plain foundation, 16th St., for Ranco Corp., c/o architects.

Wis., Milwaukee—Apartment—G. Zagel & Bro., archts., 144 Oneida St., taking bids 3 story, 100 x 103 ft., brick, tile and concrete plain foundation, Folsom Pl., for Retep Realty Co., c/o architect. $150,000.

Wis., Milwaukee—Home—Kirchhoff & Rose, archts., 210 Sycamore St., taking bids 3 story and basement, 100 x 103 ft., brick and concrete, plain foundation, 640 Cass St., for St. Johns Home for Aged Women. $150,000.

Wis., Niagara — Hotel — Kimberly & Clark Co., Neenah, taking bids 3 story and basement, 65 x 110 ft., tile and concrete, plain foundation, $150,000. Private plans.

Minn., Albert Lea—Lodge—Sept. 3, by I. O. O. F. Lodge, c/o C. J. Dudley, founda-

Buildings (Continued)

tion and 1st floor slab for 3 or 4 story and basement, 83 x 146 ft., rein.-con., brick and tile, Newton and Williams Sts. Bids on superstructure will be taken later. $150,000. W. L. Alban, 347 Endicott Bldg., St. Paul, archt.

Minn., Winona—School, etc.—Sept. 11, by State Bd. Control, Capitol, St. Paul, 3 story and basement, 200 x 210 ft. main building with power plant in basement, rein.-con., brick and tile, State Teachers College, here. $550,000. C. H. Johnston, 715 Capitol Bank Bldg., St. Paul, archt. Noted Sept. 21.

Kan., Wichita — Club — E. Forsblom, archt., Sedgwick Bldg., taking bids and opens same about Sept. 1, 6 story and basement, 140 x 150 ft., rein.-con., brick and stone, for B. P. O. E., Elk Hall, 115½ North Topeka St., $150,000. H. A. Noble, Reliance Bldg., Kansas City, Mo., engr.

Mo., St Louis—School—Sept. 5, by Bd. Educ., 911 Locust St., 3 story, rein.-con., brick and stone, Walnut St. $255,000. R. M. Milligan, Bd. Educ. Bldg., archt. Noted July 19.

Ark., Brinkley—Church—Southern Presbyterian Church, c/o A. H. Milwer, chn., taking informal bids 2 story and basement, brick veneer, plain foundation. $150,000. Private plans.

Calif., Berkeley—Office and Store—F. M. Young of Berkeley Building Co., Colusa and Solano Sts., receiving bids 6 story and basement, rein.-con., University Ave. near Shattuck Ave., for F. Koerber, 2647 Ashby St. $150,000. Engineer's and architect's name withheld. Noted July 26.

Calif., Fullerton — Auditorium — City Council receiving bids 2 story, brick, steel and concrete. To exceed $150,000. W. H. Austin, 1st Natl. Bank Bldg, Long Beach, archt.

Calif., Los Angeles—High School—Sept. 7, by Bd. Educ., 2 story and basement, 141 x 190 ft., auditorium and domestic science building rein.-con., Highland Ave. and Sunset Blvd., for Hollywood High School. $275,000. N. F. Marsh, Bway. Central Bldg., archt.

Calif., Los Angeles—School—Sept. 14, by Bd. Educ., 3 story, 100 x 265 ft., rein.-con., 16th and Hill Sts. $400,000. Noerenberg & Johnson, Los Angeles Ry. Bldg., archts. Noted July 12.

Calif., San Francisco—Store and Club—Meyer & Johnson, archts., 742 Market St., receiving bids steel for 13 story, Post St. between Powel and Mason Sts., for Elks Club.

BIDS RECEIVED

Conn. Hartford — High School — High School Com., 3 story, brick and steel, plain foundation, Maple Ave., bids on (a) total contract with Wheeler system of ventilating (b) total contract with re-circulating system (c) without gymnasium (d) without gymnasium and kitchen (e) separate bid on swimming pool, from H. Wales Lines Co., 134 State St., Meriden, (a) $1,587,000 (b) $1,619,792 (c) $1,371,536 (d) $1,347,242 (e) $56,448. Archts. est. $1,500,000. Noted July 19.

N. Y., New York—Police Station—R. E. Enright, police comr., 240 Centre St., Aug. 21, new 42nd Precinct Police Station House and garage, Wadsworth Ave. and West 182nd St., from S. Guidera, 672 East 223rd St., with concrete, $198,867, and without concrete, $195,867. Noted Aug. 16.

Pa., Harrisburg—Office—B. H. Boyd, secy. Dept. Property & Supplies, Capitol Bldg., general contract completing office building, from C. W. Strayer, Green and Forster Sts., $629,667. Noted Aug. 2.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 3 story and part basement, 110 x 215 ft. rein.-con., brick and steel, plain foundation, Cameron Ave., from F. N. Cooper, 6370 Gratiot Ave., $546,346. Noted Aug. 2.

Calif., Los Angeles—High School—City, for Fairfax High School, brick and rein.-con., general contract from North-Pacific Constr. Co., Detwiler Bldg., $445,900; plumbing, from W. W. Brooks, 820 West 48th St., $35,600; heating, from J. Hokum, 4312 South Moneta St., $59,422. Noted Aug. 2.

Que., Montreal—City Hall—For constructing concrete floors, roof, etc., of new city hall from J. A. Durocher, 91 Chambly St. $229,400. Noted July 5.

CONTRACTS AWARDED

N. Y., Buffalo—Store and Loft—Holling Press, 498 Washington St., 10 story, 43 x 125 ft., rein.-con., Washington St., to Boehm Bros., Inc., 101 Norfolk Ave., Buffalo, to exceed $250,000.

N. Y., New York—Hotel—L. Kemper, archt. and engr., 7529 Cass St., Detroit, Mich., brick, steel and stone hotel, Times Sq. Sect., to Lynch Constr. Co., 1 Pershing Sq Archts. est. $1,500,000. Owner's name withheld.

N. Y., New York City—Office—Masro Realty Co., c/o Springsteen & Goldhammer, archts and engrs., 32 Union Sq., will build brick, steel and stone, 36 West 47th St., by day labor. Archts. est. $750,000.

Pa., Phila.—Store—See "Industrial Wks."

Pa., Pittsburgh—Hotel Apartment—Bellefield Co., Farmers Bank Bldg., extending present 2 wings and altering Schenley Hotel, 10 story and basement, Forbes St., Bigelow Blvd. and 5th Ave., to Mellon-Stuart Co., Oliver Bldg. Archts. est. $500,000.

Tenn., Dyersburg — Bank and Office — Citizens & First Natl. Bank, general contract 8 story, brick, concrete and steel, to Thomas & Sons Constr. Co., Memphis, $220,000. Noted July 12.

Tenn., Knoxville—Institute—L. S. Pope, dir. institutions, Nashville, school, 2 dormitories, heating plant, etc., for Deaf and Dumb Institute, here, to P. L. Nicholson Constr. Co., Knoxville, $242,000. Noted July 19.

Tenn., Nashville—Office—Nashville, Chattanooga & St. Louis R.R., 1000 Bway., 8 story, rein.-con., terra cotta and brick, 10th St. and Bway., to Southern Ferro-Concrete Co., Trust Co. of Georgia Bldg., Atlanta, Ga. Archts. est. $20,000. Noted Aug. 23.

O., Canton — Office and Storeroom — Methodist Episcopal Church, 3 story, brick, steel and concrete, Cleveland Ave. and 2nd St. S.W., to R. G. Witters, Witters Bldg., Cleveland Ave. N.W., $156,500.

O., Cleveland — Commercial — Phoenix Mortgage Co., c/o D. Lawrence, pres., Natl. City Bldg., 2 story and basement, 135 x 282 ft., brick, steel and timber, East 17th St. and Euclid Ave., to Piscopo Constr. Co., 2233 Edgehill Rd. Archts. est. $150,000. Noted July 19.

O., Cleveland Heights (Warrensville P. O.)—Church, etc.—Fairmount Blvd. Presbyterian Church, 1, 2 and 3 story, brick, steel and concrete, Fairmount Blvd., to Craig-Curtiss Co., 4614 Prospect Ave., Cleveland. Archts. est. $150,000. Noted May 10.

O., East Cleveland (Cleveland, P. O.)—High School—Ursaline Academy of the Sacred Heart, 3 story, 75 x 135 ft., brick and steel, Euclid and Belmore Aves., to Hebring Co., 1832 West 54th St., Cleveland. Archts. est. $150,000.

O., Lima—Schools—Bd. Educ., two 2 story and part basement, 40 x 120 ft., brick, steel and concrete, known as Roosevelt and Jefferson Schools, to J. Baldauf, Marion, $148,432. Noted Aug. 9.

Mich., Lansing—Temple—Masonic Temple Assn., 213 South Capitol St., 7 story, 100 x 165 ft., South Capitol St., to Reniger Constr. Co., 336½ East Michigan Ave., $577,000. Noted July 5.

Ill., Chicago—Office—Graham, Anderson, Probst & White, archts., 80 East Jackson Blvd., 6 story, 167 x 568 ft., addition, 25th and Southport Sts. to R. C. Wieboldt Co., 1534 West Van Buren St., for Chicago, Milwaukee & St. Paul R.R. Co., 80 East Jackson Blvd., $350,000.

Ill., Chicago—Office and Sales—H. Defrees, c/o Rapp & Rapp, archts., 190 North State St., 6 story, 100 x 142 ft., rein.-con., brick and steel, 401-409 Rush St., to H. Erickson Co., 139 North Clark St. Archts. est. $500,000.

Wis., Milwaukee — Temple — Milwaukee Elks Club, c/o W. F. Eichfeld, secy. building comrs., 208 City Bank Bldg., 8 story and basement, 110 x 145 ft., concrete, brick and metal lumber, plain foundation, Mason and Marshall Sts., to Raulf Co., 428 Grand Ave. Archts.. est. $1,500,000. Noted July 5.

Ia., Burlington—Municipal—City, general contract 3 story, and basement, rein.-con., brick, tile and stone, to H. B. Nelson, 45 McCullough Bldg., Davenport, $121,234. Noted Aug. 9.

Ia., Cedar Rapids—Court House and Jail—Linn Co., general contract 3 story, rein.-con., brick, tile and stone, here, to Madsen & Peterson, 646 Builders Exch., Minneapolis, Minn., about $505,000. Noted Aug. 2.

Kan., Coffeyville — Auditorium — City, general contract 3 story and basement, 115 x 172 ft., rein.-con., brick and tile, to Universal Constr. Co., Coffeyville, $143,800. Noted July 28.

Kan., Ft. Scott—Church—First Presbyterian Church, 3rd and Crawford Sts., general contract, 2 story, brick and stone, to J. H. Reddick, 619 North 20th St., Ft. Smith, Ark., $117,495. Noted Aug. 30.

Ark., Little Rock — Hospital — Missouri Pacific Hospital Assn., Railway Exchange Bldg., St. Louis, Mo., 4 story and basement, rein.-con. and brick, concrete foundation, here, to J. Stewart Co., Boatmens Bank Bldg., St. Louis, Mo. Archts. est. $600,000.

Ark., Little Rock — Hospital — Trinity Hospital, c/o M. Ogden, 20th and Main Sts., will build 3 story and basement, rein.-con. and brick, plain foundation, Main St., by day labor. $200,000. Private plans.

Calif., Centerville—School—Washington Union High School Dist., general contract 2 story, concrete, to E. T. Leiter & Sons, 3601 West St., Oakland, $183,387. Noted Aug. 23.

Calif., Ensenada—Club—Ensenada Beach Club, 2 story, 150 x 350 ft., hollow tile, to Winters Constr. Co., Railway Bldg., Los Angeles.

Calif., Long Beach — Apartment — W. Bradford, et al., rein.-con., Ocean Ave., to Ransford-Goble Co., 1643 Highland Ave., Los Angeles, about $1,000,000.

Calif., Long Beach—Hotel-Apartment—Bolivar Holding Co., c/o Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, 14 story and basement, rein.-con., East Ocean Ave., here, to Scofield Eng. Co., Pacific Finance Bldg., Los Angeles, $1,000,000.

Calif., Los Angeles—Apartment—L. V. Mayell, 5 story and basement, brick and concrete, 9th and Lake Sts., to A. T. Hesse, Hollingsworth Bldg., $350,000.

Calif., Los Angeles—Apartment—E. A. Wayt, 13 story, 83 x 100 ft., rein.-con., 6th St. and Carondelet Ave., to Richardson Building and Eng. Co., 631 South Berendo St., $700,000. Noted May 3.

Calif., Los Angeles — Office — Eighth & Olive Holding Co., 13 story and basement, 55 x 168 ft., rein.-con., 8th and Olive Sts., to W. Simpson Constr. Co., Bank of Italy Bldg., $600,000. Noted Aug. 9.

Calif., Los Angeles—Office—Taft Realty Co., 5751 Hollywood Blvd., 12 story and basement, 120 x 137 ft., rein.-con., Hollywood Blvd. and Vine St., to Edwards, Wildey & Dixon, Black Bldg., $850,000. Noted Aug. 9.

Calif., Madera—Bank and Office—First Natl. Bank, Yosemite Ave. and D St., 2 story and basement, granite, Yosemite Ave., to Brown & Stafford, Madera, $150,000.

Ont., Haileybury—Court House—Dept. Pub. Wks., Parliament Bldgs., Toronto, general contract 3 story and basement, rein.-con., brick, steel and stone, plain foundation, here, to Dickie Constr. Co., Ryrie Bldg., Toronto. Archts. est. $150,000.

Ont., Hamilton — Hospital — Hamilton General Hospital, 3 story and basement, rein.-con., brick and steel, plain foundation, general contract to W. H. Cooper, Clyde Bldg., $98,702; marble and tile to Kent, Garvin & Co. Ltd., 20 Catherine St. N., $24,731. Noted Mar. 15.

Ont., Windsor—School—Separate School Bd., general contract 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, to Muxlow & Gale, 1342 Howard Ave., $134,000. Noted Aug. 9.

Federal Government Work

PROPOSED WORK

Me., Bar Harbor—Garage, etc.—Spec. 4900—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans garage and repairs to administration building, at Radio Station, here.

Fla., Pensacola—Distribution System, etc.—Spec. 4715—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans steam distribution and heating systems, at Naval Air Station, here.

Mich., Harbor Beach—Stone—U. S. Engineer, 337 Federal Bldg., Detroit, received no bids Aug. 16, furnishing and placing 10,000 tons stone on breakwater, here. Will readvertise. Noted Aug. 2.

Calif., San Pedro—Removal—Spec. 4903—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans removal and relocation of Russell Hall, here.

BIDS DESIRED

Mass., Chelsea—Reroofing—Spec. 4886—Sept. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., reroofing buildings, at Naval Hospital, here. Former bids rejected. Noted Aug. 23.

R. I., Providence—Dredging—Sept. 25, at office U. S. Engineer, dredging in Pawcatuck River, Rhode Island and Connecticut; adv. E. N.-R. Aug. 30.

D. C., Wash.—Laboratory—Sept. 19, at Dept. of Interior, for pathological laboratory at Freedmen's Hospital. F. M. Goodwin, asst. secy.

Federal Government Work (Continued)

D. C., Wash.—Repairing Roof—Spec. 4902—Sept. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairing roof of Naval Hospital. Noted Aug. 23.

Ill., Rock Island—Lumber—Sept. 5, at office U. S. Engineer, furnishing about 250,000 ft. Douglas fir lumber.

Ill., Rock Island—Lumber—Sept. 7, at office U. S. Engineer, furnishing 280,947 ft. Douglas fir lumber.

Wis., Milwaukee—Breakwater—Sept. 28, at office U. S. Engineer, constructing breakwater in Harbor, here; adv. E. N.-R. Aug. 30.

Mo., Excelsior Springs—Hospital—Spec. 4887—Sept. 6, by Bureau Yards & Docks, Navy Dept., Wash., D. C., for subsistence and ward buildings, at U. S. Veterans Hospital, here. G. A. McKay, acting ch.; adv. E. N.-R. Aug. 30. Noted July 26.

Tex., Galveston—Dredging—Sept. 25, at office U. S. Engineer, dredging in Trinity River; adv. E. N.-R. Aug. 30.

Arizona — Road — Sept. 11, by E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, constructing 15.583 mi. Prescott-White Spar Forest Highway, Prescott National Forest, Yavapai Co., 423,404 cu.yd. excav., etc.

Calif., San Diego — Roads and Walks—Spec. 4901—Sept. 12, by Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks at Marine Barracks, Naval Operating Base, here. Noted Aug. 23.

BIDS RECEIVED

Tenn., Memphis—Sub Post Office—Treas. Dept., Wash., D. C., sub post office, here, from Regan Constr. Co., 2 East Lexington Ave., Baltimore, Md., $122,900. Noted July 26.

New Mexico—Road—E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, constructing or improving 11.09 mi. Glenwood-Reserve Sect. 4, Forest Highway, Datil National Forest, Catron Co., here, from Cotey, Black & Co., Clifton, Ariz. Noted July 26.

CONTRACTS AWARDED

Me., Saco — Post Office — Treas. Dept., Wash., D. C., constructing U. S. Post Office, here, to Sloan Dickinson Corp., 136 Liberty St., New York City, $45,421 (14 months). Noted May 10.

N. Y., Chelsea—Water Supply—Treas. Dept., Wash., D. C., water supply system, at U. S. Veterans Hospital, here, to Noland-Clifford Co., 330 28th St., Newport News, Va., $53,655. Noted Aug. 23.

Pa., Phila.—Remodeling—Treas. Dept., Wash., D. C., remodeling Post Office and Court House, here, to Pearce Bros. Inc., 220 West 42nd St., New York City, $7,350 (50 days).

Md., Annapolis—Water Softening Plant—Spec. 4836—Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant, at Naval Academy, here, to Permutit Co., 440 4th Ave., New York City, $13,815 (150 days). Noted Aug. 23.

Md., Baltimore—Dredging—U. S. Engineer, dredging channels and in harbor, to Sanford & Brooks Co., 24 Commerce St., $66,609; Arundel Corp., Pier 2, Pratt St., $118,994. Noted Aug. 23.

Ky., Louisville—Pump—U. S. Engineer, P. O. Box 72, one vertical centrifugal pump to deliver 7,000 g.p.m. against head of 25 ft., complete with motor base, etc., to Morris Machine Wks., Baldwinsville, N. Y., $1,210. Noted July 26.

O. Marietta—Wire Grills, etc.—Treas. Dept., Wash., D. C., wire grills, partitions, etc., in U. S. Post Office, here, to Dickison & Hockingberry, Marietta, $5,961 (60 days).

Ill., Chicago—Removal Pile Protection—U. S. Engineer, 537 South Dearborn St., removal pile protection in Harbor, here, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., $8,555. Noted July 19.

Ill., Elgin — Extension — Treas. Dept., Wash., D. C.; extension of mailing vestibule in U. S. Post Office, here, to H. T. Seiger, 396 Lovel St., $3,247 (45 days).

Ill., Evanston—Extension—Treas. Dept., Wash., D. C., extension, with driveway at U. S. Post Office, here, to Garber & Cissel, Inc., Bethlehem, Pa., $13,500 (150 days). Noted Aug. 23.

Kan., Fort Scott—Mailing Shed—Treas. Dept., Wash., D. C., mailing shed for U. S. Post Office, here, to Ruff Contg. Co., 523 East Main St., $4,447 (90 days). Noted Aug. 23.

Mo., St. Louis — Remodeling — Treas. Dept., Wash., D. C., remodeling Custom House, Court House and Post Office, here, to Hellermann Contg. Co., 407 North 8th St., $6,590. Noted Aug. 23.

H. T., Pearl Harbor—Storage Facilities—Spec. 4760—Bureau Yards & Docks, Navy Dept., Wash., D. C., mine storage facilities at Naval Operating Base, here, to W. F. Martens, 112 Cutler Bldg., Rochester, N. Y., $80,406 (280 days). Noted July 26.

Miscellaneous

PROPOSED WORK

Swimming Pool—Hartford, Conn.—Common Council plans swimming pool in one of city parks. $25,000. R. N. Clark, city engr.

Fill—New York—Cities of Albany and Watervliet plan to purchase and fill in Erie Canal, and to construct 9 mi. Erie Blvd., 5,500 cu.yd. concrete, 40,000 cu.yd. earth fill, etc., $500,000. J. G. Brennan, City Hall, Albany, engr.

Stadium—Wash., D. C.—C. Griffith, 1307 Buchanan St., N. W., plans addition to concrete stadium in American League Park, seating capacity 35,000. $125,000-$150,000.

Heating Plant—High Point, N. C.—See "Buildings."

Retaining Walls, etc.—Ohio—P. R. Murray, dir. Pub. Wks., Hartman Bldg., Columbus, soon takes bids repair of concrete and stone walls, also building new retaining walls, at Buckeye Lake in Fairfield and Licking Counties. $40,000.

River Terminal—Cincinnati, O.—Cincinnati River-Rail Transfer Co., Front and Harriet Sts., plans river freight terminal, 50,000 tons capacity. $50,000-$75,000.

Parks and Playground, etc.—Columbus, Ga.—Plans election early in November to vote on $50,000 bonds for city parks and playgrounds, also $150,000 bonds for stadium.

Elevation of Tracks—Ft. Wayne, Ind.—See "Railways" under Indiana.

Transmission Line, etc.—Herndon, Kan.—Sept. 11, to vote on $30,000 bonds for electrical transmission line and electric light system. W. B. Rollins & Co., 521 Railway Exchange Bldg., Kansas City, Mo., engrs.

Electrical Distribution System—Laurence, Kan.—Bowersock Mill & Power Co., had plans prepared electrical distribution system. $200,000. A. L. Mullegren, 555 Gates Bldg., Kansas City, Mo., engr.

Power Line, etc.—Celina, Tex.—Fris-Co.-Lina Utilities Co. c/o H. E. Blumberg, 1606 North Washington Ave., Dallas, plans power line and additions to electric plant, here. $50,000. Private plans.

Power Line—Ft. Worth, Tex.—Ft. Worth Power & Light Co., 1001 Commerce St., making plans 6 mi. power line from 25th and North Main Sts. to Lake Worth. $25,000-$30,000. Engineer not announced.

Park Improvements, etc.—Taylor, Tex.—Having plans prepared park improvements, swimming pool, walks, sewers, etc. $50,000 bonds voted for project. G. V. Hyde, mayor.

Elevator — Valley View, Tex. — Whaley Mill & Elevator Co. having plans prepared elevator. To exceed $60,000. Engineer and architect not announced.

Harbor Improvements—Berkeley, Calif.—Alameda Co. plans election to vote on $50,000-$100,000 bonds for harbor improvements.

Gas Distributing System—Long Beach, Calif.—Voted $3,000,000 bonds for municipal gas distributing system.

Street Sweeper — Marysville, Calif. — City Trustees appropriated $7,500 for motorized street sweeper. J. O. Wanzer, city mgr.

Park Improvements—Palo Alto, Calif.—City plans to purchase 12 acre site and improve for park purposes. J. F. Bxybee, Jr., city engr.

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., plans 14,200 ft. 20 in. c.i. gas main from Wellington St. to William and McGill Sts. $174,574. E. S. Stanton, supt. gas. distribution.

Subway—Montreal, Que.—See "Streets and Roads."

Drilling Wells — Arkona, Ont. — High Pressure Oil & Gas Co., Arkona, plans to drill wells for oil and gas. $35,000. W. J. Hyatt, c/o owner, engr.

Arena — Niagara Falls, Ont. — Niagara Falls Arena Ltd., Niagara Falls, soon takes bids 1 story, 85 x 185 ft. ice arena, rein.-con., brick and steel, plain foundation. $150,000. F. Barber and Associates Ltd., 45 Jarvis St., Toronto, engrs.

Wharf — Pembroke, Ont. — Dept. Pub. Wks., Parliament Bldgs., Ottawa, soon takes bids wharf here. $125,000. K. M. Cameron, acting ch. engr.

BIDS DESIRED

Enclosures—New York, N. Y.—Sept. 10, by Transit Comn., 49 Lafayette St., enclosures of 3rd addition to shops at Lenox Ave. and 148th St. yard.

Lumber and Piles—New York, N. Y.—Sept. 7, by E. W. Buckley, comr., Dept. of Purchase, Municipal Bldg., lumber and piles, to Dept. of Docks.

Fill—Newark, N. J.—Sept. 6, at office of T. L. Raymond, dir. Dept. Streets and Pub. Impvts., City Hall, placing 51,000 cu.yd. dry cinder fill and 135,000 cu.yd. cellar dirt or approved similar fill, at Port Newark Terminal.

Elimination of Grade Crossing—Youngstown, O.—Sept. 17, by city, eliminating grade crossings at Westlakes Crossing, Himrod, Wick and North Aves., Ardale, Oak, Watt, Walnut, Champion, Phelps, Hazle and Holmes Sts., also bridges at Belmont and West Aves. City's share of cost $200,000 and railroads $200,000. I. Turner, city engr.

Levee System—Illinois—Sept. 5, by Dept. Pub. Wks. and Buildings, Division Highways, Springfield, for State Farm Levee System, 122,566 cu.yd. earthwork, etc. C. H. Older, ch. highway engr.

Wall—Waterloo, Ia.—Sept. 5, by Waterloo River Front Comn., constructing 525 lin.ft. river wall, 2,000 cu.yd. concrete, etc. J. E. Dempster, secy. R. B. Slippy, city engr.

Paving Materials—St. Paul, Minn.—Sept. 4, by H. W. Austin, city purch. agt., 15,000 bbl. portland cement, asphalt sand, asphalt filler, etc., for paving various streets. G. M. Shepard, city engr.

Culvert—St. Louis, Mo.—Sept. 25, by Bd. Pub. Serv., 208 City Hall, rein.-con. culvert to carry Delmar Blvd. across River Des Peres. $131,000. Former contract withdrawn. L. R. Bowen, 301 City Hall, engr. Noted Aug. 9.

Shell Ballast, etc.—Houston, Tex.—Sept. 6, by Harris Co. Navigation Dist., shell ballast, rails, ties, switches, frogs, etc., for construction Turning Basin Classification Yard. $50,000. Howe & Wise, co. engrs.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Park Bd. Municipal Bldg. heating and ventilating apparatus in Wing K, Metropolitan Art Museum, from Austin Eng. Co, 124 West 42nd St., $137,472; interior finish from Lustig & Weil, 103 Park Ave., $535,691. Noted Aug.16.

Changes to Railroad Structure — Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York City, Aug. 23, making changes in railroad structure to provide for crossover, Route 8, Sect. 5, Bushwick Ave., here, Agreement "CP," from D. Levy, 303 Fifth Ave., $47,148. Noted Aug. 16.

Concrete Mixer, etc.—St. Paul, Minn.—City, Aug. 14, cement-concrete mixer on caterpillar motor driven loader and tank, for Water Dept., from Milwaukee Concrete Mixer Co., 955 30th St., Milwaukee, Wis., $1,300 and $5,859; T. W. Rosholt Co., 421 South 5th St., Minneapolis, $1,000.

Subway — Sacramento, Calif. — City Comrs. subway through levee at 16th and B Sts., from Tieslau Bros., 2819 Grove St., Berkeley, $102,000; Davison & Nicolsen, 324 West Lafayette St., Stockton, $102,000. Noted Dec. 21.

CONTRACTS AWARDED

Underground Fire Alarm System—St. George, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., New York, portion of underground cable fire alarm system, here, to J. Sugden Co., 17 West 42nd St., New York, $13,375. Noted Aug. 23.

Pier—Phila., Pa.—Dept. Wharves, Docks & Ferries, completing Porter St. Pier 84, to Snare Corp., 1524 Chestnut St., $500,000. Noted July 19.

Culverts—Toledo, Ia.—Tama Co., to E. Wolfe, Toledo, 24 concrete box culverts, $16,355; to Mamminga Constr. Co., Morrison, 15 concrete box culverts. $8,950.

Cement—St. Paul, Minn.—H. W. Austin, city purch. agt., 5,340 bbl. cement for paving Front St. between Dale and Rice Sts., to St. Paul Builders Material Co., 605 Ryan Bldg., $2.80 per bbl. del. Noted Aug. 23.

Steel Rails—Montreal, Que.—Canadian Pacific Ry., Windsor Sta., furnishing 35,000 tons 80 lb. steel rails to Algoma Steel Corp., Saulte Ste. Marie, Ont.

Dyke—New Westminster, B. C.—South Westminster Dyking Comrs., Cloverdale, 4½ mi. earth dyke along Fraser River opposite here, to A. B. Palmer & Co., 736 Granville St., Vancouver. $35,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Red Bank—Oceanport Road

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Red Bank-Oceanport Road No. 45, Sect. 1, with reinforced concrete pavement, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on Wednesday, Sept. 5, 1923, at 11:00 A.M. Daylight Saving Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer, at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.
Attest:
CHARLES E. COLE, Clerk,
Freehold, N. J., August 8, 1923.

Bids: Sept. 19.

Gates and Valves

Chicago, Ill.

Sealed proposals for the construction of Lockport Lock, also Water gates and valves of Lockport and Marseilles Locks will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 121, State House, Springfield, Illinois, until Nine o'clock Central Standard Time of the 19th day of September, 1923, and then publicly opened and read.

The contract, if let, will be awarded to the lowest responsible bidder. The work includes about 170,000 cu.yds. rock excavation, 97,000 cu.yds. of concrete and 2,100 tons of steel work.

Copies of the plans, specifications proposal blank, etc., may be obtained at the office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois upon receipt of a check for Five Dollars made payable to the Division of Waterways, which sum will not be returned.

The State reserved the right to reject any or all proposals.

OFFICIAL PROPOSALS

Bids: Sept. 5.

Bridge Repairs

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of a new timber floor and repairs and additions to the steel trusses of Bridge No. R-1 Keyport, (Length 670 ft., width of roadway 24 ft.) and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday Sept. 5th, 1923 at 11:00 A.M. (Daylight Saving Time).

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB, Director.
CHARLES E. COLE, Clerk.
Freehold, N. J., August 20th, 1923

Bids: Sept. 17.

Incinerator

St. Petersburg, Fla.

Sealed proposals for the construction of an incinerator to incinerate garbage at the rate of 80 tons in 10 hours will be received at the office of the Director of Finance of the City of St. Petersburg, Florida until 7:30 P.M., September 17th, 1923.

Proposals will be received on designs by Incinerator Companies and upon designs prepared by the City. Separate proposals will be received for the construction of the furnaces, the reinforced charging floors with approaches and roof, and the 115 foot chimney in the City design.

Plans and specifications may be obtained upon deposit of $25.00 which will be refunded upon return of the plans in good condition within 10 days after receiving bids.

Each proposal must be accompanied by a certified check made payable to the Director of Finance for 5 per cent of the amount bid. City reserves the right to reject any or all bids.

H. T. DAVIS,
Directors of Finance.

OFFICIAL PROPOSALS

Bids: Sept. 18.

Dredging

Lake Charles, La.

Sealed bids will be received by the Police Jury of the Parish of Calcasieu, Louisiana, until noon, Tuesday, September 18th, 1923, in the Police Jury Room, Courthouse, Lake Charles, Louisiana, and then and there publicly opened, for the construction of the following Sections of a Navigation Channel 30 feet deep x 125 feet wide at the bottom, from Lake Charles to the Sabine River.

1. The construction of a Pilot Ditch from Station 1185 on Sabine River east to Station 974, a distance of 4 miles. This Ditch will be 12 feet deep and 40 feet wide on the bottom. Approximately 380,000 cubic yards of earth to be moved.
2. The construction of a channel 30 feet deep and 125 feet wide at the bottom from Station 1185 on Sabine River, east along the Intracoastal Canal to Station 974, a distance of 4 miles. Approximately 2,400,000 cubic yards of earth to be moved.
3. The construction of a Pilot Ditch from Station 954, on the Intracoastal Canal, east to Station 914, a distance of 4.54 miles. This ditch will be 12 feet deep and 40 feet wide on the bottom. Approximately 520,000 cubic yards of earth to be moved.
4. The construction of a channel 30 feet deep and 125 feet wide on the bottom, from Station 974, east along the Intracoastal Canal to Station 714—4.92 miles long. Approximately 2,750,000 cubic yards of earth to be moved.
5. The construction of a Pilot Ditch from Station 330 on the Intracoastal Canal, west to Station 580, a distance of 4.72 miles. This ditch will be 12 feet deep and 40 feet wide on the bottom. Approximately 600,000 cubic yards of earth to be moved.

   This work is all along the present Intracoastal Canal which is 5 feet deep and 40 feet wide on the bottom. The land is marsh. Elevation of plus 1.0 to plus 4.0. Average stage of water plus 1.5. All depths and elevations refer to Mean Low Gulf datum.

   Separate bids will be required on each section.

Bids to be accompanied by certified check for 5% of amount of bid. Bond for one-half amount of each contract will be required of the successful bidders. Plans and specifications can be obtained from the office of Parish Engineer, Room 1, Court House, Lake Charles, Louisiana.

The Police Jury reserves the right to reject any or all bids.

V. R. REEVES,
President, Police Jury.
FRED SHUTTS,
Parish Engineer.

Bids: Sept. 10.

Concrete Pavement

Greenwich, Conn.

Sealed proposals will be received by the Highway Commission of Greenwich, Conn., at the office of the Superintendent of Highways, Town Hall, Greenwich, Conn., until 4:00 o'clock P.M., Daylight Saving Time, September 10, 1923, for 7,000 square yards of reinforced concrete pavement, grading and other incidental work on the River Road.

Plans and specifications may be seen at the office of the engineers, S. E. Minor & Co., Room 31, Smith Building, Greenwich, Conn.

The Greenwich Highway Commission
By P. L. MINOR,
Supt. of Highways.

CONSTRUCTION NEWS

Engineering News-Record, September 6, 1923

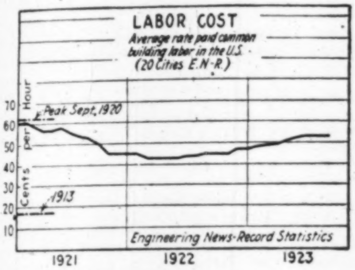
The Construction Barometer

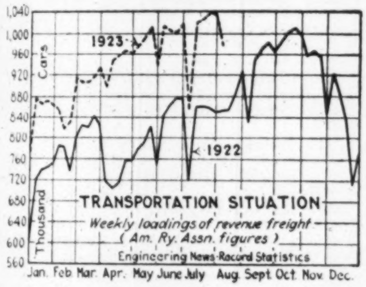
Drop in Volume of Construction—Heavy Car Loadings—Production Slow

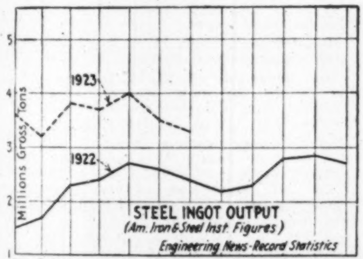
DESPITE the seasonal slowdown in production of basic materials, the sustained buying power of the public is evidenced in freight loadings of over a million cars per week since July 7. During the week of **Aug. 11**, however, there was a decrease of 59,968 cars, due to the observance of President Harding's funeral.

Construction cost has shown little change during the month, but volume has been steadily falling off since June.

Private construction work, for the week ended Aug. 30, exceeded public by 23 per cent, in actual money value. This is the first instance where private work, throughout the entire country, eclipsed public construction, since the week of July 19.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Aug. 16	$13,110,000	$6,281,000	$19,391,000
Aug. 23	17,906,000	13,376,000	31,282,000
Aug. 30	12,669,000	15,178,000	27,847,000
3 Weeks	$43,685,000	$34,835,000	$78,520,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

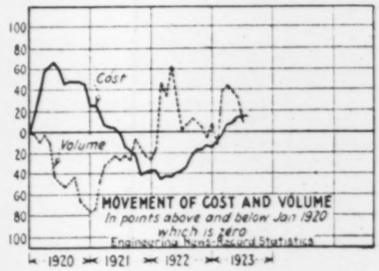
Week Ended	No.	Public Work	No.	Private Work
Aug. 16	4	$783,000	14	$4,860,000
Aug. 23	15	4,755,000	27	7,140,000
Aug. 30	8	1,496,000	25	12,342,000
3 Weeks	27	$7,034,000	66	$24,342,000

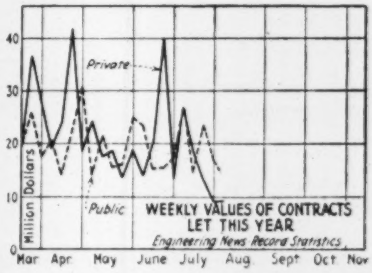
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

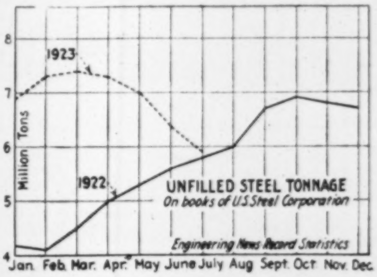
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Aug. 16	29	160	66	29	37
Aug. 23	28	215	87	35	45
Aug. 30	28	189	66	33	51

FIR TIMBERS DOWN—OTHER BASE PRICES UNCHANGED

	Quoted on Sept. 6, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl...	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.....	63.00	59.00	July 5
Fir, San Fran., M. ft...	38.00	41.00	Aug. 30
Common labor, hr.....	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

Bids Close		See Eng. News-Record
	WATERWORKS	
Sept. 7	New York, N. Y.	Aug. 30
Sept. 11	Hoboken, N. J.	Aug. 9
Sept. 12	Lamar, S. C.	Aug. 30
Sept. 12	Cleveland, O.	Sept. 6
Sept. 14	Cleveland, O.	Sept. 6
Sept. 15	Grand Island, N. Y. ...... Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 17	Crescent City, Fla.	Sept. 6
Sept. 17	Trenton, Mich.	Sept. 6
Sept. 18	McAlester, Okla. .... Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 19	South Bend, Ind.	Aug. 30
Sept. 25	Ft. Worth, Tex. .... Adv. Sept. 6.	Sept. 6
Sept. 26	Providence, R. I. .... Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 27	Bordentown, N. J. .... Adv. Sept. 6.	Sept. 6
	SEWERS	
Sept. 8	Lewistown, Pa.	Sept. 6
Sept. 10	New York	Aug. 30
Sept. 11	Laredo, Tex.	Aug. 30
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	Hartford, Conn.	Sept. 6
Sept. 12	Monessen, Pa.	Aug. 30
Sept. 13	Cleveland, O.	Sept. 6
Sept. 13	Baltimore, Md.	Sept. 6
Sept. 14	Wash., D. C. .... Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 14	Wash., D. C. .... Adv. Sept. 6.	Sept. 6
Sept. 14	Millville, N. J.	Sept. 6
Sept. 15	Norfolk, Va.	Aug. 30
Sept. 17	Plainfield, N. J. .... Adv. Sept. 6.	Sept. 6
Sept. 24	St. Petersburg, Fla.	Aug. 23
Sept. 24	Leesburg, Fla. .... Adv. Sept. 6.	Sept. 6
Sept. 26	Berwick, Pa. .... Adv. Sept. 6.	Sept. 6
Nov. 1	Fort Erie, Ont.	Aug. 23
	WASTE DISPOSAL	
Sept. 17	St. Petersburg, Fla.	Aug. 23
	BRIDGES	
Sept. 7	New York	Aug. 30
Sept. 10	Pittsburgh, Pa.	Sept. 6
Sept. 10	Jacksonville, Fla.	Sept. 6
Sept. 10	Alpena, Mich. .... Adv. Sept. 6.	Sept. 6
Sept. 11	New Jersey	July 26
Sept. 11	Indiana	Aug. 30
Sept. 11	California	Aug. 30
Sept. 11	New Jersey .... Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 11	Cadiz (Arvada P. O.), Wyo.	Sept. 6
Sept. 11	Edgemont, S. D.	Sept. 6
Sept. 12	Ft. Wayne, Ind.	Aug. 23
Sept. 15	Canadian, Tex.	Aug. 23
Sept. 15	Pawkuska, Okla.	Sept. 6
Sept. 19	Phila., Pa.	Aug. 23
Sept. 20	Greenwood, Miss. .... Adv. Sept. 6.	Sept. 6
Sept. 24	New Jersey .... Adv. Sept. 6.	Sept. 6

Bids Close		See Eng. News-Record
Sept. 27	Chicago, Ill. Adv. Sept. 6.	Sept. 6
Sept. 28	Oil City, Pa. Adv. Sept. 6.	Sept. 6
Oct. 2	Mermentau, Mich. Adv. Aug. 30 and Sept. 6.	Aug. 30
Nov. 30	Sydney, Australia Adv. Apr. 19, May 3, July 5, Aug. 2 and Sept. 6.	Apr. 19

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Sept. 10	Corpus Christi, Tex.	Sept. 6
Sept. 11	Clarksdale, Miss.	Aug. 30
Sept. 14	Los Angeles, Calif.	Sept. 6
Sept. 15	Foley, Mo. Adv. Sept. 6.	Sept. 6
Sept. 18	Lake Charles, La.	Aug. 23

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 7	Trenton, N. J.	Aug. 30
Sept. 10	Dallas, Tex.	Aug. 23
Sept. 10	Madison, S. D.	Aug. 23
Sept. 10	St. Paul, Minn.	Aug. 23
Sept. 10	Greenwich, Conn.	Aug. 30
Sept. 10	Michigan	Aug. 30
Sept. 10	Sanford, Fla.	Aug. 30
Sept. 10	Seattle, Wash.	Aug. 30
Sept. 10	Groesbeck, Tex.	Aug. 30
Sept. 10	Wichita, Kan.	Aug 30
Sept. 10	Independence, Mo.	Sept. 6
Sept. 10	Greensburg, Pa.	Sept. 6
Sept. 10	Niagara Falls, N. Y.	Sept. 6
Sept. 10	Forest, Miss.	Sept. 6
Sept. 10	Long Island City, N. Y.	Sept. 6
Sept. 11	Pennsylvania	Aug. 30
Sept. 11	Anamosa, Ia.	Aug. 30
Sept. 11	Massachusetts	Aug. 30
Sept. 11	Alabama	Aug. 16
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	San Diego, Calif.	Aug. 23
Sept. 11	Alabama	Aug. 23
Sept. 11	Austin, Tex.	Aug. 23
Sept. 11	Sonora, Tex.	Aug. 23
Sept. 11	Washington	Aug. 30
Sept. 11	South Dakota	Sept. 6
Sept. 11	Cheyenne, Wyo.	Sept. 6
Sept. 11	Corinth, Miss.	Sept. 6
Sept. 11	Wilson, Okla.	Sept. 6
Sept. 11	Wapello, Ia.	Sept. 6
Sept. 11	Maryland Adv. Sept. 6.	Sept. 6
Sept. 11	Michigan	Sept. 6
Sept. 12	Faribault, Minn.	Aug. 23
Sept. 12	Michigan	Aug. 30
Sept. 12	Newton, Tex.	Aug. 30
Sept. 12	Lisbon, O.	Aug. 30
Sept. 12	Cleveland, O.	Sept. 6
Sept. 12	Marysville, Calif.	Sept. 6
Sept. 12	Cresson, Pa.	Sept. 6
Sept. 12	Cleveland, O.	Sept. 6
Sept. 12	Brooklyn, N. Y.	Sept. 6
Sept. 12	Davis, Okla.	Sept. 6
Sept. 12	Pittsboro, Miss.	Sept. 6
Sept. 13	Point Pleasant Beach, N. J. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 13	St. George, N. Y.	Sept. 6
Sept. 13	Walthall, Miss.	Sept. 6
Sept. 14	New York Adv. Sept. 6.	Sept. 6
Sept. 14	Gainesville, Fla.	Sept. 6
Sept. 14	Ohio	Sept. 6
Sept. 14	McComb, Miss.	Sept. 6
Sept. 14	Lisbon, O.	Sept. 6
Sept. 15	Niagara Falls, N. Y.	Aug. 30
Sept. 15	Tonawanda, N. Y. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 15	Conroe, Tex.	Sept. 6
Sept. 15	Honey Grove, Tex.	Sept. 6
Sept. 15	Bonham, Tex.	Sept. 6
Sept. 17	Virginia Adv. Sept. 6.	Sept. 6
Sept. 17	California	Sept. 6
Sept. 17	Kansas City, Kan.	Sept. 6
Sept. 17	Ivanhoe, Minn.	Sept. 6
Sept. 18	Marlin, Tex.	Aug. 30
Sept. 18	Clinton, Okla.	Sept. 6
Sept. 18	Louisiana	Sept. 6
Sept. 18	Waurika, Okla.	Sept. 6
Sept. 18	Alabama	Sept. 6
Sept. 19	Delaware Adv. Sept. 6.	Sept. 6
Sept. 19	Belvidere, N. J. Adv. Aug. 30 and Sept. 6.	Sept. 6
Sept. 19	Water Valley, Miss.	Sept. 6
Sept. 20	Newton, N. J. Adv. Sept. 6.	Sept. 6
Sept. 20	Alpine, Tex.	Sept. 6
Sept. 20	Tuscaloosa, Ala.	Sept. 6
Sept. 24	Carrollton, Miss.	Aug. 30
Sept. 24	Bronson, Kan.	Sept. 6
Sept. 24	Leesburg, Fla Adv. Sept. 6.	Sept. 6
Sept 24	Asbury Park, N. J. Adv. Sept. 6.	Sept. 6
Sept. 25	Independence, Kan.	Sept. 6
Sept. 25	St. Louis, Mo.	Sept. 6
Sept. 26	Kentucky	Aug. 23
Sept 26	Kentucky	Aug. 30
Sept. 26	Minnesota	Sept. 6
Sept. 27	Florida	Sept. 6
Oct. 1	Kelso, Wash.	Sept. 6
Oct 2	St. Louis, Mo.	Sept. 6

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 10	St. Louis, Mo.	Sept. 6

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 10	Louisville, Ky.	Aug. 30
Sept. 10	Detroit, Mich.	Aug. 30
Sept. 10	Phila., Pa.	Sept. 6
Sept. 11	Winona, Minn.	Aug. 30
Sept. 11	Fullerton, Calif.	Sept. 6
Sept. 11	Davenport, Ia.	Sept. 6
Sept. 12	Geneva, O.	Aug. 23
Sept. 12	Athens, O.	Aug. 30
Sept. 14	Los Angeles, Calif.	Aug. 30
Sept. 14	Clifton, N. J.	Sept. 6
Sept. 15	Dallas, Tex.	July 26
Sept. 15	Sedalia, Mo.	Aug. 16
Sept. 15	Proctor, Minn.	Aug. 23
Sept. 15	Johnstown, Pa.	Sept. 6
Sept. 17	Jackson, Miss.	Sept. 6
Sept. 20	Oakwood (Dayton P. O.), O.	Aug. 30
Sept. 21	Haywood, Wis.	Sept. 6
Sept. 21	Findlay, O.	Sept. 6
Sept. 23	Atlantic City, N. J.	Aug. 30
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Sept. 28	Huntington, W. Va.	Sept. 6
Oct. 1	Memphis, Tenn.	Sept. 6
Oct 8	Wichita, Kan.	Sept. 6
Oct. 10	Birmingham, Ala.	Aug. 30
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 10	Flooring—Boston, Mass.	Aug. 23
Sept. 11	Dredging—Galveston, Tex. Adv. Aug. 16 to Sept. 6.	Aug. 16
Sept. 11	Road—Arizona	Aug. 30
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
Sept. 12	Pistons, etc. — Denver, Colo.	Aug. 9
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19
Sept. 17	Quarters, etc. — Rutland, Mass. Adv. Aug. 23 to Sept. 6.	Aug. 23
Sept. 19	Laboratory—Wash., D. C.	Aug. 30
Sept. 24	Road Repair—Ft. Riley, Kan. Adv. Sept. 6.	Sept. 6
Sept. 25	Dredging—Galveston, Tex. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 25	Dredging — Providence, R. I. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 28	Breakwater — Milwaukee, Wis. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 28	Mailing Vestibule—Grand Junction, Colo. Adv. Sept. 6.	Sept. 6
Sept. 29	Outside Service Lines—Dawson Springs, Ky. Adv. Sept. 6.	Sept. 6
Oct. 3	Gates, Hoists, etc.—Denver, Colo. Adv. Sept. 6.	Sept. 6
Oct. 3	Superstructure — Dunkirk, N. Y. Adv. Sept. 6.	Sept. 6
Oct. 15	Breakwater—Hilo, H. T. Adv. Aug. 23 to Sept. 6.	Aug. 23
Nov. 1	Pipe Line Dredge—Chicago, Ill. Adv. Sept. 6.	Sept. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 7	Lumber and Piles—New York, N. Y.	Aug. 30
Sept. 10	Enclosures—New York, N. Y.	Aug. 30
Sept. 10	Copper and Steel Standards, etc.—Santa Ana, Calif.	Sept. 6
Sept. 10	Culvert—Wilkinsburg, Pa.	Sept. 6
Sept. 10	Transmission Line — Nova Scotia	Sept. 6
Sept. 11	Grain Elevator—Oswego, N. Y. Adv. Aug. 16 to Sept. 6.	Aug. 16
Sept. 11	Fire Alarm System — New York	Sept. 6
Sept. 12	Tunnel—Colorado	Aug. 9
Sept. 14	Conduits—Erie, Pa.	Sept. 6
Sept. 17	Elimination of Grade Crossing —Youngstown, O.	Aug. 30
Sept. 17	Electric Light System—Washington, La.	Sept. 6
Sept. 17	Gas System — Fairfax, Okla.	Sept. 6
Sept. 19	Lock Gates, etc.—Illinois. Adv. Aug. 16 to Sept. 6.	Aug. 23
Sept. 25	Culvert—St. Louis, Mo.	Aug. 30
Sept. 28	Cement—Jefferson City, Mo.	Aug. 23
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., New Britain—Bd. Water Comn. plans main pipe extensions in eastern part of city. $100,000. J. D. Williams, city engr.

N. Y., Albany—Bd. Pub. Wks. takes bids about Sept. 10, enlarging city filtration plant, repairing coagulating basin and placing new sand in filter beds. $50,000. A. Hazen, 25 West 43rd St., New York, engr. Noted May 3.

N. Y., Jamestown—Plans 1 m.g. reservoir. $50,000. L. Bergman, city engr.

N. Y., Jamestown—Takes bids about Sept. 29, laying approximately 6,000 ft. mains in Roosevelt Sq., Harrison and Market Sts., also road from Steel St. to Hunt Rd. $60,000. L. Bergman, city engr.

Fla., Lakeworth—See "Industrial Works."

Wis., New London—C. J. Thompson, city clk., cancelled date of bids which were to be opened Sept. 1, 200,000 gal. rein.-con. reservoir. $15,000-$20,000. H. R. Albert, c/o Court House, Green Bay, engr. Noted Aug. 23.

Kan., Kansas City—Plans election to vote on $4,000,000 bonds for extension to water and electric light plant. H. Payne, clk.

Wyo., Evansville — Making preliminary plans new waterworks system. To exceed $15,000. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Mo., Breckenridge—Having preliminary plans and surveys made for complete new waterworks system. To exceed $15,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Mo., Canton—Voted $60,000 bonds for improving waterworks. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Edina — Soon takes bids extending waterworks. $60,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Aug. 9.

Mo., Kansas City—Having revised plans prepared for new waterworks plant on Missouri River, $11,000,000. Fuller & Maitland, 201 Walsix Bldg., engrs.

Mo., Marceline—Sept. 14, to vote on $20,000 bonds for improving waterworks. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult. engrs.

Mo., Odessa—Sept. 11, to vote on $15,000 bonds extensions to mains.

Mo., Ridgeway—Sept. 17, to vote on $45,000 bonds for new waterworks system. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noted Aug. 16.

Tex., College Station—Texas A. & M. College making plans well and waterworks improvements, $20,000; also graveling streets and sidewalks. Private plans.

Tex., Dallas — North Highlands Water Dist. plans mains, hydrants, etc. To exceed $15,000. Myers & Noyes, Dallas Co. Bank Bldg., engrs.

Tex., Frisco — Voted $40,000 bonds for waterworks system. Engineer not announced.

Tex., Highland Park (Dallas P. O.) — Plans 500,000 gal. concrete reservoir and miscellaneous work. To exceed $20,000. Myers & Noyes, Dallas County Bank Bldg., Dallas, engrs.

Tex., Sweetwater—Having plans prepared 1 m. g. filter. $35,000. J. B. Howley, Cotton Exch. Bldg., Ft. Worth, engr.

Ont., Windsor — Essex Border Utilities Comn., Windsor, plans filtration plant incl. strainer system, 7,000 ft. 42 in. and 3,000 ft. 36 in. steel mains, c.i. pipe, pumps, etc. J. C. Keith, ch. engr.

Calif., Eureka — City plans to purchase 12,500 ft. 2 in. pipe for water system. A. W. Kildale, city clk.

Calif., Gilroy—Voted $87,000 bonds for extensions and repairs to waterworks system. Noted July 26.

Calif., Lemore—Plan election to vote on $25,000 or more bonds for improvements to waterworks system.

Calif., Oroville—See "Miscellaneous."

Que., Montreal—Plans 12,300 ft. 12, 16, 20, 24 and 30 in. c.i. high pressure force main from McTavish reservoir to pumping station at Papineau St., also 3,673 ft. 8 in.

Waterworks (Continued)

c.i. mains in 7 other streets, $16,786. E. Gauthier, asst. city clk.

Ont., Fonthill — Plans pumping station and standpipe. $52,000.

Ont., Goderich—Plans to enlarge and extend waterworks intake $75,000. A. Gallow, mayor.

BIDS DESIRED

Fla., Crescent City — Sept. 17, by Bond Trustees, waterworks system, alternate proposals, 40,000 gal. reservoir, steel tank tower, pumping equipment, 3 motor pumps and 2 service pumps. $30,000. G. A. Main, Daytona, engr.

N. J., Bordentown—Sept. 27, by N. S. Hill, Jr., consult. engr., 112 East 19th St., New York City, at office of Commissioner of Educ., State House, Trenton, addition to water system at Bordentown Manual Training and Industrial School, here. J. Enright, secy. State Bd. Educ.; adv. E. N.-R. Sept. 6.

O., Cleveland—Sept. 12, by Cuyahoga Co. 12,000 ft. 6 and 8 in. c.i. mains in Impvt. 45. To exceed $25,000. R. F. MacDowell, Court House, engr.

O., Cleveland—Sept. 14, furnishing filtration valves. To exceed $50,000. G. W. Hawlin, City Hall, engr.

Mich., Trenton—Sept. 17, by L. Frebes, village clk., 2 m.g.d. water purification plant, pumping station, 1,500 ft. 14 in. and 5,600 ft. 10 in. pipe. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Minn., St. Paul—See "Miscellaneous."

Tex., Ft. Worth—Sept. 25, at office C. S. Snow, city secy., enlargement of filtration plant. D. L. Lewis, city engr.; adv. E. N.-R. Sept. 6.

Tex., Sweetwater—City Comn., receiving bids and opens same about Sept. 7, 2½ mi. water main from Lake Trammel. $20,000. W. H. Bartlett, Sweetwater, engr.

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hays, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York City, Aug. 30, furnishing and setting fire hydrants and appurtenances on existing mains in Flatbush and Flatlands Sects., here, from Wartega Contg. Co., $19,674. Noted Aug. 23.

Mich., Detroit—Detroit Water Bd. furnishing and installing 37,000,000 gal. capacity steam driven pump, from Worthington Pump & Mchy. Co., 115 Bway., New York City, $247,700.

CONTRACTS AWARDED

N. Y., Rochester — Monroe Co. and Manitou Beach Ry. Co., water supply system from Rigney's Bluff to Manitou Beach, to Rochester Willite Co., Rochester, $162,000.

Wis., Milwaukee — Central Bd. Purch., coal and ash handling equipment for Riverside pumping station, to Link Belt Co., 910 South Michigan Ave., Chicago, $44,800.

Minn., Hibbing—Bd. Educ. of Hibbing and town of Stuntz, extending mains between here and Stuntz, to serve towns Stuntz, Morton, Leetonia and Kelly Lake, within 5 mi. radius of Hibbing, to Phelps-Drake Co., 219 Power Bldg., $150,000.

Ark., Fort Smith—Water Works Dist. furnishing lead and yard, trenching, laying and backfilling about 64,000 ft. c. i. pipe, to Benson & Farrer, 120 South 2nd St., Guthrie, Okla. $39,239. Noted July 26.

Okla., Paden—See "Miscellaneous."

Calif., Santa Barbara—To United States Cast Iron Pipe & Foundry Co., Monadnock Bldg., Los Angeles, furnishing fittings, $3,749; De La Vaul centrifugal water pipe, $30,890.

Sewers

PROPOSED WORK

O., Dayton—Making surveys and plans sewage disposal plant. $1,000,000. Metcalf & Eddy, 14 Beacon St., Boston, Mass, engrs.

Wis., Reedsville—Plans sewerage system and disposal plant $25,000. C. Hagenon, city clk. Engineer not selected.

Mo., Canton — Voted $60,000 bonds for sanitary sewerage system. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Edina—Soon takes bids sanitary sewerage system. $60,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Note Aug. 9.

Mo., Macon — Making plans sanitary sewerage system. To exceed $25,000. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Mo., Marceline—Sept. 14, to vote on $55,000 bonds for sanitary sewers and sewage disposal plant. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult engrs.

Mo., Poplar Bluff — Having preliminary plans prepared for storm and sanitary sewers in various streets in East Side Sewer Dist. $45,000. E. S. Nickey, City Hall, engr.

Mo., Ridgeway — Sept. 17, to vote on $45,000 bonds for sanitary sewers. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Tex., Waco—Having plans prepared sewer extensions. To exceed $25,000. V. G. Koch, city engr.

Calif., Elsinore—Having plans prepared sewer outfalls and Imhoff tank. To exceed $25,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Calif., Long Beach—Soon takes bids deep sanitary sewers in Bway. between Golden and Alimitos Aves. $50,000. Noted Aug. 30.

Calif., Martinez—Mountain View Sanitary Dist., having plans prepared 10 mi. 6 in. vitr. lateral sewers. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Ont., London—Making plans storm and sanitary sewers, also pumping plant in South London. $300,000. W. P. Near, city engr.

BIDS DESIRED

Conn., Hartford—Sept. 11, by Bd. Contract & Supply, laying 800 ft. 48 in. concrete, rein.-con., vitr. clay, segmental block or tile, sewer in South Marshall St. R. N. Clark, city engr.

N. J., Plainfield—Sept. 17, by Common Council, constructing about 4,800 lin.ft. storm sewers, etc. A. W. Vars, city engr.; adv. E. N.-R. Sept. 6.

N. J., Millville—Sept. 14, by Bd. City Comrs., City Hall, reconstructing sewage disposal plant. W. F. Ware, dir. Parks and Pub. Impvts.

Pa., Berwick—Sept. 26, sewerage system, Alexander Potter, 50 Church St., New York City, consult. engr.; adv. E. N.-R. Sept. 6.

Pa., Lewistown—Sept. 8, by Lewistown Housing & Development Co., 880 ft. 8 in. terra cotta sewer, and 1,100 ft. 6 in. laterals in Juniata St., 273 ft. 8 in. terra cotta main, and 80 ft. 6 in. laterals in South Main St. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

D. C., Wash.—Sept. 14, by Dist. Comrs., 509 Dist. Bldg., 3,105 lin.ft. sewer. Further information, apply Room 427 Dist. Bldg.; adv. E. N.-R. Sept. 6.

Md., Baltimore—Sept. 13, by Bd. Awards, storm sewers in Dist. J-1 and other localities, Storm Water Contr. 59, incl. 6,000 lin. ft. 15-54 in. pipe. $50,000. B. L. Crozier, highways engr.

Fla., Leesburg—Sept. 24, by Bd. Comrs. and D. E. Bivens, city mgr., 2 mi. 8 in. pipe sewer extensions and 1 mi. 4 in. house connections. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.; adv. E. N.-R. Sept. 6.

O., Cleveland — Sept. 13, by city, main sewer in southwesterly dist., also culverts in Morgan and Kingsbury Runs. To exceed $25,000 R. Hoffman, city engr.

O., Cuyahoga Heights (Cleveland P. O.) —Sept. 22, sewer in Sects. 1, 2 and 3, East 71st St. Dist. 1. To exceed $25,000. R. Hecker, Leader-News Bldg., Cleveland, engr.

BIDS RECEIVED

N. J., Newark—See "Streets and Roads."

Wis., Racine—Sewers in district south of Spring St. 1,840 ft. 48 in. rein.-con. and 7,630 ft. 8-12 in. vitr. pipe, from Brogan & Burns, 700 Dousman St., Green Bay, $31,584.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., altering and improving sewer in East 12th St., to P. J. Donlon Contg. Co.; Snyder Ave. and East 56th St., Brooklyn, $23,275; West St., to T. A. Reilly Co., 48 East 41st St., $19,071. Noted Aug. 16.

N. Y., St. George—Temporary sanitary sewers in North Burgher St. and Washington Ave., to J. Johnson Sons, West New Brighton. $3,424 and $4,323; Dixon Ave., to C. Vanderbilt, West New Brighton, $4,963; Clove Ave. to G. Orricco, 500 Britton Ave., Concord, $6,011. Noted Aug. 16.

N. Y., Troy — Laying 1,750 ft. 30 in. sewer in 10th St., 920 cu.yd. earth and 1,148 cu.yd. rock trenching, to H. W. Golden & Sons, 4 Elm Pl., $166,409.

Pa., Phila.—Substructure and superstructure of Southwest Sewage pumping plant, 40th Ward, to W. G. I. Contg. Co., Arch and Broad Sts., $174,132. Noted Aug. 23.

Fla., Miami—For 3,960 ft. terra cotta and 5,685 ft. concrete storm sewers, to J. J. Quinn Co., Miami, $110,000. Noted Aug. 9.

Tenn., Ripley — Complete sewerage system, to Sullivan, Long & Hagerty Constr. Co., Bessemer, Ala., $74,800. Engrs. est. $75,000. Noted May 10.

O., Cleveland—Cuyahoga Co. 16,000 ft. 8 in. and 16,000 ft. 12-60 in. tile sewers in Impvt. 30 of Co. Sewer Dist., to Langahan Constr. Co., Marshall Bldg., $219,000 Noted Aug. 30.

O., Columbus—See "Streets and Roads."

O., Maple Heights (Bedford P. O.)—For 8,617 ft. 15-20 in. vitr. clay sewers in Dunham Rd., Sect. 1, to B. J. Whittaker, 2269 Noble Rd., Cleveland, $58,862. Noted Aug. 16.

Mich., Detroit—Lateral 3940, to Rennie & Dibble, 9144 Linwood Ave., $8,960; Lateral 3982, to J. J. Reading, Detroit, $22,577; Lateral 3990, to Hammen & Co., 4612 Woodward Ave., $10,988; Lateral 3992, to S. Healey, Detroit, $10,500; Lateral 3864, to S. Fattore, 2201 St. Joseph Ave., $10,380; Laterals 3985, 3986 and 3989, to W. Blanck & Co., 827 Ford Bldg., $9,450, $3,801 and $30,446 respectively. Noted Aug. 9.

Ia., Oelwein—Sanitary sewerage system, to Seig Constr. Co., Waterloo, $28,974.

Kan., Russell—Sanitary sewers and disposal plant, to Amerman & Snyder, Wichita. $72,736. Engrs. est. $75,000. Noted June 21.

Mo., Kansas City—Sanitary sewers in Dists. 459 to W. C. Mullins Constr. Co., 419 Nelson Bldg., $27,813; Dist. 317 to Kinlin Constr. Co., 2538 Michigan Ave., $25,391.

Tex., Sanger—See "Waterworks."

Waste Disposal

PROPOSED WORK

N. Y., Elmira—Plans one 32 cell and one 22 cell garbage disposal plant, probably Becarri system. $100,000. G. W. Jarchow, clk.

Pa., Bradford — Plans new incinerator plant. $30,000.

BIDS RECEIVED

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 42 x 75 ft. brick incinerator, 36 ft. high with 150 ft. chimney, from Davis Garbage Furnace Co., 110 West 40th St., New York City, $69,890. Noted Aug. 2.

Calif., Sacramento—City Comrs., incinerator, from F. L. De Carie, Portland, Ore., $195,000. Noted Aug. 30.

Bridges

PROPOSED WORK

N. Y., Buffalo—Delaware, Lackawanna & Western R.R., 90 West St., New York, had plans prepared 310 ft. bridge, 32½ ft. wide, with concrete piers and abutments, to replace present Bridge 407 over Buffalo River, here. $200,000. A. E. Deal, Hoboken, N. J., bridge engr.

N. Y., Jamestown—Plans 2 span 110 ft. concrete and steel bridge, over Winsor St. $25,000-$30,000. L. A. Bergman, City Hall, engr.

Alabama—State Hy. Dept., Montgomery, plans 967 ft. creosoted timber bridge on Montgomery-Selma Rd., Lowndes Co., one 80 ft. steel span, 55 timber spans, creosoted piling and 2 concrete piers. $67,400. W. S. Keller, state highway engr.

Tenn., Springfield—Dept. Highways and Pub. Wks., Nashville, plans 160 ft. concrete bridge with 4 spans, over Sulphur Fork Creek, near here. $25,000.

Ky., Catlettsburg—Boyd Co. plans steel truss highway bridge, over east fork of Big Sandy River. $25,000. J. G. Rucker, co. judge.

O., Akron—See "Streets and Roads."

O., Cincinnati—Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, Md., making plans bridges over Colerain Ave. and Gest St., here. To exceed $50,000. H. A. Lane, Baltimore, ch. engr.

O., Cincinnati—Plans bridge at 8th St. $800,000. F. King, city engr.

Kan., Great Bend—Barton Co. plans two 30 ft. and one 45 ft. concrete deck girders on concrete piers and abutments, Federal Aid Project 160, Sect. B. H. S. Allen, co. engr.

Ark., Forrest City — See "Streets and Roads."

Bridges (Continued)

Texas—C. H. Kendall, engr., Sugarland, soon takes bids 350 ft. rein.-con. and steel truss bridge, over Beazos River, 3 spans, etc., for State, Federal and Ft. Bend Co. (Richmond). $225,000.

Tex., Houston—Harris Co. plans highway and railroad bridge across Ship Channel at Southern Pacific R.R. wharves. Howe & Wise, co. engrs.

Tex., Liberty—See "Streets and Roads."

Okla., Newkirk—Kay Co. plans election soon to vote on $600,000 bonds for steel and concrete bridges. Former bond election failed to carry. L. A. Cann, co. comr. Noted July 19.

BIDS DESIRED

New Jersey — Sept. 24, by State Hy. Comn., Trenton, constructing bridges in Rockaway and West Milford Twps., Passaic Co.; Jefferson and West Milford Twps., Morris and Passaic Counties, also towns of Hamilton and Bordentown, Mercer and Burlington Counties, J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Sept. 6.

Pa., Oil City — Sept. 28, by Comrs. Venango Co., at office in Franklin, removing highway bridges, over Allegheny River and tracks of Pennsylvania R.R., also constructing new bridge. F. P. McKibben, Schenectady, N. Y., engr.; adv. E. N.-R. Sept. 6.

Pa., Pittsburgh—Sept. 10, by Allegheny Co., removing piers and superstructure of Bridge 3, over Allegheny River, 7th St. J. P. Moore, co. controller.

Virginia—See "Streets and Roads."

Fla., Jacksonville — Sept. 10, by H. N. Rodenbaugh, genl. mgr. Florida East Coast Ry., St. Augustine, superstructure for 2,480 ft double track steel bridge on concrete piers, 5 truss spans and 23 girder spans, over St. Johns River, here. Total cost $1,800,000. Noted Aug. 9.

Louisiana—See "Streets and Roads."

Miss., Greenwood — Sept. 20, by Bd. Supervs. Leflore Co., bridge over Yazoo River. For further information address State Hy. Dept., Jackson; adv. E. N.-R. Sept. 6.

Mich., Alpena—Sept. 10, by G. R. Nicholson, city clk., steel bridge over Thunder Bay River, 9th St. Gram & Cissel, 225 Eng. Bldg., Ann Arbor, engrs.; adv. E. N.-R. Sept. 6.

Ill., Chicago—Sept. 27, by H. E. Wallace, clk, at office Sanitary Dist. of Chicago, 910 South Michigan Ave., superstructure double leaf Trunnion Bascule bridge (Strauss type) over Main Drainage Channel on line of South California Ave. W. O. Nance, chn.; adv. E. N.-R. Sept. 6.

Minnesota—See "Streets and Roads."

S. D., Edgemont—Sept. 11, by State Hy. Dept., Pierre, 336 ft. concrete deck girder over Cheyenne River on Federal Aid Project 159, Fall River Co., 1,020 cu.yd. concrete, 154,676 lb. reinforcing, 39,787 lb. structural steel, etc. Noted Aug. 23.

Wyo., Cadiz (Arvada P. O.)—Sept. 11, by State Hy. Comn., Cheyenne, steel truss bridge, one 161 ft. span, over Clear Creek, near here $27,000. J. F. Seiler, state bridge engr.

Okla., Pawhuska—Sept. 15, by Osage Co., 30 ft. girder bridge over Rush Creek; 30 ft. girder bridge over Buxham Creek; 30 ft. girder bridge over Belford Creek; 70 ft. steel span over Birch Creek; 120 ft. steel span over Salt Creek; 120 ft. steel span over Mud Creek; two 120 ft. steel spans over Hominy Creek. A. B. Ludwig, co. clk.

BIDS RECEIVED

Ohio—See "Streets and Roads."

Mich., Saline—State Hy. Dept., Lansing, 75 ft. concrete girder Bridge 8111001, near here, Washtenaw Co., from J. S. Whitcomb Constr. Co., 525 Woodland Ave., Detroit, $39,542.

CONTRACTS AWARDED

Fla., Jacksonville — H. N. Rodenbaugh, genl. mgr. Florida East Coast Ry., St. Augustine, sub-structure for 2,480 ft. double track steel bridge on concrete piers, 5 truss spans and 23 girder spans, over St. Johns River, here, to Union Bridge Constr. Co., 903 Sharp Bldg., Kansas City, Mo. Total cost $1,800,000. Noted Aug. 9.

Alabama—State Hy. Comn., Montgomery, concrete girder bridge over Flint River, Madison Co., to Smith Co., 30 3rd Ave. W., Birmingham, $24,679. Noted Aug. 16.

Alabama—State Hy. Dept., Montgomery, 654 ft. concrete bridges on Duplin-Orion Rd. on Bee Line Highway, 34 ft. spans, Montgomery Co., to W. C. McCoy, Lafayette, $40,252. Noted Aug. 9.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing bridges, **c s means concrete slab, c g concrete girder, s steel, c concrete, c c concrete culvert, super superstructure and sub substructure,** to W. H. Shons, South Liberty Ave., Freeport, **1-38B Johnson means (Route 1, Sect. 38B, Johnson Co.),** 1 sub for steel and one 50 ft. c g 1-38B, Johnson, $19,405 1 super for 85 ft. steel 1-38C Johnson, $6,670 1 sub for steel and one 50 ft. c g 1-39B Massac, $16,179 1 super for 140 ft. steel 1-39C Massac, $13,162 and one 30 ft. c g 1-40B Massac, $5,017 one 100 ft. steel complete and one 10 ft. culvert, 3-74B Randolph, $32,500, one 12 ft. c c, one 28 ft. c s, one 30 ft. c g and 2 sub for two 120 ft. steel, 34-1B Saline, $33,267, two 20 ft. c s, one 30 ft. and two 40 ft. c g 34-2B Saline, $24,833, one 10 ft. c c, two 12 ft. c c, two 24 ft. c s, two 40 ft. c g, and one 35 ft. c g 34-3B Pope-Hardin, $55,204, one 200 ft. super for steel 34-5C Hardin, $24,892; to F. E. Marsh & Co., Jefferson, Ia., 1 sub for steel 2-63B McLean, $20,296; to Continental Bridge Co., Monadnock Bldg., Chicago, super for two 80 ft. steel spans and one 120 ft. s, 2-63C McLean, $20,570, super for 80 ft. s Route 7, Federal Aid Project 7, Sect. R-3 Bureau, $5,667, to W. C. Johnson, 512 South High St., Belleville, sub for one 200 ft. steel span 3-59B Madison, $21,786; to General Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., super for one 200 ft. steel span 3-59C Madison, $22,532, super for two 120 ft. steel spans 34-1C Saline, $17,789; to F. O. Panton, South Elgin, three 22 ft. c s 6-F Cook, $8,795; to Sheldon Constr. Co., Putnam Bldg., Davenport, Ia., sub for one 80 ft. steel, and one 30 ft. c s Route 7, Federal Aid Project 7, Sect. R2 Bureau Co., $21,548; to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., super for 150 ft. steel and concrete 33-4C Jasper, $13,014; T. Walbridge Eng. Co., 1014 South Michigan Ave., Chicago, one 14 ft. c c, one 30 ft. and one 35 ft. c g 34-4B Hardin, $12,251; two 12 ft. c c, one 30 ft. c g and sub for one 200 ft. steel, 34-5B Hardin, $40,639. Noted Aug. 16.

Calif., San Francisco — City and San Francisco Co., steel bridge superstructure to carry Bay Crossing Pipe Line of Hetch Hetchy Project across Dumbarton Straits, Contr. 93, thirty-six 105 ft. spans, etc., to United States Steel Products Co., Rialto Bldg., $272,162. Noted Aug. 30.

Dams

PROPOSED WORK

Pa., Sharon—See "Miscellaneous."

Tex., Ballinger — Coke-Runnels Water Impvt. Dist. 1, plans 2,000 ft. dam, 100 ft. high to provide irrigation for 200,000 acres. $4,500,000 bonds voted for project. C. C. Holder, Bronte, acting consult. engr. Noted July 26.

Tex., Ft. Worth—Southwestern Portland Cement Co., Two Republics Bldg., El Paso, had plans prepared 600,000 gal. per day earth dam, 40 ft. high, 150 ft. concrete spillway. $60,000. J. B. Hawley, Cotton Exch. Bldg., engr. Noted May 31.

CONTRACTS AWARDED

Ky., Danville—Kentucky Hydro Electric Co., c/o Middle West Utilities Co., 122 South Michigan Ave., 260 ft. dam, 2 mi. south from mouth of Dix River, to L. E. Meyer, Monadnock Bldg., Chicago. Est. cost $4,000,000. Noted July 12, under Miscellaneous.

Railways

PROPOSED WORK

Texas—Ft. Worth Belt Line R.R., Ft. Worth, plans belt line railroad around city to avoid grade crossings, switching, etc. K. Roby, Courthouse, Ft. Worth, engr.

Texas — Trinity Portland Cement Co., Commonwealth Bldg., Dallas, 1½ mi. standard gauge siding on White Settlement Rd., in Ft. Worth, to D. H. Purvis, 9th and Houston Sts., Ft. Worth, $40,000.

Ontario—Niagara & St. Catharines Electric Ry., Niagara Falls, having plans prepared extending lines, to Lundys Lane, building new terminal and double tracking on Victoria Ave., Niagara Falls. $70,000. A. Scott, c/o owner, engr.

CONTRACTS AWARDED

Arkansas — A. S. Johnson Lumber Co., Reader, will grade and lay 22 mi. single track railroad from Reader to Arkansas oil fields, using 56 lb. rails, connecting with Missouri Pacific R.R., by day labor. $125,000.

Excavation, Drainage Irrigation

PROPOSED WORK

Va., Richmond—City plans to expend $3,000,000 in harnessing Shockoe Creek to prevent damage by freshets following heavy rains. A. J. Saville, dir. Pub. Wks.

Mich., Detroit—Wayne Co., County Bldg., having plans prepared for 17,063 ft. Sects. 1-5, Capler Drain, in Redford and Greenfield Twps. G. A. Dingman, County Bldg., engr.

Tex., Childress—Upper Red River Valley Dist., plans to irrigate 18,000 acres. R. G. Garraway & Co., Childress, engrs.

Calif., Macdoel—Butte Valley Irrigation Dist voted $594,000 bonds for irrigation system. C. T. Darley, Klamath Falls, Ore., engr. Noted Sept. 7.

BIDS DESIRED

Wis., Green Bay—See "Buildings."

Mo., Foley—Sept. 15, at Bank of Foley, pumping station for Sandy Creek D. D. H. Heinman, pres. Bd. Supervs. Sandy Creek D. D.; adv. E. N.-R. Sept. 6.

Tex., Corpus Christi—Sept. 10, by City and Nueces Co. Navigation Dist. 1, c/o R. Driscoll, chn., Corpus Christi, constructing rip rap breakwater in Bay, rip rap bulkhead with wharf piling in north part of city, 3,000,000 cu.yd. excav. R. J. Cummins, Gulf Bldg., Houston, engr.

Calif., Los Angeles—Sept. 14, by Harbor Comn., 312 Byrne Bldg., 700,000 cu.yd. dredging in Los Angeles Harbor.

CONTRACTS AWARDED

Miss., Yazoo — Rocky Bayou Levee & Drainage Dist., to Clark-Hunt Constr. Co., Memphis, Tenn., 300,000 cu.yd. levee $0.169, 513,000 cu.yd. drainage channels and 5½ acres clearing and grubbing for levee, drag line work $0.14.

O., Cleveland — Cleveland Union Terminals Co., 323 Lakeside Ave., excavation for new passenger and freight terminal building, 1,000,000 cu.yd. excav., to Walsh Constr. Co., 318 Euclid Ave.

Ill., Freeport—W. T. Rawleigh Co., 101 South Liberty Ave., excavation for 150 x 300 ft. power house, to Gund-Graham Co., Freeport. Total cost $250,000.

Wis., La Crosse—City will dredge approximately 203,130 cu.yd. by day labor. Former bids rejected. W. J. Fries, chn. Noted Aug. 23.

Wis., New London—C. J. Thompson, city clk., will build rein.-con. reservoir, 200,000 gal. capacity, by day labor. Former bids rejected. Noted Aug. 23.

Minn., Worthington—Nobles Co., Judicial Ditch 1, 21,900 lin.ft. open ditch, 139,365 cu.yd. excav., waste bank leveling, to E. D. Barr, Bird Island; 36,400 lin.ft. 6-28 in. tile, 3 flood water inlets, to Ceylon Cement Tile Co., Ceylon; tile labor to Berg & Morris, Worthington. Total $44,000. Noted July 26.

Tex., Sanger—Will construct waterworks and sewerage systems, by day labor. $55,000 and $22,500 respectively. E. L. Dalton, 1915½ Main St., Dallas, engr. Noted July 26.

Tex., Wichita Falls—Wichita Co. Irrigation Dist. 1, 30 mi. North Side Canal and distributing system 100 mi. ditch, to Callahan Constr. Co., Kirby Bldg., Dallas. Noted June 14.

Streets and Roads

PROPOSED WORK

Pennsylvania—State Hy. Dept., Harrisburg rejected bids for road work on Application 2452 Monroe Co., Route 73 Butler Co., Route 247 Fayette Co., Route 167 Monroe Co. and Route 108 Washington Co. Noted July 26 and Aug. 16.

W. Va., Morgantown—Oct. 15, to vote on $250,000 bonds for street improvements. C. McDowell, city engr.

N. C., Charlotte—Mecklenburg Co. plans hard surfacing 10 mi. Mt. Holly Rd., 18 ft. $250,000. L. Ross, Charlotte, engr.

Fla., Clearwater—Pinellas Co. plans election to vote on $109,000 bonds paving with brick on asphalt 5.4 mi. roads in Special Road and Bridge Dist. 2 (Pinellas Park), 16 ft. J. A. Mortland, Tampa, engr.

Fla., Winter Park—Election Sept. 18, to vote on $100,000 bonds paving various streets.

Alabama—State Hy. Dept., Montgomery, plans grading and gravel surfacing 20.23 mi. Montgomery-Selma Rd., Federal Aid Project 139, Lowndes Co. $237,800. W. S. Keller, state highway engr.

SEWAGE TREATMENT WORKS—CHICAGO, ILL.

Following are lowest three bids opened July 26, by Sanitary Dist., for constructing North Side Sewage Treatment Works, Div. A, (A) J. Griffiths & Son Co., 112 West Adams St., (awarded contract); (B) White Constr. Co.; (C) W. J. Newman Co., 21 North Curtis St. The unit bids were as follows:

	A	B	C
65,000 cu.yd. removal of top soil	$1.85	$1.00	$1.40
330,000 cu.yd. earth excavation—Class A	1.80	2.50	1.77
40,000 cu.yd. earth excavation—Class B	3.00	5.00	5.665
5 cu.yd. rock excavation	5.00	5.00	5.00
500 cu.yd. rolled embankment	3.00	2.50	2.00
65,000 cu.yd. replacing top soil	1.40	1.35	1.975
100 M. ft. B.M. sheeting	40.00	40.00	40.00
10,000 cu.yd. sand or gravel fill	4.00	4.50	2.50
7,500 cu.yd. cinder fill	3.00	4.00	1.75
7,500 cu.yd. concrete—Class A	14.50	14.50	9.73
50,000 cu.yd. concrete—Class B	18.00	15.00	11.60
40,000 cu.yd. concrete—Class C	21.00	22.00	26.87
9,000 cu.yd. concrete—Class D	25.00	23.50	21.24
1,500 cu.yd. concrete—Class E	15.00	14.00	10.00
175,000 sq.ft. concrete baffles	0.50	0.65	0.09
5,000 bbl. additional portland cement	3.50	3.40	3.75
15,000 lin.ft. steel plate expansion joints	2.00	3.00	2.25
10,000 lin.ft. copper plate expansion joints	1.00	2.50	1.30
33,000 sq.yd. asphalt expansion joints	1.50	0.65	0.75
500 cu.yd. brick masonry	50.00	50.00	15.26
12,500,000 lb. reinforcing steel	0.05	0.06	0.064
350,000 lb. reinforcing mesh	0.08	0.12	0.085
1,500,000 lb. structural steel	0.085	0.09	0.11
850,000 lb. miscellaneous steel and wrought iron	0.12	0.14	0.115
300,000 lb. iron castings	0.08	0.13	0.08
7,000 lb. miscellaneous bronze, brass and copper	0.90	1.80	0.60
16,000 sq.ft. subway grating	1.50	1.50	1.55
3,200 lin.ft. pipe railing	2.50	4.00	2.50
300,000 lb. galvanizing	0.05	0.05	0.025
4,000 lin.ft. 6-in. vitrified sewer pipe	0.80	0.70	0.35
1,500 lin.ft. 8-in. vitrified sewer pipe	1.00	1.00	0.45
1,000 lin.ft. 12-in. vitrified sewer pipe	2.00	1.50	0.80
1,000 lin.ft. 15-in. vitrified sewer pipe	3.00	2.50	1.26
1,000 lin.ft. 18-in. vitrified sewer pipe	3.50	3.50	1.75
1,500 lin.ft. 24-in. vitrified sewer pipe	6.00	6.00	3.00
3,000 lin.ft. 4-in. tile underdrain	0.40	0.60	0.15
1,000 lin.ft. 6-in. tile underdrain	0.45	1.00	0.19
100 M. ft. B.M. miscellaneous woodwork	200.00	175.00	156.00
7,100 aeration plate containers—9 or 10 plate	15.00	15.00	27.55
825 aeration plate containers—8 plate or less	13.00	12.00	13.82
35,000 lin.ft. whole separator blocks	1.50	3.50	9.06
62,000 lin.ft. split separator blocks	1.00	1.75	1.65
4,500,000 lb. cast-iron pipe, bell and spigot	0.09	0.07	0.175
100,000 lb. cast-iron pipe, flanged	0.12	0.09	0.089
600,000 lb. cast iron specials, bell and spigot	0.16	0.13	0.133
525,000 lb. cast iron specials, flanged	0.15	0.12	0.115
700 taps, drilling and tapping cast iron pipe	8.00	5.25	4.80
4,300 lin.ft. 8-in. water main	6.50	2.50	3.75
Special work on 8-in. water main (lump sum)	6,000.00	4,200.00	4,475.00
28,000 lin.ft. wrought iron pipe, 1-in. and less	0.40	0.35	0.36
8,000 lin.ft. wrought iron pipe, 1¼ and 1½-in	0.70	0.50	0.47
6,000 lin.ft. wrought iron pipe, 2-in	1.10	0.70	0.70
15,000 lin.ft. wrought iron pipe, 2½ and 3-in	1.90	1.20	1.17
6,000 lin.ft. wrought iron pipe, 4-in	2.75	1.80	1.70
3,500 lin.ft. wrought iron pipe, 5 and 6-in	3.80	3.00	3.09
12,500 wrought iron pipe fittings, 1-in. and less	0.18	0.43	0.43
4,000 wrought iron pipe fittings, 1¼ and 1½-in	0.45	0.70	0.68
1,800 wrought iron pipe fittings, 2-in	0.75	0.90	0.96
12,000 wrought iron pipe fittings, 2½ and 3-in	1.50	2.00	1.96
1,700 wrought iron pipe fittings, 4-in	3.50	3.80	3.58
500 wrought iron pipe fittings, 5 and 6-in	7.25	9.00	8.58
825 gate, globe, angle, hose, and check valves, 1-in. and less	1.90	2.30	2.20
80 gate, globe, angle, and check valves, 1¼ and 1½-in	3.40	3.70	3.50
25 hose valves, 1½-in	3.60	3.40	3.50
200 gate, globe, angle, and check valves, 2-in	5.60	5.50	5.80
100 gate, globe, angle, and check valves, 2½ and 3-in	14.00	11.50	11.22
900 gate, globe, angle, and check valves, 4-in	21.00	23.00	22.40
25 gate, globe, angle, and check valves, 5 and 6-in	49.00	33.00	32.00
1 gate valve, 8-in	65.00	56.00	54.40
2 gate valves, 12-in	130.00	120.00	125.00
60 gate valves, 14-in	186.00	162.00	157.00
72 gate valves, 16-in	189.00	217.00	208.00
36 angle valves, 16-in	633.00	500.00	483.00
36 check valves, 16-in	215.00	360.00	341.00
1 gate valve, 36-in	1,040.00	1,200.00	1,173.00
7 gate valves, 48-in., including operating mechanism	2,300.00	2,000.00	1,934.00
75 floor stands for valves under 48-in	31.00	60.00	59.00
40 condensate traps	55.00	66.00	67.00
750,000 lb. installing meters, sluice gates, and appurtenances	0.10	0.04	0.02
30 installing settling tank thickener mechanisms	550.00	1,250.00	600.00
10 hydrants	150.00	100.00	125.00
17,000 lin.ft. steel rail—30 lb	0.35	0.80	1.56
1,600 lin.ft. standard gage track—70 lb	3.75	7.00	5.28
Gantry crane and transfer trucks (lump sum)	3,800.00	8,000.00	8,400.00
17,000 sq.yd. macadam roadways	3.75	3.25	2.30
50,000 gal. water	0.07	10.00	
72,000 setting aeration plates	0.20	0.07	0.12
Cleaning up (lump sum)	20,000.00	20,000.00	6,000.00
Extended totals	$5,602,636	$5,886,649	$6,230,564

Streets and Roads (Continued)

Miss., Brookhaven—Plans hard surfacing 2 blocks Monticello St., 2 blocks Cherokee St., 3 blocks East and West Whiteworth St. T. M. Snuglie, mayor.

La., Independence—Plans street improvements. $27,000 bonds sold for project.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids paving 12 mi. road from Lawrence Co. line to Waynesboro, 16 ft., Wayne Co., gravel and chert. $150,000. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids grading and surfacing probably with bituminous macadam 4 mi. road from New Markel to Knox Co. line, Jefferson Co., $25,000; 12 mi. from Knoxville to Jefferson Co. line, Knox Co., both 16 ft. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids bituminous macadam paving 13 mi. road, 16 ft., from Knox Co. line to Straw Plains, Knox Co., State Aid Project 132; 5 mi. from Hamilton Co. line to Luck Creek, Marion Co., Federal Aid Project 2B and 24. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, had surveys made constructing 5 mi. Federal Aid Highway, from Haywood Co. line to Fayette Co. line, 18 ft., Tipton Co. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, having surveys made constructing 10 mi. highway, between Linden and Lewis Co. lines, 16 ft., Perry Co. J. G. Creveling, comr.

O., Akron—Summit Co. plans vitr. brick paving, Barberton-Greenwich Rd., $41,000; Robinson Ave., in Barberton, $35,500; Springfield Sanitorium Rd. from Canton Rd. to Krumroy-Mayersville Rd.; Barberton-Springfield Rd., Sect. C, $42,000; resurfacing Springfield Rd., waterbound macadam, $35,000-$45,000. J. Weaver, County Bldg., co. engr.

O., Akron—Summit Co. and State plan improving 11 mi. Cleveland-Massillon-Columbus Rd., 20 ft., incl. bridges and culverts. $500,000. State's share of cost $90,000. J. Weaver, co. engr. Noted June 21.

O., Lima—Plans paving 13,500 ft. Main St., 24 ft., vitr. bric. $100,000-$125,000.

O., Newark—Licking Co. plans paving 4 mi. road from Hanover to Coshocton Co. line, 20 ft., vitr. brick. $85,000.

Michigan—State Hy. Dept., Lansing rejected bids grading and surfacing 5.973 mi. State Trunk Line Rd. 11-25, Sect. A and B, Oceana Co., 0.723 mi. State Trunk Line Rd. 14-15, Sect. A, Mason Co., and 4.896 mi. State Trunk Line Rd. 10-30, Iosco Co. Noted Aug. 9 and 16.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and surfacing 4½ mi. State Trunk Line Rd. 68-3, Ontonagon Co. stamp sand. F. F. Rogers, state comr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids grading following sections **1-39A Massac means (Route 1, Sect. 39A, Massac Co.)**, 1-39A and 1-40 A Massac, 2-63A, Woodford-McLean, 34-1A and 34-2A Saline, 34-3A Pope-Hardin, 34-4A and 34-5A Hardin, **7-55-41 Bureau means (Route 7, Federal Aid Project 55, Sect. R1 Bureau Co.)**, 7-55-R1 and 7-55-14A Bureau, Routes 7 and 29, Federal Aid Project 7, Sect. R, Bureau Co. Noted Aug. 9.

Wis., Genoa Junction — Making plans paving with 1 course plain concrete 11,000 sq.yd. Freeman and Walworth Sts. To exceed $25,000. H. J. Peters, Courthouse, Elkhorn, engr.

Wis., Racine—Making plans paving with vitrified brick, asphalt or concrete several miles 24 streets. To exceed $25,000. J. W. Beaugrand, City Hall, engr.

Ia., Marshalltown — Marshall Co. voted $800,000 bonds to pave 20 mi. Lincoln highway and various roads. D. C. Elder, co. engr. Noted July 19.

Kan., Caldwell—City Clerk opens bids about Sept. 6, 12,300 sq.yd. brick, concrete or asphalt concrete paving, 7070 lin.ft. curbing and gutter, 555 lin.ft. headers, 3,700 cu.yd. excav., etc. $40,000. J. E. Berlin, 318 Sedgwick Bldg., engr.

Kans., Leavenworth—Making plans grading, paving and curbing Central Ave., Pottawatomie, Fifth, Ninth, Oak, Arch, Spruce, Kickapo, Dakota and Maple Sts., also alleys in city blocks 3, 20, 24, 42, 55, 76 and 93; grading and opening Dakota St. from 10th to 13th, Maple Ave. from Thornton to Limit Ave.

Kan., Marion—Marion Co. plans surfacing with concrete or bituminous filled brick, 0.578 mi. New Santa Fe Trail northeast of Florence, known as Kansas Federal Aid Project 162, R. K. Walters, Marion, co. engr.

Kan., Wichita — Sedgwick Co. making plans brick or concrete paving 1.989 mi. Valley Center Extension, 18 ft. M. Roseberry, Court House, engr.

South Dakota—State Hy. Dept., Pierre, plans to gravel surface 12.5 mi. Federal Aid Project 153, Union Co. $62,150. F. D. Hudgins, ch. engr.

Mo., Illmo—Having preliminary plans prepared paving 13 blocks in 3rd, 4th, Pine and Maple Aves., concrete and gravel $27,000.

Ark., Forrest City—St. Francis Co., making preliminary plans grading and paving several roads, also constructing several creosoted timber bridges in Dist. 5, St. Francis Co. $150,000. F. Reese, Neuhart, engr.

Ark., Forrest City — Francis Co. soon takes bids constructing about 5 mi. gravel roads and installing pile bridges in Dist. 12. $75,000. A. Buford, Forrest City, engr.

Ark., Pine Bluff—City plans paving with fibre or vitrified brick, 4½ mi. cemetery roads. $55,000. E. B. Reynolds, Pine Bluff, engr.

Tex., Amarillo—Potter Co. having plans prepared grading and gravel surfacing 6.16 mi. State Highway 13, 16 ft., $61,500; 6 mi. State Highway 33, 16 ft., $75,000. O. A. Seward, co. engr.

Tex., Angleton — Brazeria Co. making plans shell surfacing 6.6 mi. Rd. Dist. 16, 18 ft. $80,000. W. H. Munson, Angleton, engr.

Streets and Roads (Continued)

Tex., Brownsville — Cameron Co. soon takes bids paving 20.8 mi. highway, 18 ft., asphalt on concrete. $400,000. W. O. Washington, Brownsville, engr.

Tex., Cameron—Milam Co. election Sept. 25, to vote on $100,000 bonds improving Highway 36. A. F. Mitchell, co. engr.

Tex., Cameron—Milam Co. making plans grading, etc., 11.4 mi. State Highway 43A, 24 ft. $50,000. A. F. Mitchell, co. engr.

Tex., Canton—Van Zandt Co. soon takes bids graveling 8.78 mi. Federal Aid Project 363. $65,000. F. W. Gaines, co. engr.

Tex., Carrizo Springs—Dimmit Co. voted $234,000 bonds grading and graveling 56 mi. State Highway 12B. Total cost $470,000. W. H. Davis, co. judge. Engineer not selected. Noted July 26.

Tex., College Station—See "Waterworks."

Tex., Conroe — Montgomery Co. making plans paving various roads. $190,000. W. J. Kelley, Conroe, engr.

Tex., Corsicana — Making plans paving various streets. $400,000. W. W. McClendon, Corsicana, engr.

Tex., Corsicanna—Navarra Co. election soon to vote on $4,750,000 bonds hardsurfacing various roads. McClendon & Purnell, Corsicanna, engrs. Noted Aug. 16.

Tex., Corsicana—Navarro Co. had plans prepared paving 6.48 mi. Corsicana-Waco Highway. $92,000. W. W. McClendon, Corsicana, engr.

Tex., Dallas—Plans paving North Fitzhugh St., probably bituminous. To exceed $25,000. E. A. Kingsley, city engr.

Tex., Georgetown—Williamson Co. making plans constructing 7.5 mi. State Highway 36B. $82,000. R. A. Nichols, co. engr.

Tex., Houston — Had plans prepared asphalt paving Waugh Dr., 30 and 40 ft. $50,000. J. C. McVea, city engr.

Tex., Huntsville — Voted $50,000 bonds paving various streets. H. L. Leigh, Huntsville, city clk.

Tex., Jasper — Jasper Co. making plans graveling 7.9 mi. State Highway 7, 18 ft. $50,000. C. P. Hunter, co. engr.

Tex., Jasper—Jasper Co. voted $125,000 bonds for highway improvements. C. P. Hunter, co. engr.

Tex., Laredo—Webb Co. voted $200,000 bonds paving highway. L. Villegas, Laredo, mayor. Noted Aug. 16.

Tex., Liberty—Liberty Co. had plans prepared grading and bridging 34.54 mi. Federal Aid Project 352, 18 ft. $460,000. W. C. Young, Liberty, engr.

Tex., Linden—Plans election to vote on $100,000 bonds for road work. S. L. Henderson, Linden, judge.

Tex., Madisonville—Madison Co. election Sept. 15, to vote on $150,000 bonds grading and graveling State Highway 21. Total cost $300,000.

Tex., Marlin—Falls Co. had plans prepared graveling 19 mi. Federal Aid Project 331, 18 ft. $321,000. J. P. Mehrung, Lott, engr.

Tex., McKinney—Collin Co. soon takes bids concrete paving 6.75 mi. State Highway 6, 18 ft. $300,000. F. W. Cawthon, co. engr. Noted May 3.

Tex., Novice — Coleman Co. (Coleman) plans election Sept. 22, to vote on $200,000 bonds highways in Novice Precinct, here. W. E. Dickerson, Coleman, co. engr.

Tex., Palo Pinto—Palo Pinto Co. soon takes bids bituminous macadam surfacing 3.37 mi. State Highway 1, 18 ft. $57,000. G. W. Courter, co. engr.

Tex., Paris—Lamar Co. had plans prepared concrete paving 1.58 mi. Paris-Blossom Highway, 18 ft. $47,000. W. M. Fooshee, co. engr.

Tex., Pearsall—Frio Co. election Sept. 18, to vote on $65,000 bonds hard surfacing State Highway in Rd. Dist. 4. R. E. Killmer, co. engr.

Tex., Riogrande—Starr Co. takes bids early in September, grading and graveling 32 mi. State Highway 12 between Samfordyce and Roma, also grading 16 mi. on State Highway 12, between Roma and Zapata Co. line. $350,000. V. H. Henderson, Austin, engr.

Tex., San Augustine—San Augustine Co. voted $50,000 bonds highway improvements. W. A. French, co. engr.

Tex., Sierra Blanci—Hudspeth Co. had plans prepared graveling 9.04 mi. State Highway 1, 18 ft. $35,400. J. W. Carter, El Paso, engr.

Tex., Sulphur Springs—Hopkins Co. plans election soon to vote on $90,000 bonds for road work. R. E. Bertram, co. judge.

Tex., Wichita Falls—Wichita Co. making plans concrete paving 6 mi. State Highway 30, 16 ft. $180,000. D. B. Sartin, co. judge.

Okla., Ardmore—Plans grading and paving 6 blocks Hickory St. from 5th to 11th Sts., 7,000 sq.yd. vertical fibre brick, 2,500 lin.ft. curbing, etc. $37,000. S. Mathews, Ardmore, engr.

Okla., Oilton—Plans improving 6 blocks Main St., 12,000 sq.yd. concrete 3,500 lin. ft. curbing, etc. $40,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs.

Okla., Ponca City — Had plans prepared improving 7 blocks 7th St., et al., 11,000 sq.yd. vertical fibre brick, 2,600 lin.ft. concrete curb and gutter, etc. $60,000. J. P. Rickard, Ponca City, engr.

Okla., Poteau—Plans improving 11 blocks McKenna, Witte and Dewey Sts., 18,000 sq.yd. concrete, 7,000 lin.ft. curbing, etc. $80,000. J. E. Davis, Poteau, engr.

Okla., Stigler—Having preliminary plans prepared grading, curbing and concrete paving 14,150 sq.yd. Main, Holmes and 3rd Sts. $55,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

California—State Hy. Dept., Sacramento, rejected bids grading and graveling 11.5 mi. road between Beltane and Schellville, Sonoma Co. Noted Aug. 23.

Calif., Ft. Bragg — Had plans prepared improving main and Laurel Sts., etc., 264,290 sq.ft. grading, 2,300 lin.ft. concrete curb, 206,507 sq.ft. 3½ in. and 57,720 sq.ft. 4½ in. asphaltic concrete pavement, etc. C. C. Kennedy, Call Bldg., San Francisco, engr.

Calif., Huntington Park — Plans paving with 8 in. asphaltic concrete Santa Fe Ave., Saturn St., etc. To exceed $25,000. H. McCurdy, Pacific Electric Bldg., Los Angeles, engr.

Calif., Huntington Park — Making plans paving Albany St., 120,000 sq.ft. 4 and 5 in. asphaltic concrete. H. McCurdy, Pacific Electric Bldg., Los Angeles, engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving west portion Pacific Blvd., 11,905 sq.ft. removal of concrete walks, 3,033 cu.yd. excav., 22,418 sq.ft. concrete walks, 2,930 lin.ft. curb, 6,480 sq.ft. gutter, 4,744 sq.yd. concrete, 19,600 sq.ft. oil and screen roadway, etc.; east portion Pacific Blvd., 11,688 sq.ft. removal concrete walks, 2,559 cu.yd. excav., 22,685 sq.ft. walks, 2,862 ft. curb, 6,839 sq.ft. gutters, 22,400 sq.ft. oil and screen roadway, etc.

Calif., Richmond—Had plans prepared improving portions Main Ave., 2,140 cu.yd. excav., 42,515 sq.ft. macadam, 13,240 sq.ft. concrete walks, 4,070 sq.ft. concrete gutter, 2,809 lin.ft. concrete curb, etc. H. D. Chapman, city engr.

Calif., San Diego—Had plans prepared paving with 1½ in. warrenite and topeka on 3 in. asphaltic concrete or 1½ in. willite on 3 in. asphaltic concrete 13,752 sq.yd. Imperial Ave., also 17,682 sq.yd. 12th St. in Balboa Park. F. A. Rhodes, city engr.

Calif., San Leandro—Plans paving 4 mi. various streets.

Calif., Santa Rosa—Appropriated $30,000 bonds paving various street intersections. L. L. Mills, city engr.

Calif., Stockton—San Joaquin Co. having plans prepared oil macadam paving 2½ mi. Harney Lane Rd., also 2½ mi. Terminous Rd. To exceed $25,000. F. E. Quail, co. surv.

Calif., Visalia—Had plans prepared improving portions West Center, North Giddings Sts., etc., 4,631 cu.yd. grading, 212,757 sq.ft. 1½ in. warrenite bitulithic on 4 in. base, 2,731 lin.ft. concrete curb, 7,875 lin.ft. gutter, etc. L. H. Gadsby, city engr.

Calif., Woodland—Yolo Co. had plans prepared furnishing and spreading 4,000 cu.yd. 1 to ¼ in. crushed rock or gravel on portions Jefferson Blvd. A. C. Proctor, co. surv.

Que., Montreal—Plans asphalt pavements on Nicolet St., $19,700, Fabre St., $34,000, Garnier St. $30,000, Marquette St. $69,600, Adam St. $4,193, Villemarie St. $28,449, Addington St. $22,660, Angers St. $66,420, Amherst St., $50,050, St. Cunegonde St., $12,980, Parthenais St., $25,835, Hochelaga St., $25,161; concrete sidewalks on Pie IX and St. Joseph Blvds., Madison and 5th Aves., Hochelaga, Drolet, Lajeunesse, Baby, Rivard, Drolet, Chambord, Hector, Villemarie, Patricia, 9th, 8th, Nanyc, Northmount, Namur, Marquette, Rachel, Therrien and Moreau Sts., $137,417.

Que., Montreal—Voted $800,000 bonds for streets and roads, sidewalks, subways, etc. E. Gauthier, asst. city clk.

BIDS DESIRED

New York—Sept. 14, by F. S. Greene, comr. highways, Albany, reconstructing highways in Dutchess, Jefferson, Monroe, Otsego, Saratoga, Washington and Westchester Counties. W. A. Patton, secy.; adv. E. N.-R. Sept. 6.

N. Y., Brooklyn—Sept. 12, by E. Riegelmann, boro pres., Boro Hall, repaving 67th and Joralemon Sts., Georgia, Prospect, Schenectady, Forrest and Manhattan Aves., also Prospect Ave. from 8th to 10th Aves., permanent asphalt, 41st St., Kent and Forrest Aves., grade 1 granite; paving Kings Highway asphalt; grading Flatbush Ave.

N. Y., Long Island City—Sept. 10, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc. on Beach 92nd St.

N. Y., Niagara Falls—Sept. 10, by E. J. Fort, city mgr., repairing and relaying portions of roadbed and road in 3 mi. Main St. along line of International Ry. tracks, 15-24 ft. $81,900.

N. Y., St. George — Sept. 13, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Myrtle and Davis Aves., bituminous concrete concrete curbing and guttering, etc., Benziger Ave. (4th Ave.).

N. J., Asbury Park—Sept. 24, by State Hy. Dept., Trenton, paving Route 4, Sect. 22, Main St., here, Monmouth Co., sheet asphalt and stone block. A. L. Grover, ch. clk.; adv. E. N.-R. Sept. 6. Noted Aug. 9.

N. J., Belvidere—Sept. 19, by Bd. Freeholders Warren Co., grading Hainesburg-Columbia Rd., 31,016 cu.yd. excav. H. W. Vetter, co. engr. Adv. E. N.-R., Sept. 6.

N. J., Jersey City—Sept. 13, by Bd. Freeholders, Hudson Co., paving with sheet asphalt on repaired macadam, 20,600 sq.yd. County Ave., Secaucus. F. J. Radigan, co. engr.

N. J., Newton — Sept. 20, by Bd. Freeholders Sussex Co., constructing Fredon Stillwater Rd., Sect. 2, Stillwater Twp. H. Snook, co. engr.; adv. E. N.-R. Sept. 6.

Pa., Greensburg—Sept. 10, by Comrs. Westmoreland Co., resurfacing 2.4 mi. (more or less) Latrobe-Beatty Rd., Unity Twp., willite, warrenite bitulithic, sheet asphalt or amesite. W. A. Arter, co. controller.

Pa., Cresson—Sept. 12, by Boro. Council, 5,600 sq.yd. vitr. brick pavement, 3,350 lin.ft. cement curb in 2nd St. D. W. Dillman, 80-81 Altoona Trust Bldg., Altoona, engr.

Delaware—Sept. 19, by State Hy. Dept., Dover, grading and concrete paving 0.622 mi. Contr. CK 18 through Clayton; 2.16 mi. Contr. CS 26, Clarks Cross Rds. to Bridgeville; 1 mi. Contr. CS 29 through Greenwood; adv. E. N.-R. Sept. 6.

Maryland—Sept. 11, by State Rds. Comn., Baltimore, concrete paving 1 mi. Contr. CI-43, Carroll Co., from New Windsor toward Englars Mill; adv. E. N.-R. Sept. 6.

Virginia—Sept. 17, by State Hy. Comn., Richmond, improving 39.3 mi. roads in Appomattox, Buckingham, Northampton, Albemarle, Russell, Wight and Wise Counties; improving 5.99 mi. road and constructing bridges in Henrico and Hanover Counties, constructing bridges in Montgomery and Smyth Counties. H. G. Shirley, chn.; adv. E. N.-R. Sept. 6.

Florida—Sept. 27, by State Rd. Dept., Tallahassee, grading and concrete or asphaltic paving 0.701 mi. Project 37 A, Alachua Co., 3.261 mi. Project 37 C, Alachua Co.; grading, dredging embankment and surface treating 2.14 mi. Project 37 D, Alachua Co., 2.3 mi. Project 38 A, Escambia Co.; grading, surface treating and 8 in. rock base on Project 40 D, Brevard Co., 16.169 mi. Project 40 A, Brevard Co., 16.28 mi. Project 597, Volusia Co. J. L. Cresap, Tallahassee, engr.

Fla., Gainesville—Sept. 14, by Alachua Co., surface treating 52,800 sq.yd. Rd. 2 from Daysville to Wacahoota, $25,000, 60,000 sq.yd. Rd. 3 from Gainesville to Newbury, $30,000; grading Rd. 4 from Santa Fe River at Worthington Springs and Rd. 7 from Orange Heights to Melrose, 58,400 cu.yd. excav., 70 acres clearing, $25,000. A. B. Gross, Gainesville, engr.

Fla., Leesburg—Sept. 24, by Bd. Comrs. and D. E. Bivens, city mgr., 60,000 sq.yd. paving with necessary curb and gutter. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.; adv. E. N.-R. Sept. 6.

Alabama—Sept. 18, by State Hy. Comn., Montgomery, improving 9.756 mi. Butler-Meridian Rd., Federal Aid Project 134, Choctaw Co., 1,904 sta.yd. overhaul, 97,399 cu.yd. excav., 1,023 cu.yd. concrete, 123,635 lb. reinforcing, 24,000 cu.yd. gravel, etc. W. S. Keller, state highway engr.

Streets and Roads (Continued)

Ala., Tuscaloosa—Sept. 20, by Tuscaloosa Co., resurfacing with gravel and cinders 19½ mi. Birmingham-Tuscaloosa Rd., 30 ft. $55,000.

Louisiana—Sept. 18, by State Highway Comn., Reymond Bldg., Baton Rouge, constructing 9 mi. Sect. A, and 7.409 mi. Sect. B of Federal Aid Project 81, St. Francisville-Mississippi Highway, West Feliciana Parish. J. M. Fourmy, ch. engr.

Louisiana—Sept. 18, by State Hy. Comn., Reymond Bldg., Baton Rouge, 6.515 mi. State Project 383, Sects. A and C, Opelousas-Lafayette Highway, St. Landry Parish, also fifteen 19 ft. spans over Bayou Carencno. J. M. Fourmy, ch. engr.

Miss., Corinth—Sept. 11, by Bd. Supervs. Alcorn Co. at office Chancery Clerk, improving road and installing bridges over 20 ft. span, on 9.794 mi. Federal Aid 149, from here to Iuka, 79,367 cu.yd. earth and 5,196 cu.yd. borrow excav., 48,605 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Forest—Sept. 10, by Bd. Supervs. Scott Co. improving road and installing bridges over 20 ft. span on 6.7 mi. Federal Aid Project 134, between here and Morton, 25,830 cu.yd. earth and 13,701 cu.yd. borrow excav., 37,598 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr. Noted Aug. 2.

Miss., McComb—Sept. 14, by W. T. Denman, state highway comr., City Hall, grading and paving 2.863 mi. Felders Camp Grounds Rd., 13,010 cu.yd. earth and 480 cu.yd. borrow excav., 2,525 cu.yd gravel, etc. 1,715 mi. River Rd., 8,418 cu.yd. earth and 841 cu.yd. borrow excav., 76.92 cu.yd. concrete 7,265 lb. reinforcing, 1,509 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Pittsboro — Sept. 12, by Bd. Supervs. Calhoun Co., at office Chancery Clerk, improving road and installing bridges on 19.122 mi. Federal Aid 152, from Grenada to Houston, 122,724 cu.yd. earth and 136,979 cu.yd. borrow excav., 10,320 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Walthall — Sept. 13, by Bd. Supervs. Webster Co., improving 12.866 mi. from Calhoun City to Ackerman, Federal Aid Project 157, 25.5 acres clearing and grubbing, 95,548 cu.yd. earth excav., 49,230 cu.yd. borrow, 78,114 lb. reinforcing, etc., also installing bridges over 20 ft. span on same. H. C. Dietzer, Jackson, Miss.

Miss., Water Valley — Sept. 19, by Bd. Supervs. Yalobusha Co., Court House, constructing road and installing bridges over 20 ft. span on 12.492 mi. Federal Aid Project 161, from Grenada to Holly Springs, 60,628 cu.yd. borrow and 72,699 cu.yd. borrow excav., 73,632 cu.yd. gravel, 28,023 sq.yd. concrete, etc. H. C. Dietzer, Jackson, state highway engr.

Ohio—Sept. 14, by L. A. Boulay, dir. Highways and Pub. Wks., Columbus, widening and paving 13,242 ft. Sect. B, Youngstown-East Liverpool Highway, 16 ft., bituminous macadam. $58,461.

O., Cleveland—Sept. 12, by city, paving Steine Court, Hood and Parkview Aves., and West 23rd, West 41st and West 88th Sts., vitr. brick. To exceed $25,000. R. Hoffman, city engr.

O., Cleveland—Sept. 12, by Cuyahoga Co. paving Miner Rd., waterbound macadam. $48,071. F. R. Lander, Court House, engr.

O., Lisbon—Sept. 14, by Columbiana Co. resurfacing 2 mi. Goshen Rd., 20 ft., bituminous macadam. $30,800. L. Kirk, Courthouse, engr. Noted Aug. 9.

Michigan—Sept. 11, by State Hy. Dept., Lansing, grading 4.197 mi. Federal Aid Project 50 Sect. B, Monroe Co., 41,579 cu.yd. excav., etc. Former bids rejected. Noted Aug. 29.

Ia., Wapello—Sept. 11, by Auditor Louisa Co., grading 7.001 mi. primary road from here south to Des Moines Co. Line, 79,551 cu.yd. earth excav., 5,300 ft. tile, etc. Iowa Hy. Comn., Ames, engrs.

Minnesota—Sept. 26, by State Hy. Dept., St. Paul, 18 mi. State Project 6-39, Sect. 1, Federal Aid Project 332, 190,000 cu.yd. excav., two 20 ft. slab spans for Bridge 4104, portable and monolithic culverts, $50,000; 27 mi State Project 4-27, Federal Aid Project 318, 344,000 cu.yd. excav., 180 ft. truss span, Bridge 3956, $90,000; 13 mi. State Project 2-24, Federal Aid Project 129, 20,500 cu.yd. gravel surfacing, $25,000; 16 mi. State Project 23-22, Federal Aid Project 243, 18,700 cu.yd. gravel surfacing, $25,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., Ivanhoe—Sept. 17, by A. L. Swenson, aud. Lincoln Co., gravel surfacing 15 mi. State Project 6-07, 24 ft., from here to north co. line. $25,000. State Highway Dept., 1246 University Ave., St. Paul, engrs.

Kan., Bronson—Sept. 24, by Clerk Bourbon Co., grading, and concrete surfacing 1.076 mi. Ft. Scott-Wichita Road, Federal Aid Project 117. B. Boyle, Ft. Scott, co. eng.

Kan., Independence—Sept. 25, by Clerk Montgomery Co., grading and surfacing with bituminous macadam 5.141 mi. Independence Caney Rd., 18 ft., Federal Aid Project 121. H. K. Hubbard, co. engr. Noted Aug. 16.

Kan., Kansas City—Sept. 11, by O. K. Williamson, engr. Wyandotte Co., improving 2½ mi. Gibbs road, 16 ft., 18,815 cu.yd. earth excav., 28,258 sq.yd. rock asphalt, 878 cu.yd. crushed rock, 28,258 sq.yd. scarifying. Former bids rejected.

South Dakota—Sept. 11, by State Hy. Dept., Pierre, hard surfacing 1 mi. Federal Aid Project 12, Minnehaha Co. F. D. Hudgins, ch. engr.

Wyoming—Sept. 11, by State Hy. Comn., Cheyenne, grading, surfacing, etc., 8.4 mi. Federal Aid Project 149, Clearmont-Cadiz Rd., Sheridan Co., 24 ft., $127,000. Z. E. Sevison, state highway engr.

Mo., Independence—Sept. 10, by L. E. Koehler, city engr., repairing, grading and surfacing 75,353 yd. road incl. 2,000 ft. 6 in. and 4,000 ft. 8 in vitr. tile.

ROAD WORK—DELAWARE

Bids were opened July 25, by State Highway Dept., Dover, for constructing 2.200 mi Maryland-Glasgow Rd., Contr. CN-12, (A) A. H. McDowell, Marshallton; (B) D. W. Robbins, Inc., Utica, N. Y.; (C) D. E. O'Connell & Sons, Ridley Park, Pa. The unit bids were as follows:

	A	B	C
0.3 acres clearing	$400.00	$400.00	$900.00
0.3 acres grubbing	400.00	400.00	900.00
16,000 cu.yd. excavation	1.30	1.30	1.60
100 tons stone base course	5.00	5.90	5.80
3,800 cu.yd. concrete pavement	16.30	16.45	16.40
120 cu.yd. class A concrete	32.00	34.00	35.00
4,200 lb. reinforcement	.10	.10	.10
300 lin.ft. 15 in. R.C. pipe	3.00	3.40	3.00
150 lin.ft. 18 in. R.C. pipe	4.50	4.10	4.00
60 lin.ft. 24 in. R.C. pipe	6.00	6.10	6.50
100 lin.ft. relaid pipe	1.25	1.50	1.50
1,000 lin.ft. 4 in. underdrain	1.00	.75	1.00
800 sq.yd. concrete gutter	2.50	2.30	2.60
600 lin.ft. W.C. guard rail	.50	.65	.50
1,200 lin.ft. wd. shoulder curb	.50	.40	.50
Extended totals	$93,700	$94,251	$99,680

ROAD WORK—VIRGINIA

Following are lowest three bids opened July 25, by State Highway Comn., Richmond, for constructing road between Providence Forge and Bottoms Bridge, New Kent Co., (A) Van Doren Bros., Richmond; (B) McDowell Constr. Co., Marion, N. C.; (C) Burgess & Atkisson, Scottsville, Va. The unit bids were as follows:

	A	B	C
37.13 acres clearing and grubbing	$200.00	$250.00	$125.00
84,060 cu.yd. excavation	.41	.40	.54
14,375 cu.yd. borrow excavation	.40	.42	.54
532.82 cu.yd. class "A" concrete	29.00	26.00	23.00
790.24 cu.yd. class "B" concrete	22.50	22.00	20.00
49,183 lb. reinforcing steel	.08	.10	.08
168 lin.ft. 15 in. concrete pipe	3.00	2.25	2.50
1,606 lin.ft. 18 in. concrete pipe	3.75	3.50	3.00
302 lin.ft. 24 in. concrete pipe	5.00	4.50	4.50
7,630 lin.ft. wooden guard rail	.60	.50	.50
2,000 lin.ft. timber piling	1.10	1.50	1.25
27,143 cu.yd. gravel	.55	.70	.85
Extended totals	$126,006	$130,101	$138,351

ROAD WORK—VIRGINIA

Following are lowest three bids opened July 25, by State Highway Comn., Richmond, for constructing road between Grundy & Hanger, Buchanan Co., (A) Waugh & Longley, Bluefield, W. Va.; (B) R. H. Bolling, Norton; (C) Clintwood Constr. Co., Clintwood. The unit bids were as follows:

	A	B	C
32.4 acres clearing and grubbing	$90.00	$150.00	$100.00
121,885 cu.yd. excavation	.78	.78	.75
307 cu.yd. class "A" concrete	25.00	30.00	35.00
329 cu.yd. class "B" concrete	21.00	25.00	32.00
29,224 lb. reinforcing steel	.10	.10	.15
244 cu.yd. dry rubble masonry	6.00	5.00	6.00
2,380 lin.ft. 15 in. concrete pipe	3.00	3.50	4.50
844 lin.ft. 18 in. concrete pipe	4.25	4.50	5.00
442 lin.ft. 24 in. concrete pipe	6.50	6.00	6.50
2,380 lin.ft. 16 in. C.I. pipe			
844 lin.ft. 18 in. C.I. pipe			
442 lin.ft. 24 in. C.I. pipe			
20,464 lin.ft. wooden guard rail	.50	.50	.70
115 lin.ft. wooden guard rail with steel posts	.75	1.50	1.00
Extended totals	$154,962	$161,361	$169,418

DAM, ETC.—NEW YORK

Bids were opened July 31, by Bd. Water Supply, Municipal Bldg., New York City, for clearing and grubbing the Schoharie Reservoir and constructing a diverting dam in towns of Gilboa and Conesville, Schoharie Co., Plattsville, Greene Co., and Roxbury, Delaware Co., (A) Rice & Ganey, Inc., Grand Central Terminal, New York City, (awarded contract); (B) Ward & Tully, Inc., 189 Montague St., Brooklyn; (C) S. K. Johnson, Norwich. The unit bids were as follows:

	A	B	C
1,300 acres clearing	$60.00	$52.00	$120.00
250 acres clearing and grubbing	350.00	300.00	400.00
15,000 cu.yd. earth excavation	2.00	2.25	1.50
100 cu.yd. rock excavation	6.00	7.00	10.00
1,700 bbl. portland cement	4.00	5.00	5.00
1,200 cu.yd. concrete masonry	18.00	20.00	20.00
3,500 cu.yd. rock-filled timber crib	12.00	15.00	5.00
50 M. ft. B.M. timber and lumber	100.00	240.00	100.00
9,000 lb. iron and steel	.10	.10	.20
Diversion dam (lump sum)	10,000.00	16,500.00	3,200.00
400 acres ordered second cutting of cleared areas	10.00	30.00	20.00
200 cu.yd. removing excrementitious material	10.00	10.00	5.00
600 cu.yd. rip-rap	4.00	10.00	5.00
Extended totals	$290,800	$312,100	$351,500

Streets and Roads (Continued)

Mo., St. Louis — Sept. 25, by Bd. Pub. Serv., Room 208, City Hall, 4,500 sq.yd. granitoid sidewalks, 5 and 6 ft. in Kingshighway Memorial Dr., Ashland, Kennerly, Burd, Fair, West Florissant, Beacon, Linton, DeSoto, Blair, Southwest, Adkins Varrelmann McCausland and Minnesota Aves. $27,750.

Mo., St. Louis—Oct. 2, by Bd. Pub. Serv., Room 208 City Hall, paving 7 alleys with concrete in blocks 4541, 5243, 5255, 5467 and 5577, $28,825; paving and granite curbing 3,950 sq.yd. Gamble St., bitulithic on concrete, $39,600.

Tex., Alpine—Sept. 20, by M. S. Burke, judge Brewster Co., improving 8.53 mi. State Highway 12, from Alpine to Jeff Davis Co. line, 49,529 cu.yd. earth excav., 1,657 sq.yd. concrete paving, 22,031 cu.yd. gravel and caliche, 34,349 lb. reinforcing, etc., $48,610; graveling and caliche surfacing 15.7 mi. State Highway 12 from Alpine to Altuda, 79,033 cu.yd. earth excav., 3,463 sq.yd. concrete paving, 18,400 cu.yd. stripping pits, 13,170 cu.yd. screening surface material, 62,040 lb. reinforcing, etc., $88,635. A. L. White, co. engr. Noted Aug. 23.

Tex., Bonham—Sept. 15, by S. E. Neilson, judge Fannin Co., rein.-con. paving 1 mi State Highway 1, through Honey Grove, 18 ft. $37,000. P. B. Price, Honey Grove, engr.

Tex., Conroe—Sept. 15, by W. A. Lee, judge Montgomery Co., graveling 22.13 mi. State Highway 19, from Wills to Harris Co. line, 16 ft. $190,000. W. J. Kelly, Conroe, engr.

Tex., Honey Grove—Sept. 15, concrete paving ¾ mi. East Market St., 27 ft. To exceed $25,000. P. B. Price, Honey Grove, engr.

Okla., Clinton—Sept. 18, by W. A. Shouse, city clk., grading and paving 7 blocks Frisco, 5th and Dewey Sts., 9,000 sq.yd. asphalt, etc. $45,000. B. M. Hart, City Hall, Oklahoma City, engr.

Okla., Davis—Sept. 12, by F. A. Crossett, city clk., grading and paving Main St., 8,500 sq.yd. 7 in. concrete, 4,500 lin.ft. curbing, etc. $28,000. E. T. Archer, New England Bldg., Kansas City, Mo., engr. Noted May 31.

Okla., Waurika—Sept. 18, by R. McGuire, city clk., grading and paving Main, Bway., C, D, E and F Sts., 27,000 sq.yd. vertical fibre brick, 14,000 lin.ft. curbing, 14,000 lin. ft. gutter, 8,500 cu.yd. excav., etc. $190,000. F. E. Devlin, Wichita, Kan., engr. Noted July 12.

Okla., Wilson—Sept. 11, by H. T. Brown, city clk., grading and graveling Main and Fint Sts., 18,700 sq.yd. gravel, 11,000 lin.ft. curbing, etc. $60,000. McIntosh Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Wash., Kelso—Oct. 1, by A. J. Branscow, city clk., grading and paving Dist. 48, 136,377 sq.yd. 4 in. concrete sidewalk, 41,320 cu.yd. earth, 365 cu.yd. loose and 1,394 cu.yd. solid rock excav., etc. $80,000. W. G. Jackson, city engr.

California—Sept. 17, by State Hy. Comn., Sacramento, surfacing with gravel or broken stone 11.1 mi. road between 2 mi. south of Weaverville and Tom Long Gulch, Trinity Co.; gravel surfacing 12.7 mi. road between 3 mi. east of Chester and 3 mi. east of Westwood, Plumas and Lassen Counties. R. M. Morton, state highway engr.

Calif., Marysville—Sept. 12, by Yuba Co., graveling 3½ mi. Woodruff and La Porte Rds. J. R. Meek, co. surv.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Aug. 29, resurfacing (1) Delamere Pl. (2) Gravesend Neck Rd. (3) Ave. N, (4) roadway of 67th St., with bituminous macadam, grading, curbing and flagging (5) Sheepshead Bay Rd., repaving (6) 41st St., block asphalt (7) Bergen St. (8) Division Ave. (9) 60th St. (10) 79th St. asphalt on concrete, (11) roadway of Flushing Ave., (12) roadway of Furman St. (13) roadway of Prospect Ave., grade 1 granite, from Galecor Contg. Co., 507 Greenwich St., New York City, (1) $7,003 (2) $15,118 (3) $7,540 (4) $16,297; Cranford Co., 52 9th St., (5) $66,333 (10) $30,187; Hastings Paving Co., 25 Broad St., New York City, (6) $9,934; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (7) $8,730 (9) $11,978; Borough Asphalt Co., 1301 Metropolitan Ave., (8) $10,424; Greico Bros., 172 Russell St., (11) $35,267 (12) $5,642 (13) $81,470. Noted Aug. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Aug. 29, paving with permanent pavement on concrete, from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, Fresh Pond Rd. from Metropolitan Ave. to Woodbine St., $56,400, and from Mt. Olivet Ave. to Metropolitan Ave., $68,399. Noted Aug. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Aug. 30 repaving with sheet asphalt (1) Astoria Ave., paving with permanent pavement on asphalt (2) Ditmars Ave., grading, curbing, laying sidewalks, etc. (3) Graham Ave. (4) Weirfield St. (5) Woodside Ave., regarding sidewalk space and laying sidewalks (6) 16th Ave., grading (7) Queens Blvd., from W. P. McDonald Constr. Co., 17 West 42nd St., New York, (1) $61,230; Uvalde Asphalt Paving Co., 1 Bway., New York, (2) $38,800; C. Curth, (3) $11,878 (6) $2,031; Welsh Bros. Contg. Co., Inc., 32 Queens St., Astoria, (5) $25,071 (7) $52,845; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (4) $6,030. Noted Aug. 23.

N. J., Newark—G. C. Bergen, purch. agt. Essex Co., Aug. 28, paving 21,000 ft. Mt. Pleasant Ave., 2½ ft. 2 in. asphaltic concrete shoulders on stone base, on both sides of existing pavement, from Osborne & Marsellis, Bellevue Ave., Montclair, $21,055; grading and paving 16,000 ft. Campbell Ave., Caldwell, 33 ft., 2 in. asphaltic concrete on 6 in. concrete, from Franklin Contg. Co., 20 Washington Pl., $28,219; concrete sewers in 5,000 ft. Harrison Ave. Roseland, from J. F. Boylan, Belleville, $13,924. Noted Aug. 23.

Delaware—State Hy. Dept., Dover, grading and paving 4.22 mi. road from Clarksville to Bethany Beach, Contr. CS-27, from Highway Engr. & Constr. Co., Shelbyville, stone concrete $122,419, slag concrete $117,539 0.518 mi. concrete road through Fredericka, Contr. CK-17, from Juniata Co., Empire Bldg., Phila., $19,738; temporary timber bridge at Seaford, Contr. 42-A, from Delaware Constr. Co., Wilmington, $4,733. Noted Aug. 9.

Md., Baltimore — Bd. Awards, paving streets, Contr. 242-NA, 14,000 sq.yd. asphalt, from Amer. Paving Co., Montebello, $64,367; Contr. 243-NA, 22,000 sq.yd. asphalt, from D. Marine, Knickerbocker Bldg., $56,738. Noted Aug. 23.

Florida — State Rd. Dept., Tallahassee, surfacing 7.121 mi. road between Wabasso and Sebastian River, Project 36 E, St. Lucie Co, 75,205 sq.yd. bituminous macadam on broken stone, from C. F. Lytle, Jacksonville, $252,358; 9.517 mi. road between Pasco Co. line and Brooksville, Project 545, Hernando Co., 89,336 sq.yd. bituminous macadam on broken stone, from Broadbent and Groeting, Ocala, $294,045. Noted Aug. 16.

Kentucky—State Hy. Dept., Frankfort, surfacing with waterbound macadam using concrete pipe 5.409 mi. Hodgensville-Buffalo Rd., State Project 41, Sect. A, Larue Co., from McClellan & Campbell, Bowling Green, 27,401 cu.yd. earth excav. at $0.47 per cu.yd., 1,115 cu.yd. macadam excav. $1, 2,271 cu.yd. borrow $0.50, etc., total $113,704; grading using concrete pipe 3.996 mi. Hazard-Whitesburg Rd., State Project 4, Sect. C, Perry Co., from J. C. Williams, Winchester, 25,707 cu.yd. earth excav. $0.40, 8,088 cu.yd. loose rock excav. $0.70, 44,189 cu.yd. solid rock excav. $0.90, etc., total $77,463, 2.646 mi. Hazard-Jackson Rd., State Project 4, Sect. B, Perry Co., from Codell Constr. Co., Winchester, 28,457 cu.yd. earth excav. $0.48, 19,025 cu.yd. solid rock excav. $0.75, 15,108 sta.yd. overhaul $0.03, etc., total $46,884; reconstructing road from Williamstown to Falmouth Rds., State Projects 62 C and 21 C, Pendleton Co., 8,000 tons crushed stone, from Broaddus & Forbes, Richmond, $14,960; surface treating 5.409 mi. Hodgensville-Buffalo Rd., State Project 41, Sect. A, Federal Aid Project 107, Larue Co., from R. B. Tyler Co., 114 South 4th St., Louisville, $8,017; 1 concrete culvert and approaches on Midland Trail, State Project 17, Sect. C, Shelby Co., 2,800 cu.yd. borrow, 4,526 lb. reinforcing, etc., from Monahan & Turner, Lexington, $4,274. Noted Aug. 2 and 9.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.197 mi. Federal Aid Project 50, Monroe Co., from Townsend, Shuttleworth & Ballmer Co., 306 South Capitol St., Lansing, $136,437; also 60 ft. concrete arch Bridge 580,902, near Monroe, from E. C. Nolan & Son, 1497 Collingwood Ave.; Detroit, $23,957. Noted Aug. 16.

N. D., Napoleon—Logan Co. grading 8 mi. Federal Aid Project 188, 63,000 cu.yd. excav., etc., from H. Knudson, Adrian, $27,517.

Mo., St. Louis — Bd. Pub. Serv., Room 208 City Hall, Aug. 28, 2,180 sq.yd. vitr. brick on DeSoto St., 920 sq.yd. on Christy Ave., and 1,145 sq.yd. on Linton Ave., from Eyermann Constr. Co, 1216 South Grand Ave., $12,344, $5,058 and $6,[illegible] respectively; 7,450 sq.yd. bitulithic on Whittier Ave., and 5,335 sq.yd. on Ohio Ave. from Granite Bituminous Paving Co., Ry. Exch. Bldg., $16,938 and $28,449 respectively; 1,470 sq. yd. refined asphalt on Compton Ave., from Trinidad Asphalt Paving Co. Title Guaranty Bldg., $4,211. Noted Aug. 2.

Ariz., Phoenix—Grading and paving 7th and 9th Aves., Roosevelt, Portland, Latham, West Moreland, Culver, Willetta and Lynwood Sts., from Kisselburg, Smith & Hitchcock, 116 South 18th Ave., $11[illegible],850. Noted Aug. 9.

Calif., Los Angeles—Improving Hobart Blvd. between Lemon Grove and Melrose Aves., from G. R. Curtis, 24[illegible] East 26th St., total for grading $2,000, [illegible]4,342 sq.ft. bituminous base at $0.19 per sq.ft., 1,236 ft. curb $0.65, 3,310 sq ft. walks $0.20, etc.; 10th St. between Gaffney and Meyler Sts., from Griffith Co., Railway Bldg., total for grading $4,200, 152 sq.ft. asphalt $0.35, 81,077 sq.ft. concrete $0.22, 3,337 ft. curb $0.65, 17,262 sq.ft. walks $0.22, etc.

Calif., Sacramento—Improving Freeport Blvd., from McGillivray Constr. Co., Capitol Natl. Bank Bldg., 3,912 ft. curb and gutter at $1.78 per ft., 6,491 cu.yd. excav. $1, 2,306 cu.yd. fill $0.25, 86,026 sq.ft. pavement $0.215, etc.

Que., Montreal—Asphalt pavements from Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., 2,805 sq.yd. Rose de Lima St., $14,350, 8,300 sq.yd. Jacques Hertel St., $54,000, 1,741 sq.yd. Rosemount Blvd. $11,920; Sicily Asphaltum Paving Co., 60 St. Viateur St., 6,480 sq.yd. De La Roche St., $28,850, 2,900 sq.yd. De Gaspe St., $12,897; concrete sidewalks from Rondou Corlier & Co., 3506 Christophe Columb St., 660 sq.yd. Valmont St., $5,937; J. Toralli, 186 St. Marquerite St., 1,070 sq.yd. Harvard Ave., $5,409, 1,050 sq.yd. Old Orchard Ave., $5,475; Leger & Lamoureaux Ltd., St. Denis Bldg., 1,810 sq.yd. St Gerard St., $6,933, 1,285 sq.yd. Boyer St., $6,265, 3,500 sq.yd. 3rd Ave., $21,507; F. Lapan, 601 Lacordaire St., 1,340 sq.yd. Grey Ave., $6,164, 1,350 sq.yd. 2nd Ave., $6,965. Noted Aug. 16.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 28,282 lin.ft. Nepaug Rd., in New Hartford, and 10,480 lin.ft. Mansfield Depot-Storrs Highway, in Mansfield, both bituminous macadam, and 13,200 lin.ft. Putnam-Norwich Rd., in Putnam and Killingly, rein.-con., to A. Vito Co., Thomaston, $188,129, $67,479 and $77,714 (cement furnished by state), respectively; 3,700 lin.ft. Farmington trunk line, Farmington, sheet asphalt to E. Balf Co., 26 State St. $30,004 (cement furnished by State); 18,191 ft. Shore Rd., in Clinton and Madison, plain and rein.-con., to Connecticut Natl. Pavements Inc., New Haven, $159,956 (cement furnished by State); 6,413 ft. Bethlehem-Woodbury Rd., in Woodbury and Bethlehem, resurfacing with 8 in. waterbound macadam, to J. DeMichiel & Bro., 58 High St., Torrington, $24,016; 18,122 lin.ft. Housatonic Rd., in Kent, rein.-con., and 5,518 lin.ft. Cooke Ave., in Plainville, plain concrete, to Osborn-Barnes Co., Odd Fellows Bldg., Danbury, $135,252 and $17,051 respectively (cement furnished by State); 19,250 lin.ft. Nichols Rd., rein.-con., in Trumbull, to Bridgeport Constr. Co., 983 Broad St., Bridgeport, $92,544 (cement furnished by State); concrete bridge in Canton, to L. Suzio Constr. Co., State and Broad Sts., $17,061 (cement furnished by State). Noted Aug. 16.

New York—C. H. Smith, supt. highways, Orange Co., Times Press Bldg., 15 King St., Middletown, bituminous macadamizing 3 mi. road in town of Warwick, also concrete paving 3.75 mi. road in towns of Minisink and Greenville, to Schunnemunk Constr. Co., Highland Mills, $280,126. Noted Aug. 2.

Pennsylvania—State Hy. Dept., Harrisburg, improving roads (A. means Application and R. means Route), 18,206 ft. A. 2573-74 and 75, Delaware Co., to V. DiFrancesco, Llanerch, $176,287; 2,203 ft. A. 2578, Beaver Co., to D. W. Challis & Sons, 420 Centennial Ave., Sewickley, $36,055; 3,666 ft. R. 163, Lehigh Co., to S. N. Weaver, Allentown, $64,697; 20,005 ft. R. 175, Northampton Co., to Juniata Co., 410 Empire Bldg., Phila., $111,190; 13,627 ft. R. 165 and 166 Northampton Co., to McInerney & McNeal, Easton, $134,918; 12,017 ft. R. 111, Greene Co., to Myers Paving Co., Waynesburg, $37,394. Noted Aug. 16.

Alabama—State Hy. Dept., Montgomery, grading and graveling 11.32 mi. Dublin-Orion Rd. on Bee Line Highway, Montgomery Co., to J. W. Gwinn, Hamilton Sta., Birmingham, $159,699. Noted Aug. 9.

Streets and Roads (Continued)

Pa., New Castle—Repaving East Washington St., vitr. brick, to M. J. Scanlon, New Castle, $31,603.

W. Va., Moundsville—Marshall Co. grading and improving River Rd. south of here, to Keeley Constr. Co., Clarksburg, $43,000.

Fla., Deland—Volusia Co. constructing 39.5 mi. road in Turnbull Special Road and Bridge Dist., Coquina rock, to G. Abbott, New Smyrna, and brick and rock base to J. Y. Wilson, Clark Bldg., Jacksonville, total $360,000. Noted July 26.

Fla., Tampa—Curbing and paving with 2¼ in. asphalt blocks Lake, Tampania and Branch Aves., to Cone Bros., Tampa, $19,393; Nordica Ave., to W. L. Harwell, 721 South Orleans Ave., $6,461. Noted Aug. 8.

La., Abbeville — Improving Perry and Abbeville Rds. to Goldberg & Rochel, New Iberia, $7,382; Kaplan Route Rd., to Banta & Muterspaugh, Crowley, $16,282; Erath Route, to Lafayette Constr. Co., Abbeville, $19,213. Noted Aug. 2.

La., Ruston—For 16,295 sq.yd. asphaltic concrete pavements on various streets, to C. W. James Constr. Co., Shreveport, $65,000.

Tennessee — Dept. Highways and Pub. Wks., Nashville, grading, etc., 14.65 mi. State Project 113, 16 ft., Scott Co., to R. E. Martin, Mountain City, $137,595.

Tenn., Pulaski — Paving 13,000 sq.yd. various streets, rock asphalt on limestone, to E. T. Lewis, Constr. Co., 1902 Elliott Ave., Nashville, $18,912. Engrs. est. $25,000. Noted Aug. 16.

O., Akron—Dept. Pub. Serv., improving Hammel St., 1,400 cu.yd. cinders, to M. Kalain, $14,895, engrs. est. $18,657; Keeney St., 350 cu.yd. cinders, to Hollinger & Davidson, $4,659, $5,413; Dayton St., 1,100 sq.yd. standard brick, asphalt fill, to McAlonan Bros., 197 West Buchtel Ave., $9,718, $10,218; Newton St., 103 cu.yd. concrete, to G. S. Hiser, $3,024, $3,883.

O., Cleveland — Paving Mountclair and Ruby Aves., to Roehl Bros. Paving & Constr. Co., West 25th St. and Lorain Ave., $25,458 and $14,738 respectively; Lenecrave Ave., to Highway Constr. Co., 903 Lorain County Bank Bldg., Elyria, $44,997. Work involves 15,710 sq.yd. vitr. brick on concrete, 10,740 lin.ft. stone curb and 4 in. tile gutter, etc. Noted Aug. 23.

O, Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying water services and sewer connections, and paving 370 ft. Gates St., 1,174 ft. 18th St., both 24 ft. wide, and 3,453 ft. Hanford St., 36 ft., all asphalt, to Franklin Asphalt Paving Co., 209 South High St., $5,050, $13,911 and $28,245 respectively; 705 ft. alley north of McMillan Ave., 896 ft. alley west of Linwood Ave., both 20 ft., and 1,621 ft. alley west of Indianola Ave., 15 ft, all concrete, to Columbus Contg. Co., 1471 West Broad St., $4,302, $5,324 and $6,843 respectively; 475 ft. 5th St., 20 ft., asphalt, to Federal Paving Co., 996 McAllister Ave., $4,707. Noted Aug. 16.

O., Lisbon—Columbiana Co. resurfacing with bituminous macadam, Dixonville Rd., to Mylar Constr. Co., Youngstown, $34,982. Engrs. est. $35,000.

Mich., Detroit—Grading and paving with sheet asphalt to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Puritan Ave. $155,773; to F. Porath, Jr., 305 Free Press Bldg., Ferdinand Ave. $22,357; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Parkhurst Ave. $20,931; to Detroit Asphalt Paving Co., 20 McGraw Bldg., Dexter Ave. $27,682, Greenlawn Ave. $26,054, Parkside Ave. $49,032, Thatcher Ave. $25,910, Webb Ave. $25,861, Washburn Ave. $23,430, Warren Ave. West $89,297, Warren Ave. East $94,818, Granville Pl. $6,172, Wilshire Ave. $49,051, Fairfield Ave. $32,290, Green Ave. $14,554, Holmur Ave. $22,230, Lakeview Ave. $31,233, Lakewood Ave. $34,189, Pitt St. $12,512, Post St. $53,587, Shoemaker Ave. $9,419, Webb Ave. $28,424.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving **0.89 mi. 11-9-C-1 Madison means (0.89 mi. Route 11, Federal Aid Project 9, Sect. C-1, Madison Co.)**, to W. C. Johnson, 512 South High St., Belleville, 0.89 mi. 11-9-C-1, 0.84 mi. 11-9-38 and 0.23 mi. 11-9-39X, Madison, $22,102, $38,499 and $6,968 respectively; to E. J. Eiff, Quincy, 2.96 mi. 31-31-8 Brown, $58,708; **4.08 mi. 3-55-Greene means (4.08 mi. Route 3, Sect. 55, Greene)**, to Nelson Bros., Jerseyville, 4.08 mi. 3-55 Greene and 4.35 mi. 3-58 Jersey, $92,367 and $90,983 respectively; to J. W. Jones, Bentin, 2.71 mi. 14-6 and 4.43 mi. 14-6X Franklin, $61,680 and $98,400 respectively; to Trompeter & Sons, Peru, 3.75 mi. 18-15 Kendall De Kalb, $80,185; to List & Gifford Constr. Co., 415 Railway Exch., Kansas City, Mo., 5.08 mi. 31-11 Schuyler, $117,206; grading to Keating Bros., Auburn, 53,590 cu.yd. 1-2A and 37,140 cu.yd. 1-3A White, $28,663 and $16,516 respectively; to D. C. Condon, 301 Karbach Bldg., Omaha, Neb., 132,361 cu.yd. 3-59A Jersey-Madison and 41,790 cu.yd. 3-60A Madison, $78,510 and $21,487 respectively; to J. W. Jones, Benton, 42,760 cu.yd. 14-6A Franklin, $26,467. Noted Aug. 9.

Wis., Madison — For 1 course concrete paving East Johnson St., to N. Quinn, 515 West Johnson. Engrs. est. $30,000.

Ia., Waterloo—Black Hawk Co., to J. A. Runkel, Webster City, grading Primary Rd. Project 302, 91,379 cu.yd. excav., $0.275 and 80,000 cu.yd. channel change, $0.375.

Minn., Le Sueur Center—Le Sueur Co., Job 2302B, State Rd. 14, 79,401 cu.yd. earth, 842 cu.yd. loose rock and 1,488 cu.yd. solid rock excav., etc., to J. Sampson, Faribualt, $26,332. Noted Aug. 9.

Kan., Arkansas City—Paving with vitrified brick on concrete, grading, curbing, etc., 14 blocks F Street, Madison and Tyler Aves., 24 ft., to Stanton & Wallace, Arkansas City. Engrs. est. $60,000.

Kan., Eldorado—Paving 8 blocks various streets, 10,212 sq.yd. 6 in. rein.-con., 6,352 ft. 6 in. curb and gutter, 4,250 cu.yd. earth excav., etc., to Stewart Ritchie Constr. Co., Wichita, $34,210. Engrs. est. $40,000.

Kan., Minneapolis—Ottawa Co. concrete paving 0.74 mi. Salina-Bennington Road, Federal Aid Project 157, to L. W. Reprood, Lincoln, Neb., $42,937.

N. D., Mandan—Paving ½ mi. Mandan-Bismarck Highway, bitulithic, to Haggart Constr Co, Fargo, $28,000. Noted Aug. 2.

N. D., Valley City—Paving 21,000 sq.yd. Dists. 1 and 2, bitulithic, to Haggart Constr. Co., Fargo, $100,000.

Ark., Little Rock—Grading, curbing and concrete paving 11,500 sq.yd. in Imp. Dist. 343, to Gregory and Wilson, Little Rock, $31,050.

Tex., Dallas—Paving St. Paul St. from Commerce to Marillo Sts., uvalde rock asphalt on concrete, to Uvalde Paving Co., Insurance Bldg., at $3.18 per sq.yd. Est. cost to exceed $50,000.

Tex., Eastland—Eastland Co. paving with bituminous on macadam 19.14 mi. Eastland Gorman Rd., 10.04 mi. road from Eastland Co. line north, 18.69 mi. Cisco-Rising Star Rd., all 18 ft., to Chapin & Kemp, San Antonio, $314,994.

Tex., Ft. Worth—Curbing, guttering and paving with 2 in. warrenite bitulithic Lee Ave. from Colwyn to Camp Bowie Sts., to West Texas Constr. Co., Cotton Exch. Bldg., $64,792. Engrs. est. $65,000.

Tex., Vernon — Wilbarger Co., concrete surfacing 2.24 mi. Vernon-Oklaunion Rd., Highway 5, 18 ft., to J. P. Foty, Vernon, $69,639, engrs. est. $80,000; 0.64 mi. Pease River Rd. to B. O. Gilstrap, Iowa Park, $15,838, $26,000. Noted Aug. 16.

Okla., Tulsa—Vibrolithic paving Trenton Ave. and 17th St., to Western Constr. Co., Tulsa, $44,391 and $75,465 respectively.

Okla., Weleetka — Improving Seminole Ave., to Wilson & Bush, Weleetka, 6,100 sq.yd. concrete at $2.40 per sq.yd., 2,100 cu.yd. earth excav. at $0.85, 3,150 lin.ft. curbing $0.83, etc., total $22,645. Noted July 19.

Utah—State Rd. Dept., Salt Lake City, grading and surfacing 1.77 mi. Main Street of Nephi City, Federal Aid Project 53, Juab Co., to Wasatch Grading Co., Provo, 2,174 cu.yd. common excav. at $0.95 per cu.yd., 1,550 cu.yd. borrow $0.50, 16,780 sq.yd. Type K concrete $1.26, 1,940 sq.yd. Type G concrete $1.26, etc., total $60,845; 7.077 mi. Scipio-Juab Rd., Federal Aid Project 17 A, Millard Co., to Hawley, Anderson & Hinckley, 323 North 1st St. W., Salt Lake City, 9,625 cu.yd. common excav. $0.50, 4,375 cu.yd. borrow $0.50, 14,322 cu.yd. loading gravel $1, 31,244 yd. hauling gravel $0.40, 7.077 mi. placing gravel $500, etc., $48,288. Noted Aug. 9.

Nevada—State Hy. Dept., Carson City, grading, gravel surfacing and building culverts on Caliente-Pioche Rd., Federal Aid Project 85, Contr. 84, Lincoln Co., to F. A. Dahle Constr. Co., 144 East 3rd St., North, Logan, Utah, $269,845; timber truss on timber bents over Meadow Valley Wash near Caliente, Contr. 83, Lincoln Co., to Security Bridge Co., Ogden, Utah, $7,244.

Wash., Kelso — To United Contg. Co., North West Bank Bldg., Portland, Ore., paving with 2 in. warrenite on 4 in. crushed rock, 6,851 sq.yd. Dist. 50, $18,942; 6,100 sq.yd. Dist. 49, $18,142; 1,589 sq.yd. Dist. 51, $4,030.

Calif., Fresno—Fresno Co. to Blanco & Taylor, Los Banos, 4.25 mi. recrowning and spreading 3 in. rock and 5. 75 mi. widening, recrowning and spreading 3 in. rock, 16 ft. wide, on Trimmer Rd., 10,000 cu.yd. earthwork at $1.40 per cu.yd., 10,000 tons rock $2.80, total $42,000; to Thompson Bros., G and Divisadero Sts., spreading 12,000 tons rock, 4 in. thick on 8.75 mi. Tollhouse Rd., at $2.98 per ton, total $35,760; to California Constr. Co., 58 2nd St., San Francisco, grading and paving 4 mi. Route 16, Sect. B, 6,116 cu.yd. earthwork at $1.10 per cu.yd., 334,940 sq.ft. 5 in. asphalt $0.197; to T. A. Hanrahan, Brix Bldg., grading and paving 6.7 mi. Route 2, Sect. A, 15,107 cu.yd. earthwork $0.65, 547,689 sq.ft. 4 in. asphalt $0.174, 4.4 mi. Route 5, Sect. B, 9,685 cu.yd. earthwork $1.20, 380,618 sq.ft. 4 in. asphalt $0.18, 2 mi. Route 27, Sect. A and 0.62 mi. Route 28, Sect. A, 3,857 cu.yd. earthwork $1.50, 219,692 sq.ft. 5 in. asphaltic concrete $0.215. Noted Aug. 30.

Calif., Grass Valley—Improving various streets, to Healy-Tibbitts Constr. Co., 64 Pine St., San Francisco, 232,936 sq.ft. 4 in. concrete at $0.179 per sq.ft., 117,450 sq.ft. 5 in. concrete $0.224, 4,295 cu.yd. grading $1.30, etc. Noted Feb. 22.

Calif., Hermosa Beach—Curbing, guttering and sidewalks on Summitt Ave., to G. H. Oswald, 366 East 58th St., Los Angeles, $117,000.

Calif., Los Angeles—Improving Vine St. between Yucca and Camerford Sts., to G. A. Constantine, Haas Bldg., total for grading $20,800, 18,000 sq.ft. asphaltic concrete at $0.32 per sq.ft., 560,133 ft. 6 in. concrete $0.236, 12,086 ft. bituminous base $0.10, 10,431 ft. curb $0.635, 55,567 ft. walks $0.20, etc., total $300,000.

Calif., Pacific Grove—To Clark & Henery Constr. Co., 38 South Sutter St., Stockton, grading, concrete curbing, guttering and paving with 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, Lighthouse Ave. between 19th St. and city limits, $86,672; Forest Ave. between Lighthouse and Sinex Aves., $23,640.

Calif., San Francisco—Curbing, sidewalks and paving Liberty St. between Church and Noe Sts., and Sanchez St. between 20th and 21st Sts., to Municipal Constr. Co., 112 Lyon St., $23,443. Noted Aug. 30.

Calif., Santa Monica—Paving with 1½ in. warrenite bitulithic on 3½ in asphaltic concrete 4th St. between Pico and Central Aves., to J. D. Keen Paving Co., Dudley Block, $28,500.

Calif., Vacaville—Asphaltic concrete paving portions West and Market Sts., etc., to California Constr. Co., 58 2nd St., San Francisco, $67,000.

Que., Montreal — To Sicily Asphaltum Paving Co., 60 St. Viateur St., asphalt pavements on Bordeaux St., $20,953, Lasalle St., $7,698, Lajeunesse St., $17,180, Lalonde St., $5,288; to B. Brault Ltd., 2855 Rosemount Blvd., Gouin Blvd., $97,287; to Rondou Corlier & Co., 3506 Christophe Columb St., Berri St., $27,554. Noted Aug. 30.

Ont., Walkerville—Concrete pavements to Merlo, Merlo & Ray, Ford, $68,000.

Industrial Works

PROPOSED WORK

N. Y., Buffalo — Albany Garage, 409 Niagara St., plans to rebuild 2 story, 60 x 80 ft. garage, recently destroyed by fire. $56,000.

N. Y., Buffalo—Becker-Hoffman Service Co., 250 Franklin St., plans 3 story, 52 x 115 ft. garage, rein.-con., brick and steel, Elmwood Ave. To exceed $75,000.

N. Y., Medina—J. C. Posson and C. W. Grinnell plan to rebuild cold storage plant, Park Ave., recently destroyed by fire. $50,000.

N. Y., New York—A. Herz Co., 9 Barrow St., plans rein.-con., brick and steel plant, plain foundation, Walnut Ave. and 134th St. $100,000. Engineer and architect not selected.

N. Y., Rochester—Paige Sales Co., Cortlandt St., plans 2 story, 60 x 100 ft., concrete and steel garage, Cortlandt St.

N. J., Jersey City—Continental Can Co., 61 Bway, New York City, having plans prepared by Francisco & Jacobus, archts. and engrs., 511 5th Ave., New York City, brick, steel and rein.-con. factory addition, 16th St., here. $500,000.

Md., Baltimore—Paper Products Co., 2405 West Franklin St., plans plant to replace one recently destroyed by fire. $350,000.

Industrial Works (Continued)

W. Va., Huntington—Sterling Oil Products Co., plans warehouse and storage tanks, 31st St. $150,000. G. C. Barnes, mgr.

N. C., Cullowhee—Bd. Trustees of Cullowhee Normal and Industrial School plans enlarging power plant. $40,000. H. A. Underwood, 916 Commercial Bank Bldg., Raleigh, engr.

Fla., Lakeworth—Plans to issue $65,000 bonds extending electric light and water works plants and buildings. A. Drake, Mayor.

Ky., Louisville—Louisville Gas & Electric Co., 311 West Chestnut St., plans extensions and improvements to steam power plant on river front, increasing capacity to 120,000 hp. $500,000. L. F. Strang, c/o owner, engr.

Ky., Russell—Chesapeake & Ohio R.R., Hickox Bldg., Cleveland, O., plans engine house, here. $100,000. C. W. Johns, Richmond, Va., ch. engr.

O., Cleveland—Nickel Plate Storage Co., Room 615, 1900 Euclid Bldg., having preliminary plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 6 story and basement, 60 x 140 ft. warehouse, brick and rein.-con., East 152nd St. and along tracks of Nickel Plate Ry. $160,000. J. Reineck, pres.

O., Hamilton—Having plans prepared by Froelich & Emory Eng. Co., 412 2nd Natl. Bank Bldg., Toledo, large electric light plant. $650,000. W. F. Mason, dir. pub. serv.

Mich., Iron Mountain—Ford Motor Co., Highland Park (Detroit P. O.), had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 5 story, 100 ft. high, 112 x 140 ft. rein.-con., brick and steel power house, plain foundation.

Ill., Chicago—N. A. and S. E. Mittleman, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., plan 1 story 75 x 110 ft. auto sales and service, 2482-86 Milwaukee Ave. $100,000.

Ill., Decatur—Polar Wave Ice & Fuel Co., 3626 Olive St., St. Louis, Mo., having preliminary plans prepared by H. G. Clymer, Wainwright Bldg., St. Louis, Mo., 2 story and basement, 100 x 200 ft. ice manufacturing and refrigeration plant, rein.-con. and brick, along tracks of Wabash Ry., here. To exceed $150,000.

Wis., Knellsville (Belgium, P. O.)—Farmers Cooperative Dairy Co., c/o J. Schmit, having plans prepared 2 story, 36 x 76 ft., brick and concrete factory, plain foundation. $40,000. Private plans.

Wis., Sheboygan—Wisconsin Pub. Serv. Co., c/o J. P. Pulliam, 559 Marshall St., Milwaukee, plans gas plant, 1,300,000 cu.ft. capacity gas storage tank, steel, 138 ft. high, brick and concrete boiler house with brick or concrete stack, brick and concrete pumping plant, etc., here. $1,000,000. R. B. Brown, 182 Wisconsin St., Milwaukee, engr.

Kan., Topeka—Jordan Baking Co. soon takes bids 2 story and basement bakery, brick and concrete, plain foundation, 5th St. $100,000 or more. Private plans.

Mo., Kansas City — A. F. Seested, c/o Kansas City Star, 1715 Grand Ave., having plans prepared by J. G. Brecklein, Federal Reserve Bank Bldg., 3 story and basement, 64 x246 ft. rein.-con. and brick garage and sales room. $100,000. Oakland Motor Car Co., lessee.

Mo., St. Louis—E. T. McGrath, c/o Holbrook-Blackwelder Real Estate Trust Co., 812 Chestnut St., plans 3 story, 89 x 110 ft., rein.-con. and brick garage, plain foundation, Bway., near Poplar St. $50,000. Engineer and architect not selected.

Tex., Carrollton — Northern Texas Gin Co., plans to rebuild cotton gin, recently destroyed by fire. $40,000-$50,000.

Tex., Dallas — Dallas Brass Mfg. Co., 4015 Main St., plans rebuilding brick factory recently destroyed by fire. $40,000. Engineer and architect not announced.

Tex., Dallas — M. Weiss, 1226 North Bishop St., plans factory, Love Field. $50,000-$60,000. Engineer and architect not announced.

Tex., Ft. Worth—City plans 3 or 4 story garage. $150,000. D. L. Lewis, city engr.

Tex., Houston—Texas Packing Co., 110 Milam St., had plans prepared by M. P. Burt, Falls Bldg., Memphis, Tenn., 3 story and basement, 56 x 116 ft., packing house, brick, Ship Cannel. $80,000.

SUBWAY—PHILADELPHIA, PA.

Following are lowest three bids opened July 24, by Dept. City Transit, for subway and stations in Arch St. from east of 9th St. to west of 12th St., Contr. 207. (A) E. Paseuzzi, A. Jafolla and L. Mark, 601 Lincoln Bldg.; (B) Keystone State Constr. Co., 210 South 13th St. (awarded contract); (C) F. J. Boas & Ryan Constr. Co., 201 North Broad St. The unit bids were as follows:

	A	B	C
70,000 cu.yd. excavation above elevation, 6.00	$8.25	$9.10	$8.95
100 cu.yd. excavation below elevation, 6.00	14.00	12.00	11.00
100 M. ft. B.M. yellow pine lumber	72.00	60.00	75.00
Underpinning buildings:			
(A) Reading terminal (lump sum)	41,000.00	50,000.00	65,000.00
1,960 ft. of front (B) buildings, 5 stories or less in height	77.70	52.00	75.00
188 ft. of front (C) buildings, over 5 and less than 10 stories in height	108.00	100.00	120.00
30 ft. of front (D) buildings, 10 stories or over in height	198.00	200.00	200.00
200 cu.yd. (E) additional masonry for underpinning	20.00	25.00	30.00
Concrete masonry:			
50 cu.yd. class 1:1½:3	19.85	20.00	25.00
10,000 cu.yd. class 1:2:4	15.75	16.00	18.00
500 cu.yd. class 1:3:6	16.00	12.00	15.00
100 cu.yd. class 1:4:8	14.00	10.00	12.00
1,000 sq.ft. reinforced concrete sheathing	.90	1.00	1.00
50 cu.yd. brick masonry	29.00	30.00	30.00
50 cu.yd. hollow terra-cotta brick masonry	30.00	30.00	30.00
50 cu.yd. rubble masonry	10.00	6.00	10.00
10 sq.yd. vitrified shale brick sewer lining	3.75	4.00	4.00
10 sq.yd. granite block sewer lining	5.00	6.00	6.00
15 manholes	150.00	100.00	100.00
60 verticle ft. wellholes	15.00	15.00	15.00
Building new inlets:			
No. 1 inlet	190.00	200.00	200.00
No. 2 inlet	165.00	175.00	175.00
No. 3 inlet	160.00	150.00	150.00
No. 4 inlet	150.00	100.00	100.00
Taking out and rebuilding inlets:			
21 inlets having standard pattern casting	175.00	80.00	100.00
1 inlet having old pattern casting to be replaced by standard pattern casting	185.00	80.00	100.00
Flagstones:			
100 sq.ft. 2-in. thickness	.60	.60	.75
100 sq.ft. 4-in. thickness	2.00	.75	1.00
100 sq.ft. 6-in. thickness	3.00	3.00	3.00
100 cu.yd. dry rubble masonry or rip-rap	4.50	4.00	4.00
100 cu.yd. broken stone or pebbles for drains	2.75	3.00	2.75
1,000 bags cement grout	1.25	1.50	1.35
1,000 sq.yd. granolithic finish	1.14	1.25	1.30
Fabric waterproofing:			
100 sq.yd. 1-ply	.95	1.00	1.00
100 sq.yd. 2-ply	1.30	1.40	1.50
100 sq.yd. 3-ply	2.10	2.00	2.00
100 sq.yd. 4-ply	3.06	3.00	3.00
100 sq.yd. 1-ply dry roofing felt	.40	.50	.50
8,000 sq.yd. asphaltic mastic water-proofing	3.00	3.00	3.00
100 cu.yd. brick in water-proofing compound	48.00	50.00	45.00
Vitrified clay pipe:			
1,000 lin.ft. 4-in.	.45	.50	.50
1,000 lin.ft. 5- or 6-in	.65	.70	.65
500 lin.ft. 8- or 10-in	.75	.80	1.00
500 lin.ft. 12-in.	1.15	1.25	1.25
1,500 lin.ft. 15-in.	1.95	2.00	2.00
100-lin.ft. 18-in.	3.50	4.00	3.50
Extra heavy cast-iron soil pipe:			
400 lin.ft. 3-in.	.68	.70	.75
500 lin.ft. 4-in.	1.04	1.00	1.00
1,000 lin.ft. 5-in.	1.40	1.50	1.50
4,000 lin.ft. 6-in.	1.70	1.75	1.75
100 lin.ft. 8-in.	2.75	2.50	2.50
Cast-iron pipe furnished:			
50 net tons bell and spigot straight	75.00	80.00	75.00
10 net tons bell and spigot specials	160.00	170.00	175.00
10 net tons flange high-pressure straight	120.00	125.00	125.00
5 net tons flange high-pressure specials	175.00	200.00	175.00
5 net tons flange high-pressure cast-steel specials furnished	285.00	300.00	250.00
Laying or removing cast-iron pipe:			
100 net tons bell and spigot pipe and specials	20.00	25.00	25.00
50 net tons flange high-pressure pipe and specials	30.00	30.00	30.00
Bell end water gate valves:			
1 30-in. geared gate valve	1,300.00	1,200.00	1,000.00
1 24-in. gate valve	450.00	400.00	500.00
1 20-in. gate valve	325.00	300.00	300.00
1 16-in. gate valve	210.00	200.00	200.00
1 12-in. gate valve	135.00	120.00	150.00
1 10-in. gate valve	110.00	100.00	100.00
1 8-in. gate valve	100.00	100.00	75.00
1 6-in. gate valve	75.00	70.00	50.00
2,000 lb. wrought-iron or steel pipe, any size	.12	.10	.10
Wrought-iron or steel pipe conduit:			
6,000 lin.ft. ¾- or 1-in. galvanized conduit	.19	.20	.25
1,000 lin.ft. 1¼- or 1½-in. galvanized conduit	.34	.30	.35
1,000 lin.ft. 2½-in. galvanized conduit	.65	.60	.50
500 lin.ft. 3-in. galvanized conduit	.76	.70	.75
500 lin.ft. 3½-in. galvanized conduit	.92	.90	1.00
Galvanized outlet and pull boxes:			
700 outlet boxes	1.50	1.00	1.00
60 pull boxes	6.00	2.00	3.00
Temporary lighting system (lump sum)	4,650.00	5,000.00	3,500.00
5 10-in. grate iron bell trap cesspools	25.00	5.00	25.00
10,000 lb. miscellaneous iron castings	.11	.10	.10
10,000 duct ft. terra-cotta ducts	.14	.15	.15
25,000 lb. structural steel of any class	.10	.08	.08
2,250,000 lb. cleaning, hauling and erecting old structural steel	.025	.03	.03
50 net tons interlocking steel sheet piling	98.00	100.00	100.00
Steel pipe piles:			
100 vertical ft. 12-in.	7.50	8.00	7.50
100 vertical ft. 15-in.	9.60	10.00	8.50
300,000 lb. steel reinforcing rods and bars	.08	.08	.07
1,000 lb. steel wire forms and anchors	.28	.20	.20
2,000 sq.ft. steel ventilation gratings	3.10	3.25	3.00
1,000 sq.ft. painting steel work	.09	.10	.07
100 sq.ft. safety treads	3.00	3.00	2.50
1,000 sq.ft. vault lights	3.00	3.00	3.00
100 sq.yd. cartway paving, granite block on gravel base, if ordered additional	4.00	4.00	5.00
Sidewalk repaving:			
100 sq.yd. granolithic	3.00	3.00	3.00
100 sq.yd. brick	2.00	2.00	2.00
100 sq.yd. flagstone	3.00	3.00	3.00

	A	B	C
Curbing:			
100 lin.ft. 6-in. straight granite	3.00	3.00	3.00
100 lin.ft. 8-in. straight granite	4.00	3.25	3.50
100 lin.ft. 6-in. curved granite	4.00	3.50	4.00
100 lin.ft. 8-in. curved granite	5.00	4.00	4.50
100 lin.ft. steel edge concrete	2.00	2.00	2.00
100 lin.ft. resetting curb	.60	.60	.50
Force account ($20,000)	25%	30%	30%
Extended totals	$1,171,729	$1,198,555	$1,271,060

Industrial Works (Continued)

Calif., Long Beach—E. R. Gibson, et al., 325 East 1st St. plans laundry. To exceed $100,000.

Calif., Los Angeles—Los Angeles Gas & Electric Co., 645 South Hill St., plans to issue $4,000,000 bonds improvements and extensions to plant and equipment.

Calif., Los Angeles—Thompson Co., 1420 East 8th St., had plans prepared 1 story, 50 x 125 ft., brick garage, East 8th St. Private plans.

Calif., San Francisco—B. Getz, Chronicle Bldg., had plans prepared by Morrow & Garren, Chronicle Bldg., 1 and 2 story, concrete garage, Ellis and Buchanan Sts. $40,000.

Calif., San Francisco — J. Pasqualetti, Humboldt Bank Bldg., having plans prepared 2 story and basement, rein.-con. garage, Market St. near 15th St. $40,000. Private plans.

Calif., San Francisco — San Francisco Assn. for Blind, Folsom and Langton Sts., having plans prepared by H. H. Meyers, Kohl Bldg., 3 story, rein.-con. factory, 7th and Howard Sts. $60,000.

Calif., Ventura — Ventura Impvt. Assn., c/o A. C. Martin, archt., Higgins Bldg., Los Angeles, having plans prepared 1 story, 75 x 100 ft., brick garage, here.

Que., Drummondville—Southern Canada Power Co. Ltd., 20 St. Nicholas St., Montreal, plans power house, 30,000 hp., at Hemming Falls near here on St. Francis River. J. S. H. Wurtele, c/o owners, engr.

Que., Montreal—J. B. Baillargeon Co., 329 Ontario St. E., plans 8 story, 109 x 155 ft., rein.-con., brick and steel warehouse. $300,000.

BIDS DESIRED

Va., Richmond—D. M. Lea Co., 20th and Main Sts., receiving bids 2 story, 200 x 300 ft., box factory. $250,000. Carneal & Johnston, Chamber of Commerce Bldg., archts.

O., Cleveland — Brush Garage Co., c/o Watson Co., archts., 4614 Prospect Ave., receiving bids 2 story and basement, 110 x 110 ft., brick, steel and concrete garage, Prospect Ave. $75,000.

O., Cleveland — A. C. Wolf and F. M. Griffith, archts., Swetland Bldg., taking bids and open same about Sept. 10, 1 story machine shop and foundry, brick and steel, East 55th St., for Globe Brass & Mfg. Co., 5532 Perkins Ave. $75,000. Noted Aug. 2.

Ill., Chicago — Bosches & Chaet, 1119 South Central Park Ave., receiving bids 1 story, 125 x 125 ft. auto sales and garage, Arthington and Crawford Sts., $60,000. J. H. Klafter, 127 North Dearborn St., archt.

Ill., Chicago — D. S. Klafter, archt., 64 West Randolph St., receiving bids 2 story, 75 x 125 ft., factory, 1312-22 Wicker Park Ave., for Parlor Furniture Co., 1304 North Wood St., $75,000.

Wis., Green Bay — Foeller, Schober & Stephenson, archts., Nicollett Bldg., taking bids 2 story, 38 x 150 ft., rein.-con., brick and steel boiler house, plain foundation, for St. Josephs Orphanage. $50,000.

Wis., Milwaukee—Thoringer & Bruecker, archts., 496 Cramer St. taking bids 1 story and basement, 100 x 110 ft., concrete factory, plain foundation, Holton St., $45,000. Owners name withheld. Noted Aug. 2.

Wis., Sheboygan — E. A. Juul, archt., Security Bldg., taking bids 4 story, 65 x 140 ft., rein.-con., brick and steel factory and boiler room, plain foundation, for Bemis-Riddel Fibre Co., 15th St. and Illinois Ave. $40,000.

Mo., St. Louis—Sept. 10, by O. J. Popp, archt., 320 Odd Fellows Bldg., 92 x 256 ft., rein.-con. and steel plant, plain foundation, Fairview Ave., for Warren Steel & Casting Co., Fairview and Kingshighway. $50,000. Noted June 7.

Calif., Los Angeles—California Warehouse Co., 843 Traction Ave., receiving bids 4 story, 80 x 100 ft. brick warehouse annex. W. J. Saunders, Laughlin Bldg., archt.

Calif., San Francisco—W. W. Hanscom, engr., 848 Clayton St., receiving bids 2 story rein.-con. factory, 19th, Florida and Alabama Sts., for Pelton Water Wheel Co., 19th and Harrison Sts. $100,000. Noted June 7.

CONTRACTS AWARDED

Conn., Hartford — Hartford Empire Co., Homestead Ave., two 1 story, 36 x 50 ft. factory buildings, brick and steel, plain foundation, to Bartlett & Brainard Co., 252 Asylum St. Archts. est. $50,000. Noted Aug. 23.

Conn., Middletown—Wilcox & Crittendon Co., 3 South Main St., 3 story, 60 x 60 ft. factory, brick and steel, plain foundation, South Main St., to C. O. Stone & Sons, Inc., 111 South Main St. Archts. est. $40,000. Noted Aug. 30.

Conn., Oakville—Oakville Pin Co., 2 story, 70 x 120 ft. factory, rein.-con. and brick, plain foundation, to J. W. Ferguson Co., 152 Market St., Paterson, N. J. Archts. est. $40,000.

Conn., Plainville—Standard Steel & Ball Bearing Inc., Woodford Ave., 2 story, 60 x 150 ft. brick and steel factory, plain foundation, to Laurence & Coe., 372 Trumbull St., Hartford. Archts. est. $60,000. Noted June 14.

N. Y., Brooklyn—J. Reuben, c/o S. Millman, archt., 26 Court St., will build 1 story, 125 x 210 ft., rein.-con., brick and steel garage, East New York Ave., by day labor. $50,000.

N. Y., New York—T. J. Keane, c/o J. G. Dunnegan, archt. and engr., 394 East 150th St., will build 2 story, 100 x 100 ft., rein.-con., brick and steel garage, 181st St. and Davidson Ave., by day labor. $50,000.

N. Y., Tottenville—Nassau Smelting & Refining Wks., Ltd., 603 West 29th St., New York City, group of buildings, 1 story, rein.-con., brick and steel, plain foundation, here, to Levering & Garrigues, 552 West 29th St., New York City. Archts. est. $100,000.

N. J., Newark—A. G. Constr. Co., c/o R. Botelli, archt. and engr., 207 Market St., will build 2 story, 75 x 300 ft., brick, steel and concrete garage, Broad St. near State St., by day labor. $60,000. A. Gennet, pres.

Fla., Jacksonville—Constructing extension to electric generating station, Talleyrand Ave. and sub-station at nEterprise St. to Gerbich & Haugard, $51,302 and $3,980 respectively; Riverside sub-station, to W. T. Hadlow, Baldwin Bldg., $14,744.

Ill., Chicago—C. Botis, 105 West Monroe St., 1 story, 99 x 174 ft. garage, 425-33 East Pershing Rd., to R. I. Wood, 12 West Garfield Blvd., $40,000.

Ill., Chicago—T. Kahl, 5 North Wabash Ave., 1 story, 170 x 297 ft., garage, 6160-6220 South Wabash Ave., to Johnson, Anderson Co., 7120 Evans Ave. Archts. est. $150,000.

Ill., Chicago—G. L. Lehle, archt., 3811 Bway., remodeling warehouse, to Krahl Constr. Co., 350 North Clark St., $150,000. Owner's name withheld.

Ill., Decatur—Wabash Ry. Co., Railway Exch., St. Louis, Mo., brick and rein.-con. car repair shop, here, to T. B. Smith, 650 Gushard Bldg. Archts. est. $175,000.

Wis., Cobb—Cobb Canning Co., 3 story and basement, 40 x 100 ft. factory, 2 story, 60 x 110 ft. warehouse, 1 story, 40 x 42 ft. boiler house, 1 story 40 x 44 ft. cook room, brick and timber, plain foundation, to H. J. Selmer Co., McCartney Natl. Bank Bldg., Green Bay. Archts. est. $100,000.

Wis., Milwaukee—W. Hyink & Sons Co., 727 North Water St., 1 story, 60 x 100 ft., brick and concrete machine shop, plain foundation, Ogden Ave., to P. Nagtegaal, 2418 Cold Spring Ave. Archts. est. $40,000.

Wis., Waupun—Bear Brand Hosiery Co., 1 story, brick and timber factory addition, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Archts. est. $40,000.

Mo., Trenton — McVey Motor Co., will build 1 and 2 story, 90 x 145 ft. concrete and brick garage, 9th St., by day labor. $50,000. R. H. Sonneman, Kansas City, archt.

Ark., Brinkley—W. E. Brown, 1 and 2 story, 60 x 80 ft., brick, stone and concrete garage and commercial building, to E. W. Dalch, Brinkley. Archts. est. $45,000. Noted Aug. 9.

Calif., Fairfield—Thelen Meat Products Co., hollow tile packing plant, to J. W. Lattin, 4223 San Bonita St., Sacramento, $70,000.

Calif., Los Angeles—Los Angeles Railway Co., Railway Bldg., 1 story, 150 x 150 ft., brick garage, 16th St., to Austin Co., Bartlett Bldg., $40,000.

Calif., Los Angeles — J. Morrell, 823 Traction St., 2 and 3 story, 80 x 160 ft. packing plant, to Winter Constr. Co., 2141 Sacramento St. Archts. est. $150,000. Noted Aug. 30.

Buildings

PROPOSED WORK

Conn., Norwich—Office, etc.—M. Klingon, Colchester, having plans prepared by L. H. Godard, 86 State St., New London, 3½ story, 60 x 120 ft., brick and steel, plain foundation, Bway. $150,000.

Conn., Winsted—Bank—Winsted Savings Bank, 690 Main St., plans brick, stone and steel, plain foundation, Main St. $150,000. Engineer and architect not selected.

N. Y., Amsterdam — High School — Bd. Educ. rejected bids 2 story, 129 x 210 ft., brick, steel and concrete. G. L. Lockwood, 1353 University Ave., St. Paul, Minn., archt. Noted Aug. 2.

N. Y., Binghamton — High School — Bd. Educ. plans 2 story high school. $425,000.

N. Y., Buffalo — Medical Arts — W. W. Cohn (Agent), 155 Pearl St., plans 2 story, 100 x 150 ft. medical arts building, North St. $250,000. Owner's name withheld.

N. Y., Harrison—School—Bd. Educ., having preliminary plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation. $300,000.

N. Y., Haverstraw—Club—B.P.O.E. having preliminary plans prepared by Tooker & Marst, archts. and engrs., 101 Park Ave., New York City, 2 story, brick, steel and stone, plain foundation. $150,000.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., preparing plans 9 story, brick, steel and stone, East 38th St., $400,000. Owner's name withheld.

N. Y., New York—Clubhouse—Knights of Columbus, 244 West 51st St., had plans prepared by E. F. Fanning, archt. and engr., 522 5th Ave., 12 story, brick, steel and stone, 8th Ave., $1,650,000. Noted July 5.

N. Y., Oneida—Hotel and Theater—Madison House Hotel Corp., 136 Madison St., plans 5 story, hotel and theatre. $250,000. J. H. Cassidy, 111 West Kennedy St., J. H. Ryan and P. J. Fitzpatrick, all of Syracuse, incorporators.

N. Y., Solvay (Syracuse, P. O.)—High School—Bd. Educ. having tentative plans prepared by M. L. King, Snow Bldg., Syracuse, new high school, Hazzard and Gertrude Sts. Cost between $500,000 and $700,000. Noted March 8.

N. J., Asbury Park — Hotels — Bradley Hotels System, Inc., c/o Jordan Green, archt. and engr., 31 Clinton St., Newark, having plans prepared 3 brick, steel and stone, plain foundations, Beach front, here. $10,000,000.

N. J., Newark—Hospital—Beth Israel Hospital, c/o F. Grad, archt. and engr., 245 Springfield Ave., having plans prepared brick, steel and stone hospital, $1,200,000.

Pa., Johnstown — Mercantile — Snook Hardware Co., 219 Franklin St., plans 3 story and basement, 110 x 130 ft., Vine St. $150,000. Engineer and architect not selected.

Pa., Sharon—Hotel—See "Miscellaneous."

Pa., Warren — High School — Plans new high school. $350,000.

Pa., Williamsport—Hospital—Williamsport Hospital, 798 Louisa St., plans 3 story and basement, 200 x 300 ft., brick, steel and stone addition, Campbell and Louisa Sts. $400,000. Architect and engineer not selected.

W. Va., Charleston—High School—Bd. Educ., takes bids about Nov. 1, 3 story, brick, Washington St. $600,000. H. R. Warne, Masonic Temple Bldg., archt.

N. C., Raleigh—Church—St. Saviours Episcopal Church plans church, rectory and parish house, stone, Saunders St. $200,000. G. M. Nelson, Raleigh, archt. W. B. Snow, Raleigh, chn. Building Com.

Fla., St. Petersburg—Club—Pass-a Grille Fishing Club, having plans prepared by W. Carpenter, St. Petersburg, club house. $200,000.

La., Lafayette—Courthouse—Sept. 18, to vote on $265,000 bonds for new 3 story and basement court house.

Buildings (Continued)

La., Monroe—Court House and Jail—Ouachita Parish Police Jury plans to build new court house and jail. $400,000 bonds sold for project.

La., Shreveport—High School and Fire Station, etc.—Oct. 2, to vote on $1,000,000 bonds for municipal improvements incl. high school and fire station.

Tenn., Nashville—High School—Diocese of Nashville, c/o T. S. Byrne, bishop, 2001 West End, having plans prepared by Regen & Weller, Bank of Commerce Bldg., Memphis, 2 story and basement, brick and stone, 20th and West End Sts. $150,000.

O., Cincinnati—Hospital—Bethesda Hospital, Lafayette and Middletown Aves., plans hospital, near Lafayette and Middletown Aves. $600,000. S. Hannaford & Sons, 1024 Dixie Terminal Bldg., archts.

O., Cincinnati—Store—S. S. Kresge Co., Kresge Bldg., had plans prepared 7 story, 41 x 100 ft., rein.-con., plain foundation, 5th St., here. $200,000. Private plans.

O., Cleveland — Apartment — L. Duchon, 3045 Essex Rd., plans 4 or 6 story, brick, steel and concrete, on lot 197 x 212 ft., East 40th St. and Windsor Ave. $350,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Cleveland — Apartment — Kleason Realty Co., c/o J. M. Sanpliner, 10011 Euclid Ave., plans 4 story, brick and steel, Mayfield and Coventry Rds. $200.000. Engineer and architect not selected.

O., Cleveland—Commercial—Private Investment Co., c/o S. Miller of Independent Towel Supply Co., 1822 Central Ave., plans brick, steel and concrete, 1841 Prospect Ave. $200,000. Engineer and architect not selected.

O., Cleveland — Hotel — Marmon Impvt. Co., c/o M. Marmorstein, pres., Ulmer Bldg., having preliminary plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 10 story, brick, steel and concrete, on lot 99 x 200 ft., 2300 Euclid Ave. $1,500,000.

O., Cleveland — Mercantile — The 1600 Prospect Co., c/o J. L. Free, 1004 Prospect Ave., plans 8 story, brick, steel and concrete, on lot 167 x 189 ft., 1600 Prospect Ave. $1,500,000. Engineer and architect not announced.

O., Cleveland — Office — Union Square Realty Co., c/o W. I. Lewis, Citizens Bldg., having plans prepared by H. F. Hughes, Citizens Bldg., altering and building 2 story, 17 x 104 ft., brick, steel and concrete addition, East 9th St. and Euclid Ave. $300,000.

O., Garfield Heights (Bedford P. O.)—Church, etc.—St. Timothy's Roman Catholic Church, c/o F. Fish, archt., Tenbusch Bldg., Cleveland, having plans prepared 2 and 3 story church, school and parish house, brick, steel and concrete, here. $300,000.

O., Toledo—Hotel—Maumee Hotel Co. having plans prepared by A. Hahn, Toledo, 12 story, 60 x 120 ft., hotel, St. Clair and Jefferson Sts. $1,500,000.

Ind., Evansville—Y. W. C. A., 2nd and Vine Sts., plans brick and stone, 2nd and Division Sts. $300,000. J. Stuart, chn.

Mich., Detroit — Apartment — Kohner & Seeler, archts., 405 Kresge Bldg., preparing plans 4 story and basement, 140 x 200 ft. rein.-con., brick and steel, plain foundation, North Woodward Ave. $500,000. Owners name withheld.

Mich., Detroit—Bank and Office—B. C. Wetzel & Co., 2317 Dime Bank Bldg., preparing plans 12 story and basement, 60 x 150 ft., brick, steel and stone, plain foundation. $700,000. Owner's name withheld.

Mich., Detroit—Hotel—Tuller Hotel, Park and Adams Aves., had plans prepared 14 story and basement, 60 x 100 ft. rein.-con., brick, steel and stone, plain foundation, Bagley Ave. W. H. Adams, 32 Campau Bldg , engr.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Verner, Wilhelm & Molby, 602 Book Bldg., 3 story and basement, 110 x 355 ft., rein.-con., brick and steel, plain foundation, Charlevoix and Fairview Aves. $900,000.

Mich., Detroit — Terminal — A. Lerner, 5710 St. Antoine St., having plans prepared by L. Kamper, Kamper Bldg., 4 story, 70 x 300 ft., rein.-con. and brick warehouse, plain foundation, Piquette Ave.

Ill., Chicago—Apartment—Silverman & Herman c/o Dubin & Eisenberg, archts., 14 West Washington St., plans 3 story and basement, 298 x 307 ft. apartment, Woodlawn Ave. near Hyde Park Blvd., $750,000.

Wis., Elcho—Infirmary—G. Meyer, c/o Globe Hotel, 221 Wisconsin St., Milwaukee, plans 3 story and basement, brick and concrete, plain foundation, Lake Elcho, here. $150,000. Engineer and architect not selected.

Wis., Madison — Academy — Dominican Sisters of Sacred Heart Academy, 2209 Monroe St., having plans prepared by A. Kelsey, Perry Bldg., Phila., Pa., 4 story, rein.-con., steel, brick and stone, plain foundation. $150,000.

Wis., Madison—Business—W. J. Taylor, 456 West Doty St., plans 3 story, 150 x 200 ft., rein.-con., brick and steel, plain foundation. $150,000. Engineers and architect not selected.

Wis., Madison—Hospital—Bd. Health, c/o K. Corscott, 119 East Washington Ave., having plans prepared by Claude & Starck, Badger Annex, 2 story and basement, 100 x 200 ft., rein.-con., brick and steel, plain foundation. $150,000. Noted Aug. 9.

Wis., New London — High School — Bd. Educ. c/o D. Newberry, supt., plans 2 or 3 story, brick, tile and concrete, plain foundation. $225,000. Smith, Reynolds & Brandt, Dempsey Bldg., Manitowac, engrs. Noted July 31.

Wis., Waukesha—Hotel—M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, soon takes bids 3 story and basement, brick, tile and concrete, plain foundation, here, for F. J. Strong, 151 South East Ave., $400,000.

Wyo., Laramie — Depot — Union Pacific System, 58 East Washington St., Chicago, plans 1 story, 34 x 195 ft., brick, 1st St. between Garfield and Park Sts., here, $160,000. R. L. Huntley, 15th and Dodge Sts., Omaha, Neb., ch. engr.

Mo., Joplin — Office and Store — G. F. Quimbly, 104 Byers Ave., plans 6-8 story, rein.-con. and brick, plain foundation, Main St. $150,000. Engineer and architect not selected.

Mo., St. Louis—Store and Office—Wedemeyer & Nelson, archts., Wainwright Bldg., rejected bids Aug. 15, 3 story and basement, 88 x 175 ft., Grand Blvd., for E. Freund, 2735 Cherokee St. $150,000. Noted Aug. 2.

Mo., St. Louis—Theatre and Office—Local Syndicate, c/o H. Tuchschmidt, archt., Rialto Theatre Bldg., having preliminary plans prepared 4 story, 90 x 150 ft., Grand Blvd., $250,000.

Ark., Blytheville—Hotel and Store—L. L. Vandervoort, Paragould, having preliminary plans prepared 8 or 10 story, rein.-con. and brick, concrete pile foundation. $250,000. Private plans.

Tex., Dallas—Bank and Office—Republic Natl. Bank, plans 18 story and basement, 97 x 100 ft., brick, concrete and steel, Main and Exchange Sts. $500,000. Engineer and architect not announced.

Tex., Ft. Worth—City Hall and Auditorium—City making plans city hall and auditorium, Throckmorton St. To exceed $500,000. Engineer and architect not announced.

Tex., Galveston—Hotel—P. G. Silber & Co., archts., 331 Bedell Bldg., San Antonio, preparing plans 10 story, 110 x 160 ft., rein.-con., brick, steel and terra cotta. $1,000,000. Owners name withheld.

Tex., Texarkana—City Hall—Voted $200,000 bonds for city hall. W. J. Nichols, mayor. Noted July 26.

Okla., Tulsa—Medical Art—C. W. Day, 1302 South Boulder St., soon takes bids 8 story and basement, 50 x 140 ft., rein.-con., brick, stone and terra cotta, 6th and Boulder Sts. $400,000. Endicott & Rush, 101 Lorton Bldg., archts. Noted March 22.

Okla., Tulsa — Store — Vandever Dry Goods Co., 109 South Main St., having plans prepared by Atkinson & Olston, 816 Mayo Bldg., 5 story and basement, 60 x 135 ft., rein.-con., brick and stone, 16 East 5th St. $250,000. W. W. Huff, Mutual Bldg., Kansas City, Mo., structural engr.

Calif., Berkeley — Store and Lodge — Knights of Columbus had plans prepared by J. W. Plachek, 2014 Shattuck Ave., 3 story, brick or concrete, Milvia St. and Shattuck Ave. $175,000.

Calif., Long Beach — Apartment — R. A. Butterfield, 919 East 17th St., having plans prepared by Baume & Davies, Farmers and Merchants Bank Bldg., 5 story and basement, brick and steel, Bway. and Magnolia Sts. To exceed $200,000.

Calif., Long Beach — Apartment — Long Beach Realty Co., 253 East 1st St., having plans prepared by Piper, Kahrs & Bobbe, 38 Locust St., 3 story and basement, 50 x 150 ft., brick, Hermosa Ave.

Calif., Los Angeles — Dormitory — Good Shepherd Convent, 1312 Arlington Ave., having plans prepared by A. C. Martin, Higgings Bldg., 4 story and basement, rein.-con. and brick, West Pico St. $150,000.

Calif., Los Angeles—Hotel—N. Talmadge, having plans prepared by Walker & Eisen, Pacific Finance Bldg., 10 story, 130 x 150 ft., brick and steel, Wilshire Blvd. and New Hampshire. $800,000.

Calif., Sacramento—Cathedral—Scottish Rite Cathedral Assn., 28th and L Sts., plans cathedral, block bounded by 28th, 29th, K and L Sts. J. Clauss, pres. C. Werner, archt., Santa Fe Bldg., San Francisco, will probably prepare plans.

Calif., Sacramento — College — Christian Brothers College, c/o Dean & Dean, archts., City Library Bldg., having plans prepared group of 2 story, brick, stucco and tile buildings, 21st and Y Sts. $200,000.

Calif., San Francisco—Theatre and Hotel—Mandarin Theatre Co., c/o A. A. Cantin, archt., 68 Post St., had plans prepared 3 story, fireproof, Kearny St. near Pacific St. $150,000.

Calif., Santa Barbara—Hall—B. P. O. E. plans 2 story and basement, fireproof. $150,000. C. Werner, Santa Fe Bldg., San Francisco, archt.

Que., Montreal—Parish House—Parish of Redemption, Notre Dame St. E., plans 3 story, 25 x 75 ft., rein.-con., brick, steel and stone, Adam St. $150,000.

Que., Montreal — School — Protestant School Bd. Comrs., Belmont St., plans 3 story, 23 x 80 ft., rein.-con., brick, steel and stone on DeBiencourt St. in Cote St. Paul, $250,000, also 2 story, 22 x 25 ft. house for caretaker, $10,000.

BIDS DESIRED

N. Y., New York—Apartment—Cowan & Daley, c/o Sugarman, Hess & Berger, archts. and engrs., 16 East 43rd St., will build 9 story, 65 x 100 ft., brick, steel and stone, East 80th St. Work will be done by separate contracts under supervision of architects.

N. J., Clifton—High School—Sept. 14, by Bd. Educ., 4 story, brick, marble and concrete, Main Ave., D. W. Ganly, secy. Lee & Hewitt, 152 Market St., Paterson, archts. and engrs. Noted Aug. 9.

Pa., Johnstown—Hospital—Sept. 15, by W. J. Kuntz, chn. Building Bd., 3 story and basement, 110 x 130 ft., rein.-con., brick and steel, Franklin St. $150,000. W. R. Adams, Nemo Bldg., archt.

Pa., Johnstown — School — Johnstown School Dist., Swank Bldg., taking bids and opens same about Sept. 24, 3 story and basement, 100 x 100 ft. concrete, brick and steel addition, Hudson St. $150,000. J. E. Adams, Nemo Bldg., archt.

Pa., Phila.—Nurses Home—Sept. 10, by H. W. Coster, archt., St. Girard Bldg., 4 story and basement, 36 x 92 ft., rein.-con., brick and steel, plain foundation, for Methodist Episcopal Hospital, Broad and Wolf Sts. $150,000.

Md., Baltimore — Apartments — J. E. Moxley, Jr., archt., Equitable Bldg., will supervise construction of 4 story, 75 x 84 ft., brick, 25th and St. Paul Sts., for N. J. Myerberg, 210 North Calvert St. $150,000. Noted Aug. 23.

W. Va., Huntington—Hospital—Sept. 28, by State Bd. Control, Charleston, 1 story and basement, 58 x 94 ft. recreation building, concrete, brick and tile 3 story and basement, 121 x 163 ft. dormitory, concrete and tile. R. M. Bates, Jr., Cammock Watts Bldg., archt. Noted Mar. 1.

N. C., Asheville—Hotel—E. W. Grove, St. Louis, Mo., receiving bids 90 x 100 ft., brick and tile, here. $600,000. J. W. Geary, Asheville, engr.

Miss., Brook Haven—High School—Bd. Educ. taking bid 125 x 200 ft., brick. $150,000. E. J. Hull, Daniel Bldg., Jackson, archt. Noted March 1.

Miss., Jackson—Office—Sept. 17, Lamar Life Insurance Co., 10 story and basement, 80 x 148 ft., rein.-con., terra cotta, and steel, plain foundation, $500,000. Sanguinet, Staats & Hendrick, First Natl. Bank Bldg., Ft. Worth, Texas, archts. Noted Aug. 23.

Tenn., Memphis—Library—Oct. 1, by E. L. Harrison, archt. and engr., U & P. Bldg., 3 story, Monroe Ave. and Front St., for City. $150,000.

O., Cleveland — Apartment — S. Glaser, Ulmer Bldg., taking bids 2 story and basement, brick, steel and timber, 1900 Ansel Rd. $150,000. L. R. Walker & J. L. Mayer, 1900 Euclid Bldg., archts. Noted June 7.

O., Cleveland—Apartment—J. Nozik, 996 Linn Dr., receiving bids and opens same about Sept. 15, 3 story and basement, 87 x 132 ft., brick and timber, 1924 East 75th St. $200,000. M. Weis, Union Bldg., archt. Noted Aug. 30.

O., Cleveland—Apartments—Ulevitch & Passov, 6300 Linwood Ave., taking bids two 3 story and basement, brick and timber, 1021-25 Linn Dr. $150,000. M. Weis, Union Bldg., archt.

BRIDGE—HAVERHILL, MASS.

Bids were opened June 29 by R. R. Evans, Co. Engr., for rebuilding Haverhill Lower Bridge, (A) H. P. Converse & Co., 191 Devonshire St., Boston, (awarded contract). (B) C. W. Blakeslee & Sons, 58 Waverly St., New Haven, Conn.; (C) T. Stuart & Son Co., 222 Pearl St., Newton. The unit bids were as follows:

	A	B	C
Removing old structure (lump sum)	$22,000.00	$30,000.00	$29,700.00
Preparing foundations (A) North River wall (lump sum)	10,527.00	7,000.00	16,480.00
Preparing foundations (B) all other foundations (lump sum)	202,921.00	190,000.00	185,000.00
Maintaining traffic (lump sum)	11,000.00	5,000.00	7,500.00
6,000 cu.yd. dredging	2.20	5.00	4.90
8,000 cu.yd. earth excavation	3.575	8.00	8.00
50 cu.yd. rock excavation	22.00	20.00	20.00
16,000 lin.ft. wooden piles	0.605	1.25	1.30
520 cu.yd. concrete 1:9	8.00	13.00	12.00
10,200 cu.yd. concrete 1:7½	15.31	19.00	19.50
675 cu.yd. concrete 1:6 underwater	9.54	20.00	19.50
7,200 cu.yd. concrete 1:6 in arches, etc.	24.26	20.00	19.50
20,000 sq.ft. granolithic surface	0.077	0.15	0.10
1,290 lin.ft. balastrade, artificial stone	10.81	15.00	14.00
Towers (piers 4 and 3) (lump sum)	10,663.00	10,000.00	10,000.00
1,150,000 lb. reinforcing bars	0.0406	0.06	0.065
84,000 lb. structural shapes, etc.	0.072	0.12	0.10
310 cu.yd. old masonry relaid	11.00	16.00	14.00
308 cu.yd. new granite masonry	88.80	80.00	90.00
3,870 sq.yd. granite block paving	3.96	7.00	7.00
43,500 sq.ft. waterproofing	0.22	0.25	0.25
200 lin.ft. granite curb stones	2.70	3.00	2.90
30 tons cast iron water pipe	143.00	200.00	175.00
Extended totals	$779,833	$890,655	$901,648

SERVICE MAIN—CLEVELAND, OHIO

Following are lowest three bids opened July 20, by Dept. Pub. Utilities, Div. of Water, for furnishing and laying West Side High Service Main, Sect. No. 1, (A) D. Lowensohn, 10803 Fairchild Ave., (awarded contract); (B) J. Connelly Constr. Co., Euclid Bldg.; (C) P. F. Connolly Co., 2029 East 102nd St. The unit bids were as follows:

	A	B	C
11,500 cu.yd. excavating and backfilling	$3.30	$4.00	$3.50
15 M. ft. B.M. lumber and wooden sheeting, left in place	50.00	50.00	75.00
2,390 tons furnishing and laying cast iron, straight, bell and spigot pipe	83.00	78.50	89.00
15 tons furnishing and laying cast iron, flanged and spigot and flanged and bell pipe	165.00	190.00	230.00
36 tons furnishing and laying cast iron, bell and spigot standard fittings	220.00	190.00	220.00
8 tons furnishing and laying cast iron, bell and spigot special fittings	250.00	225.00	220.00
10 tons furnishing and laying cast iron, flanged fittings	280.00	225.00	200.00
237 ft. furnishing and laying 36 in. flanged, riveted steel pipe	34.00	55.00	50.00
Setting one 36-in. gate valve, furnished by city	200.00	200.00	100.00
Setting three 30-in. gate valves, furnished by city	150.00	200.00	100.00
Setting one 20-in. gate valve, furnished by city	125.00	150.00	100.00
20 cu.yd. brick masonry	35.00	30.00	30.00
80 cu.yd. concrete masonry	35.00	30.00	40.00
7,000 lb. steel reinforcement	.10	.10	.10
700 lb. miscellaneous cast iron and wrought iron	.15	.15	.10
300 ft. furnishing and laying 12-in. vitrified pipe drains	2.50	3.00	4.00
200 ft. furnishing and laying 10-in. vitrified pipe drains	2.00	2.50	3.50
200 ft. furnishing and laying 8-in. vitrified pipe drains	1.75	2.00	3.00
300 ft. furnishing and laying 6-in. vitrified pipe drains	1.50	1.00	2.50
300 ft. furnishing and laying 4-in. vitrified pipe drains	1.50	.50	2.00
Furnishing and setting 6 sets 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by city	50.00	50.00	50.00
75 ft. furnishing and laying 2-in. galvanized iron pipe	1.60	1.50	2.00
8 ton furnishing surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals	$268,623	$268,958	$290,835

Buildings (Continued)

O., Findlay—High School—Sept. 21, by Bd. Educ., 3 story and basement, 112 x 207 ft., brick, steel and concrete. $350,000. T. D. McLaughlin, and associates, Savings Bldg., Lima, archts.

Wis., Green Bay — Foeller, Schober & Stephenson, archts., Nicollet Bldg., taking bids for excavation 4 story and basement, brick and concrete building, plain foundation, Jefferson and Pine Sts., for Y. M. C. A. Total cost $400,000. A. F. Grim, Minahan Bldg., secy. Noted July 19.

Wis., Haywood — School — Sept. 21, by Chairman Bd. Educ., 3 story and basement, 100 x 140 ft., concrete, rein.-con., brick and steel. $150,000. F. E. Johnson, 31 Wisconsin Block, Superior, archt. and engr.

Wis., Madison—Hotel—Balch & Lippert, archts., Gay Bldg., receiving bids 10 story and basement, 44 x 120 ft., rein.-con., brick and steel, plain foundation, Pinckney St., for Piper Bros. Co., 31 North Pinckney St. $300,000. Noted Dec. 28.

Ia., Davenport—Schools—Sept. 11, at office J. D. McCollister, secy., Bd. Educ., additions to 3 intermediate schools. Temple & Burrows, 208 Main St., archts.

Kan., Iola—High School—Sept. 17, by W. W. Williamson, archt., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 95 x 141 ft., rein.-con., brick and stone, for Bd. Educ. $150,000. Noted July 13.

Kan., Wichita—Club—Oct. 8, by B.P.O.E., c/o H. G. Boyd, 10 Elks Lodge, or E. Forsblom, archt., 305 Sedgwick Bldg., 6 story and basement, 140 x 150 ft., rein.-con., brick and steel, plain foundation, North Market St. $500,000. H. A. Noble Reliance Bldg., Kansas City, Mo., engr. Noted Aug. 30.

Calif., Fullerton—City Hall—Sept. 11, by City Trustees, brick and concrete. $150,000. W. H. Austin, 1st Natl. Bank Bldg., Long Beach, archt.

Calif., Oakland—Office—C. W. McCall, archt., Central Bank Bldg., receiving bids 5 or 7 story and basement, fireproof, 17th St. near Bway. $200,000 or more. Owner's name withheld.

Calif., Pasadena—Apartment—M. Hunt, archt., Hibernian Bldg., Los Angeles, receiving bids 3 story and basement, concrete and brick, Los Robles Ave., for Stanley Apartments. $150,000.

Calif., Pasadena — Bank and Office — Pacific Southwest Trust & Savings Bank receiving bids 10 story and basement, 105 x 168 ft., rein.-con., Marengo and Colorado Sts. $1,300,000. Curlett & Beelman, 408 Union Bank Bldg., Los Angeles, archts. Noted Apr. 26.

BIDS RECEIVED

Ky., Louisville—Administration—Standard Sanitary & Mfg. Co., 4th and Shipp Sts., 4 story, rein.-con., from L. W. Hancock, Louisville Trust Bldg. Archts. est. $150,000. Noted July 26.

Minn., Willmar — Cottages — State Bd. Control, Capitol, St. Paul, Aug. 28, general contract two 2 story and basement, rein.-con., brick and tile, at State Hospital for Insane, here, from S. M. Klarquist Sons Co., 745 Security Bldg., Minneapolis, $150,407. Noted Aug. 23.

Calif., Santa Rosa—Lodge—Santa Rosa Lodge of Elks, 3 story, concrete and steel, from R. H. Hildebrand, Santa Rosa, complete $271,919; shell $171,111. Noted Aug. 2.

CONTRACTS AWARDED

N. Y., Brooklyn — Schools — Bd. Educ., 500 Park Ave., New York City, P. S. 196 east side Bushwick Ave. between Meserole and Scholes Sts., here, to Lustbader Constr. Co., 423 Madison Ave., New York City, $1,012,000; Girls Commercial High School, Classon Ave. between Union and President Sts., here, to G. A. Fuller, 175 5th Ave., New York City, $2,492,000. Noted Aug. 23.

N. Y., Buffalo—Cathedral—Buffalo Consistory A.A.S.P., 168 Delaware Ave., cathedral, on Delaware Ave., to Crooker & Carpenter, Inc., Crosby Bldg. To exceed $700,000. Noted Dec. 7.

N. Y., New York—Apartment—K. C. W. Building Co. c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, West Tremont Ave., by day labor. $750,000.

N. Y., New York—Apartment—Sugarman & Berger, archts. and engrs., 16 East 43rd St., 15 story, 76 x 118 ft., brick, steel and stone, Amsterdam Ave. and 73rd St., to J. S. Siegel, 345 Madison Ave. Archts. est. $900,000. Owner's name withheld.

N. Y., New York — Apartment — C. Weinstein, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, 100 x 125 ft., brick, stone and steel, Pinehurst Ave., by day labor. $175,000. Noted Aug. 16.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., general contract P. S. 98 south side West 212th St., 100 ft. westerly from 10th Ave., to T. A. Clarke Co., 122 Livingston St., Brooklyn, $937,700; P. S. 75 easterly side Faile St. north of Whitlock Ave., to P. J. Brennan & Son, 624 Madison Ave., $1,054,000; P. S. 78 easterly side Fish Ave. between Needham and Hicks Sts., to Frymier & Hana Co., Inc., 25 West 45th St., $905,480. Noted Aug. 9.

Md., Crownsville — Dormitory — Crownsville State Hospital, 330 North Charles St., Baltimore, 3 story, 102 x 110 ft., brick, plain foundation, here, to North-Eastern Constr. Co., Lexington Bldg., Baltimore. $200,000. Noted Aug. 23.

Fla., Miami—Bank and Office—Bank of Bay Biscayne, 12th St. and Ave. D, 12 story, foundations to R. C. Miller, Miami; structural steel to Ingalls Iron Wks., 720 Ave. D, Birmingham, Ala. Total cost $1,500,000. Noted Aug. 23.

La., New Orleans—Office—E. Weil, archt., Whitney Central Bldg., 3 story, 186 x 195 ft., rein.-con., brick and steel addition to Maison Blanche Bldg., Iberville and Burgundy Sts., to J. V. and R. T Burkes, Carondelet Bldg., for Maison Blanche Co., Canal and Dauphine Sts. Archts. est. $283,535. Noted Aug. 9.

Ky., Princeton—High School—Bd. Educ., 3 story, 80 x 184 ft., to Blackburn, McChesney & Cartwright, Princeton. Archts. est. $150,000. Noted June 21.

O., Akron—Bank and Office—Akron Savings & Loan Co., 12 story, brick, stone and steel, plain foundation, South Main St., to Carmichael Constr. Co., 524 Hamilton Bldg. Archts. est. $600,000. Noted July 5.

O., Cleveland—Bank and Office—United Banking & Savings Co., 2 story, 60 x 110 ft., and 6 story, brick and steel, West 25th St. and Lorain Ave., to Hunkin-Conkey Constr. Co., Century Bldg. Archts. est. $1,000,000. Noted Aug. 30.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 3 story and part basement, 110 x 215 ft., rein.-con., brick and steel, plain foundation, Cameron Ave., to F. N. Cooper, 6370 Gratiot Ave., $546,346. Noted Aug. 30.

Ill., Chicago — High School — Brust & Philipp, archts., 405 Bway., Milwaukee, Wis., 4 story and basement, 220 x 238 ft., brick and concrete, Byron and Lawndale Ave., here, to Barry, Byrne & Ryan Co., 104 South Michigan Ave., for St. Joseph's Convent, 575 Layton Blvd., Milwaukee, Wis. Archts. est. $800,000. Noted May 3.

Wis., Milwaukee—Hospital—Misericordin Hospital, 22nd and Chestnut Sts., 3 story, 47 x 125 ft., brick and concrete, plain foundation, to E. Steigerwald & Sons, 2303 Galena St. Archts. est. $150,000. Noted March 1.

Wis., Union Grove — Employees — State Bd. Control, Madison, 1 story, 50 x 115 ft., rein.-con., brick and stone, plain foundation, at State Home for Feeble Minded, here, to A. C. Kappel, 526 Wisconsin Ave., Racine. Archts. est. $150,000. Noted Aug 2.

Kan., Kansas City — Memorial Rose & Peterson, archts., 434 Brotherhood Bldg., 3 story and basement, 146 x 185 ft., rein.-con., brick, stone and terra cotta to Baer Eng. & Constr. Co., Leavenworth, Kan., for City. $342,454. Noted Aug. 16.

Ark., Brinkley—Church—Southern Presbyterian Church, c/o A. H. Milwer, chn., 2 story and basement, brick veneer, timber and rein.-con., plain foundation, to F. Wagner, Brinkley. Archts. est. $150,000. Noted Aug. 30.

Buildings (Continued)

Ark., Eudore — Church — **First Baptist** Church, 2 story and basement, brick and concrete, to W. H. Gard, Dermott, Ark. Private plans. Est. cost **$200,000.**

Ark., Hamberg — Court House — Ashley Co. 3 story, brick, stone and concrete, Public Sq., general contract to T. R. Bethea, Fordyce, Ark., **$99,800.**

Tex., Abilene—Dormitory—Simmons College, 3 story, rein.-con., brick and stone, on campus, to R. C. Lewis, Abilene, **$125,000.**

Tex., Denton — Administration — Bd. Regents, Texas State Teachers College, 3 story, rein.-con. and brick, to Bellows & McClay, Slaughter Bldg., Dallas, **$232,275.** Noted Aug. 16.

Tex., Groesbeck—Courthouse—Limestone Co. 3 story and basement, 104 x 168 ft., rein.-con. and brick, to W. M. Rice Constr. Co., Amarillo, **$288,000.** Noted Aug. 9.

Calif., Long Beach—Apartment—Canterbury & Bradford, 11 story and basement, 110 x 270 ft., rein.-con., Ocean Ave. and 3rd Pl., to Ransford-Goble Co., Highland Ave., Los Angeles, **$1,000,000.**

Calif., Los Angeles—Apartment—Ardmore Corp., 4 story and basement, brick, 6th St. and Wilshire Blvd., to C. Thoren, 6764 Hawthorne Ave., **$155,000.** Noted Aug. 23.

Calif., Los Angeles—Apartment—P. M. Rutherfield, Van Nuys Bldg., 4 story and basement, brick, West 9th St., to Meline Co., Sun Drug Bldg., **$175,000.**

Calif., Los Angeles—Loft—W. W. Paden, et al., Story Bldg., 6 story, rein.-con., Lebanon and 6th Sts., to Robertson & Evans, Grant Bldg., **$155,000.**

Calif., Santa Clara—Gymnasium—University of Santa Clara, 1 story, brick and steel, to J. H. Miller, 70 West San Fernando St., San Jose, **$150,000.** Noted Mar. 15.

Calif., Santa Clara—Hall—University of Santa Clara, for R. E. McKenna Hall, 3 story, rein.-con., to J. H. Miller, 70 West San Fernando St., San Jose, **$200,000.**

Que., Montreal — City Hall — For constructing concrete floors, roof, underpinning work, etc., for new city hall to J. A. Durocher, 91 Chambly St., **$229,400.** Noted Aug. 30.

B. C., Victoria—Office—Canadian Pacific Ry., Windsor St., Montreal, Que., 4 story, 50 ft. high, 50 x 120 ft. concrete, brick, tile and stone, Belleville St., to Luney Bros. Ltd., Saywood Bldg., **$150,000.**

Federal Government Work

PROPOSED WORK

Mich., Saulte Ste Marie—Dredging—U. S. Engineer, plans dredging 8,000 cu.yd. rock in Vidal Shoals, here.

BIDS DESIRED

N. Y., Dunkirk—Superstructure—Oct. 3, at office U. S. Engineer, Buffalo, stone superstructure on breakwater, here; adv. E. N.-R., Sept. 6. Noted July 19.

Ky., Dawson Springs — Outside Service Lines—Sept. 29 at office U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., outside service lines for heating, drainage, etc., for recreation building and 4 duplex officers quarters, here. F. T. Hines, dir.; adv. E. N.-R. Sept. 6.

Ill., Chicago—Pipe-Line Dredge—Nov. 1, at office U. S. Engineer, 537 South Dearborn St., pipe line dredge; adv. E. N.-R., Sept. 6.

Kans., Ft. Riley—Road Repair—Sept. 24, at office of W. H. Whiteside, constr. quartermaster, repairing roadway; adv. E. N.-R. Sept. 6.

Colo., Denver—Gates, Hoists, etc.—Oct. 3, at office Bureau Reclamation, furnishing gates, hoists, etc., for Boise, Idaho, and Riverton, Wyo., Projects. D. W. Davis, comr.; adv. E. N.-R. Sept. 6.

Colo., Grand Junction—Mailing Vestibule —Sept. 28 by Treas. Dept., Wash., D. C., mailing vestibule, etc., in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Sept. 6.

BIDS RECEIVED

Mich., Ludington—Superstructure—U. S. Engineer, Milwaukee, Wis., Aug. 28, removing timber superstructure and constructing concrete superstructure, here, from S. M. Siesel Co., 160 Ogden Ave., Milwaukee, Wis., 1,700 lin.ft. timber superstructure removed, $10, 4,120 cu.yd. concrete foundation blocks, $16.50, 3,590 cu.yd. concrete superstructure $16.50, 92,500 lb. reinforcing $0.05, 34 mooring posts $25. Noted July 26.

Okla., Tulsa—Workroom—Treas. Dept., Wash., D. C., enlarging workroom at U. S. Post Office, here, from W. MacDonald Constr. Co., Odd Fellows Bldg., St. Louis, Mo., $9,700.

California—Road—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, clearing and grading Big Bear Valley Rd. extension, San Bernardino Co., 50,900 cu. yd. excav., 1,100 lin.ft. 18 in. corrugated pipe, etc., from H. M. Henning, Eagle Rock, furnishing explosives $61,882, Government furnishing explosives, $56,782. Noted May 4, 1922.

CONTRACTS AWARDED

D. C., Anacostia—Hangar—Spec. 4868—Bureau Yards & Docks, Navy Dept, Wash., D. C., landplane hangar, here, to C. A. Hofferberth Constr. Co., Woodward Bldg., Wash., **$6,570 (60 days).** Noted Aug. 23.

Calif., San Diego—Barracks, etc.—Spec. 4843—Bureau Yards & Docks, Navy Dept., Wash., D. C., 2 barracks and extension to mess hall at Training Station, here, to R. E. McKee, 1918 Texas St., El Paso, Tex., Items 1 and 6, **$206,194** (200 days). Noted Aug. 23.

Miscellaneous

PROPOSED WORK

Tractor and Road Grader—Southington, Conn. — Bd. Selectmen plans to purchase tractor and road grader. W. T. Foley, member.

Flood Control—Canisteo, N. Y.—City and State plan reconstructing Bennett and Purdy Creeks, to eliminate constant flood menace, also enlarging channel of Canisteo River. $100,000.

Park—Jamestown, N. Y.—Plans park at Casadaga waterworks. $26,000. L. Bergman, city engr.

Amusement Park—Sharon, Pa.—E. E. Clepper, engr., West State St., prepared plans for amusement park, dancing pavilion, hotel, 1 mi. dam 45 ft. high creating lake 1 mi. wide and ¼ mi. long, etc. $1,500,000. Owner's name withheld.

Elimination of Grade Crossings—Louisville, Ky.—Bd. Pub. Wks., retained Technical Advisory Corp., 15 Park Row, New York City, to make surveys of Louisville with idea of eliminating all grade crossings. $10,000.

Subway—Ashtabula, O. — City, Pennsylvania R.R., Broad St., Phila., and New York Central R.R., Grand Central Terminal, New York City, plan subway under tracks of above railways. $632,000. City's share of cost $192,000, balance to be divided between railroads. F. H. Hardin, c/o New York Central R.R., ch. engr.

Levee—Indiana—Drainage Comn., Gibson Co. (Princeton), plans levee on left bank of Wabash River in Gibson and Posey Counties, 40 mi. long, crown width 6 ft., side slope 1 on 3. $100,000. H. C. Morrison, engr.

Revetment — Illinois — Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., Union Central Bldg., Cincinnati, soon takes bids 2 mi. revetment, incl. piles, riprap, current retards and concrete pavement, between Mound City and Cairo, here. $25,000. C. A. Paquette, ch. engr.

Gas Container—Sheboygan, Wis. — Wisconsin Pub. Serv. Corp., plans gas container and holder of 1,000,000 or more cu.ft. capacity. A. F. Davey, mgr. Engineer not selected.

Flood Control—Ft. Worth, Tex.—State having topographic surveys made of all important river valleys for flood control. $600,000. J. A. Norris, Texas Bd. of Water Engrs., Austin, engr.

Transmission Line, etc.—Paden, Okla.—Voted $25,000 bonds electric transmission line, electric distribution system and pumping equipment. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Park—Fresno, Calif.—City plans to purchase between 60 and 90 acres along San Joaquin River and improve for park site. R. Y. St. George, city clk.

Gas and Electric Systems, etc.—Oroville, Calif.—Pacific Gas and Electric Co., 445 Sutter St., San Francisco, plans to expend $60,000 to improve gas, water and electric systems.

Subways—Montreal, Que.—See "Streets and Roads."

BIDS DESIRED

Fire Alarm System—New York—Sept. 11, by T. J. Drennan, fire comr., Municipal Bldg., New York City, extension to fire alarm system, Boro of Queens.

Conduits—Erie, Pa.—Sept. 14, 4 units low tension conduit system. $50,000. F. G. Lynch, city engr.

Culvert—Wilkinsburg, Pa.—Sept. 10, by W. N. Baker, boro. secy., 608 Ross Ave., concrete culvert from Kelley to Rebecca Aves. also paving bottom of present culvert from Rebecca to South Aves. 500 cu.yd. concrete, 870 sq.yd. brick paving, etc. $25,000. C. F. Sperling, boro. engr.

Pipe—Nashville, Tenn.—Producers Refining Co., Box 147, in market for 44 mi. 3 in. pipe.

Dragline—St. Francisville, La.—The Contractor, Box 205, is in market for caterpillar dragline, ¾ yard.

Electric Light System—Washington, La. —Sept. 17, by A. J. Miller, mayor and Bd. Aldermen, constructing electric light system, incl. service pump for water supply, etc.

Materials—St. Paul, Minn.—Sept. 11, by H. W. Austin, city purch. agt., (1) structural and reinforcing steel for repairing Wabasha St. bridge over Mississippi River (2) materials for reflooring same, incl. 209,521 ft. No. 1 fir, 15,000 pieces repressed paving blocks, 1,320 sq.yd. 3½ in. creosoted wood blocks, 21,000 lb. asphalt filler, 40,000 lb. pitch filler (3) eight hundred and eighty 12 ft. lengths 6 in. Class B c.i. pipe and three hundred and thirty 12 ft. lengths 16 in. Class B c.i. pipe for Water Dept.; (4) fifty 2 in. brass gate valves, fifty 1½ in. brass valves, fifty 2 in. corporation cocks, fifty 1½ in. corporation cocks; (5) paving materials for various streets, 3,000 bbl. portland cement, 2,200 cu.yd. crushed rock, sewer brick, reinforcing, etc. G. M. Shepard, city engr.

Gas System—Fairfax, Okla.—Sept. 17, by J. N. Fly, city clk., gas system, incl. regulator station, high and low pressure lines, 35,000 ft. 2-6 in. c.i. pipe, etc. $36,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Copper and Steel Standards, etc.—Santa Ana, Calif.—Sept. 10, installing 86 double light copper and steel standards for ornamental lighting system in portions of West 4th, East 5th and North Main Sts., also 2 rein.-con. transformer vaults, conduits, etc.

Transmission Line—Nova Scotia—Sept. 10, by A. T Craft, secy. Nova Scotia Power Comn., Halifax, 66,000 volt single circuit transmission line from Hopewell to Stellarton and 13,200 volt line from Stellarton to Pictou, Pictou Co.

BIDS RECEIVED

Underground Conduits — Montreal, Que. —Underground conduits in district bounded by St. Lawrence, Craig, Bleury and Lagauchetiere Sts., from Atlas Constr. Co. Ltd., Belmont St., $78,125. Noted Aug. 2.

CONTRACTS AWARDED

Foundation Wall, etc.—New York, N. Y. —Bd. Educ., 500 Park Ave., foundation wall, piers, trap pits, etc., at George Washington High School, Audubon Ave. about 432 ft. north of West 190th St., here, to J. T. Brady Co., 103 Park Ave., $113,598. Noted Aug. 23.

Heating and Ventilating—Apparatus, etc. —New York, N. Y.—Bd. Educ., 500 Park Ave., heating, ventilating and temperature regulating apparatus in Julia Richman High School, 2nd Ave. from East 67th to East 69th Sts., to Gillis & Geoghegan, Inc., 537 Bway., $268,630. Noted Aug. 23.

Underpass—Alabama—State Hy. Dept., Montgomery, underpass under Southern Ry. and paving highway, Federal Aid Project 108 Colbert Co.; Proposal 1 (road work) to Southern Rds. Co., Amer. Trust Bldg., Birmingham, $12,253; Proposal 2 (bridge work) to Gibson Constr. Co., Arnstein Bldg., Knoxville, Tenn., $11,022. Noted Aug. 9.

Car Barns—Ironwood, Mich.—Lake Superior Dist. Power Co., subsidiary of Ironwood & Bessemer Ry. & Light Co., Ironwood, 1 story, 56 x 126 ft., concrete, brick and steel car barns, to Tomlinson & Egan, Ashland, Wis. Engrs. est. $50,000.

Gas Container—Milwaukee, Wis.—Milwaukee Gas Light Co., 182 Wisconsin St., structural steel supports, steel tank 145 ft. high, 25th St. and St. Paul Ave. to Riter-Conley Co., Oliver Bldg., Pittsburgh, Pa. Engrs. est. $1,500,000. Noted Aug. 23.

Mud Shell—Houston, Tex.—Harris Co., 10,000 tons mud shell for road construction, to W. H. Haden, Ave. A. Galveston, at $1.45 per ton.

Fire Alarm System—Sacramento, Calif. —City Commissioners received no bids installing fire alarm system. Work will be done by force account. $25,000 bonds voted for project. A. Givan, city engr. Noted Aug. 23.

CONSTRUCTION NEWS

Engineering News-Record, September 13, 1923

The Construction Barometer

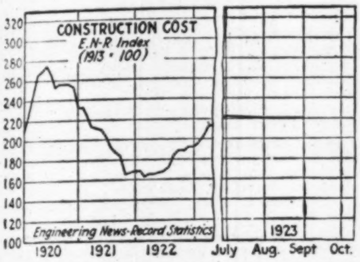
Cost Stabilizing—Seasonal Drop in Contracts—Sewers Gain

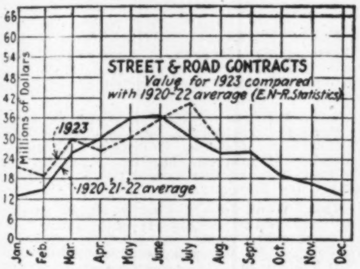
WHILE construction materials' prices have declined somewhat since the "buyers' strike" movement in April, the tendency at present is toward stabilization at current market levels.

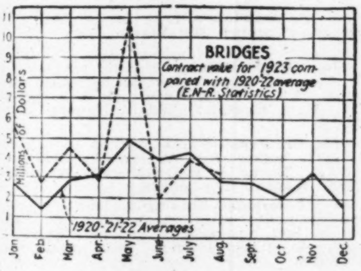
E. N.-R. Construction Cost Index Number, 221.50, for September, is the same as for the preceding month, while volume of construction fell 30 per cent during August.

Industrial works and sewers represent the only two classes of construction not showing a decline in value of contracts awarded during the last month. Much of the falling off in other classifications, however, is purely seasonal.

Lettings gained somewhat during the week of Sept. 6, particularly in public buildings. Large public jobs, taking bids, increased over 4 per cent.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Aug. 23	$17,906,000	$13,376,000	$31,282,000
Aug. 30	12,669,000	15,178,000	27,847,000
Sept. 6	28,163,000	17,205,000	45,368,000
3 Weeks	$58,738,000	$45,759,000	$104,497,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

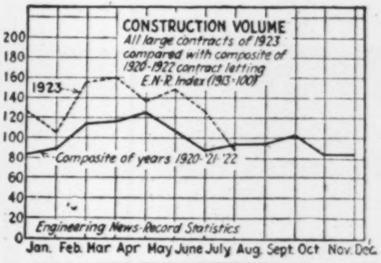
Week Ended	No.	Public Work	No.	Private Work
Aug. 23	15	$4,755,000	27	$7,140,000
Aug. 30	8	1,496,000	25	12,342,000
Sept. 6	16	9,563,000	16	8,019,000
3 Weeks	39	$15,814,000	68	$27,501,000

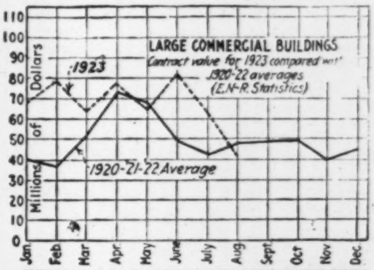
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

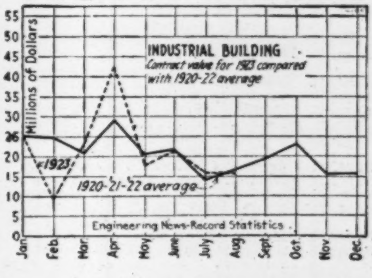
Week Ended	Private	Public			
		All	Streets and Roads	Waterworks and Sewers	All Buildings
Aug. 23	28	215	87	35	45
Aug. 30	28	189	66	33	51
Sept. 6	35	197	83	32	42

BASIC MATERIALS PRICES FIRM

	Quoted on Sept. 13, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	61.00	63.00	Sept. 6
Fir, San Fran., M. ft.	38.00	41.00	Aug. 30
Common labor	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 15	Grand Island, N. Y.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Sept. 17	Crescent City, Fla.	Sept. 6
Sept. 17	Trenton, Mich.	Sept. 6
Sept. 18	McAlester, Okla.	Aug. 30
Sept. 18	New York, N. Y.	Sept. 13
Sept. 19	South Bend, Ind.	Aug. 30
Sept. 19	Brooklyn, N. Y.	Sept. 13
Sept. 21	Trenton, N. J.	Sept. 13
Sept. 25	Ft. Worth, Tex.	Sept. 6
Sept. 26	Providence, R. I.	Aug. 30
Sept. 27	Bordentown, N. J.	Sept. 6
Sept. 27	Galveston, Tex.	Sept. 13
Oct. 2	Wallington, N. J.	Sept. 13
Oct. 3	Portland, Ore.	Sept. 13
	Adv. Sept. 6 and 13.	
Oct. 4	Stoneham (Boston P. O.), Mass.	Sept. 13
Oct. 9	Toronto, Ont.	Sept. 13
Oct. 11	Danville, Va.	Sept. 13
	Adv. Sept. 13.	

SEWERS

Bids Close		See Eng. News-Record
Sept. 14	Wash., D. C.	Aug. 30
Sept. 14	Wash., D. C.	Sept. 6
Sept. 14	Millville, N. J.	Sept. 6
Sept. 15	Norfolk, Va.	Aug. 30
Sept. 17	Plainfield, N. J.	Sept. 6
Sept. 17	Berea, O.	Sept. 13
	Adv. Sept. 13.	
Sept. 17	Barberton, O.	Sept. 13
Sept. 17	St. George, N. Y.	Sept. 13
Sept. 17	Watsontown, Pa.	Sept. 13
Sept. 18	Denver, Colo.	Sept. 13
Sept. 20	Brooklyn, N. Y.	Sept. 13
Sept. 24	St. Petersburg, Fla.	Aug. 28
Sept. 24	Leesburg, Fla.	Sept. 6
Sept. 26	Berwick, Pa.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 9	Bluefield, W. Va.	Sept. 13
	Adv. Sept. 13.	
Nov. 1	Fort Erie, Ont.	Aug. 23

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Sept. 17	St. Petersburg, Fla.	Aug. 23
Sept. 25	Indianapolis, Ind.	Sept. 13

BRIDGES

Bids Close		See Eng. News-Record
Sept. 18	Omak, Wash.	Sept. 13
Sept. 19	Phila., Pa.	Aug. 23
	Adv. Sept. 6 and 13.	
Sept. 19	Freehold, N. J.	Sept. 13
	Adv. Sept. 6 and 13.	
Sept. 20	Greenwood, Miss.	Sept. 6
Sept. 20	Milwaukee, Wis.	Sept. 13
Sept. 24	New Jersey	Sept. 6
	Adv. Sept. 6 and 13.	
Sept. 24	York, Pa.	Sept. 13
	Adv. Sept. 13.	
Sept. 25	Michigan	Sept. 13
Sept. 26	Minnesota	Sept. 13
Sept. 27	Chicago, Ill.	Sept. 6
Sept. 28	Oil City, Pa.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 2	Mermentau, Mich.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Oct. 2	Johnstown, Pa.	Sept. 13
	Adv. Sept. 13.	

Bids Close		See Eng. News-Record
Oct. 2	Louisiana	Sept. 13
Oct. 16	Clearwater, Fla.	Sept. 13
	Adv. Sept. 13.	
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Bids Close		See Eng. News-Record
Oct. 3	California	Sept. 13

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Sept. 18	Lake Charles, La.	Aug. 23
Sept. 19	Granite Falls, Minn.	Sept. 13
Sept. 27	Riverhead, N. Y.	Sept. 13
	Adv. Sept. 13.	
Oct. 1	Benton, Mo.	Sept. 13
	Adv. Sept. 13.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 14	New York	Sept. 6
	Adv. Sept. 6 and 13.	
Sept. 15	Niagara Falls, N. Y.	Aug. 30
Sept. 15	Tonawanda, N. Y.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Sept. 15	Conroe, Tex.	Sept. 6
Sept. 15	Honey Grove, Tex.	Sept. 6
Sept. 15	Bonham, Tex.	Sept. 6
Sept. 17	Virginia	Sept. 6
Sept. 17	California	Sept. 6
Sept. 17	Kansas City, Kan.	Sept. 6
Sept. 17	Ivanhoe, Minn.	Sept. 6
Sept. 17	St. George, N. Y.	Sept. 13
Sept. 17	Watertown, S. D.	Sept. 13
Sept. 17	Indiana	Sept. 13
Sept. 17	Sparta, Ill.	Sept. 13
	Adv. Sept. 13.	
Sept. 17	Forest City, Ark.	Sept. 13
Sept. 17	Sapulpa, Okla.	Sept. 13
Sept. 17	Oskaloosa, Ia.	Sept. 13
Sept. 18	Massachusetts	Sept. 13
Sept. 18	Marlin, Tex.	Aug. 30
Sept. 18	Clinton, Okla.	Sept. 6
Sept. 18	Louisiana	Sept. 6
Sept. 18	Waurika, Okla.	Sept. 6
Sept. 18	Alabama	Sept. 6
Sept. 18	Trenton, N. J.	Sept. 13
Sept. 18	Abbeville, La.	Sept. 13
Sept. 18	Grosse Pointe Park (Detroit P. O.), Mich.	Sept. 13
Sept. 19	St. George, N. Y.	Sept. 13
Sept. 19	Oklahoma	Sept. 13
Sept. 19	Delaware	Sept. 6
Sept. 19	Belvidere, N. J.	Sept. 6
	Adv. Aug. 30 to Sept. 13.	
Sept. 19	Water Valley, Miss.	Sept. 6
Sept. 19	Nevada	Sept. 13
Sept. 19	Michigan	Sept. 13
Sept. 20	Newton, N. J.	Sept. 6
	Adv. Sept. 6 and 13.	
Sept. 20	Alpine, Tex.	Sept. 6
Sept. 20	Tuscaloosa, Ala.	Sept. 6
Sept. 20	Louisiana	Sept. 13
Sept. 20	Akron, O.	Sept. 13
Sept. 20	San Rafael, Calif.	Sept. 13
Sept. 20	Mt. Gilead, N. C.	Sept. 13
Sept. 20	Warsaw, N. Y.	Sept. 13
	Adv. Sept. 13.	
Sept. 20	Michigan	Sept. 13
Sept. 20	Brooklyn, N. Y.	Sept. 13
Sept. 21	Elkhorn, Wis.	Sept. 13
Sept. 21	Minot, N. D.	Sept. 13
Sept. 22	Norwalk, Conn.	Sept. 13
	Adv. Sept. 13.	
Sept. 24	Carrollton, Miss.	Aug. 30
Sept. 24	Bronson, Kan.	Sept. 6
Sept. 24	Leesburg, Fla	Sept. 6
Sept. 24	Asbury Park, N. J.	Sept. 6
	Adv. Sept. 6 and 13.	
Sept. 25	Independence, Kan.	Sept. 6
Sept. 25	St. Louis, Mo.	Sept. 6
Sept. 25	Louisiana	Sept. 13
Sept. 25	Washington	Sept. 13
Sept. 26	Kentucky	Aug. 23
Sept 26	Kentucky	Aug. 30
Sept. 26	Minnesota	Sept. 6
Sept. 26	Aberdeen, Miss.	Sept. 13
Sept. 26	Kentucky	Sept. 13
Sept. 27	Florida	Sept. 6
Sept. 28	Topeka, Kan.	Sept. 13
Oct. 1	Kelso, Wash.	Sept. 6
Oct 2	St. Louis, Mo.	Sept. 6
Oct. 16	Clearwater, Fla.	Sept. 13
	Adv. Sept. 13.	

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 20	Palmyra, N. Y.	Sept. 13

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 15	Johnstown, Pa.	Sept. 6
Sept. 17	Jackson, Miss.	Sept. 6
Sept. 18	Richmond Hill, N. Y.	Sept. 13
Sept. 19	Los Angeles, Calif.	Sept. 13
Sept. 19	Sioux City, Ia.	Sept. 13
Sept. 20	Oakwood (Dayton P. O.), O.	Aug. 30
Sept. 21	Haywood, Wis.	Sept. 6
Sept. 21	Findlay, O.	Sept. 6
Sept. 22	Duluth, Minn.	Sept. 13
Sept. 22	Arlington, Tex.	Sept. 13
Sept. 23	Atlantic City, N. J.	Aug. 30
Sept. 24	Mandan, N. D.	Sept. 13
Sept. 25	New York, N. Y.	Sept. 13
Sept. 25	Dearborn, Mich.	Sept. 13
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Sept. 28	Huntington, W. Va.	Sept. 6
Sept. 28	Duluth, Minn.	Sept. 13
Sept. 29	Duluth, Minn.	Sept. 13
Oct. 1	Memphis, Tenn.	Sept. 6
Oct. 2	Louisville, Ky.	Sept. 13
Oct 8	Wichita, Kan.	Sept. 6
Oct. 9	Louisville, Ky.	Sept. 13
Oct. 10	Virginia, Minn.	Sept 13
Oct. 10	Birmingham, Ala.	Aug. 30
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 17	Quarters, etc. — Rutland, Mass.	Aug. 23
Sept. 17	Road—South Dakota	Sept. 13
Sept. 19	Laboratory—Wash., D. C.	Aug. 30
Sept. 24	Road Repair—Ft. Riley, Kan.	Sept. 6
	Adv. Sept. 6 and 13.	
Sept. 24	Generator Unit, etc. — Buffalo, N. Y.	Sept. 13
	Adv. Sept. 13.	
Sept. 25	Dredging—Galveston, Tex.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Sept. 25	Dredging — Providence, R. I.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Sept. 26	Changes—Boston, Mass.	Sept. 13
	Adv. Sept. 13.	
Sept. 28	Breakwater — Milwaukee, Wis.	Aug. 30
	Adv. Aug. 30 to Sept. 13.	
Sept. 28	Mailing Vestibule—Grand Junction, Colo.	Sept. 6
Sept. 29	Outside Service Lines—Dawson Springs, Ky.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 3	Gates, Hoists, etc.—Denver, Colo.	Sept. 6
Oct. 3	Superstructure — Dunkirk, N. Y.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 4	Recreation Building, etc. — Wash., D. C.	Sept. 13
	Adv. Sept. 13.	
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23
	Av. Aug. 23 to Sept. 13.	
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
	Adv. Sept. 6 and 13.	

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 17	Elimination of Grade Crossing —Youngstown, O.	Aug. 30
Sept. 17	Electric Light System—Washington, La.	Sept. 6
Sept. 17	Gas System — Fairfax, Okla.	Sept. 6
Sept. 17	Dock and Yacht Basin — Sanford, Fla.	Sept. 13
Sept. 18	Portland Cement—St. Paul, Minn.	Sept. 13
Sept. 18	Grade Separation — Milwaukee, Wis.	Sept. 13
Sept. 19	Lock Gates, etc.—Illinois.	Aug. 23
	Adv. Aug. 16 to Sept. 13.	
Sept. 19	Cement, etc.—New York, N. Y.	Sept. 13
Sept. 19	Heating and Ventilating Apparatus, etc. — New York, N. Y.	Sept. 13
Sept. 20	Asphaltic Cement, etc.—Brooklyn, N. Y.	Sept. 13
Sept. 21	Culvert — Marked Tree, Ark.	Sept. 13
	Adv. Sept. 13.	
Sept. 25	Culvert—St. Louis, Mo.	Aug. 30
Sept. 28	Cement—Jefferson City, Mo.	Aug. 23
Oct. 1	Gravel—Baton Rouge, La.	Sept. 13
Oct. 2	Wharf—Harrop, B. C.	Sept. 13
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Mount Vernon—Bd. Water Supply, 19 Prospect Ave., rejected bids furnishing all materials except c.i. pipe and special castings to be furnished by city, and performing all labor for construction complete c.i. mains, with valves, hydrants, etc. N. S. Hill, 112 East 19th St., New York, consult. engr. Will readvertise. Noted Aug. 16.

N. Y., Potsdam—Soon takes bids filtration plant. $100,000. C. A. Pohl, 30 Church St., New York City, engr.

Fla., Daytona—Election Oct. [illegible] to vote on $100,000 bonds extending waterworks system. C. M. Hodges, Daytona, engr. Noted Aug. 2.

Fla., Tampa — City plans waterworks. $1,273,000. N. S. Hill, 112 East 19th St., New York City, engr.

Ala., Talladega—Plans rein.-con. reservoir at Taylors Mills, water will be brought 4½ mi. to reservoir, then to city by gravity, will also install 2 centrifugal pumps. $263,000.

Tenn., Cookeville—Sept. 29, to vote on $100,000 bonds for water plant improvements and extensions and sewerage system.

Tenn., Union City—Sept. 15, to vote on $125,000 bonds extensions and improvements to waterworks and sewerage system.

Ky., Louisville—Louisville Water Co., 3rd St., plans about 2 mi. 48 in. main from reservoir to Eastern Parkway. $100,000. J. Chambers, c/o owner, ch. engr.

O., Whitehouse — Plans water system. $35,000. Engineer not announced.

Mich., Detroit—Water Bd. having plans prepared 10,928 ft. 6 in. and 8,347 ft. 8 in. c.i. mains in Moenart, Rowley, Coventry, Monica, Astonia, Stoepel, Horatio, Livernois, Linzee, Andover, Wark, Prairie, Bloom and State Fair Aves. T. A. Leisen, Waterworks Park, engr.

Wis., Athens — Preparing plans water and sewerage systems, incl. water supply, pumping equipment, water and sewer mains, sewage disposal plant. $77,000. W. J. Kirchoffer, Dean Bldg., Madison, engr. Noted Aug. 2.

Wis., Whitehall — Preparing plans extending waterworks and sewerage system, also extending watermains and sanitary sewers, 10-12 in. rein.-con. pipe. $15,000. C. J. Vantattel, Whitehall, engr.

Kan., Leavenworth — Soon takes bids main extensions in Grand Ave., 13th, 5th, Isabelle, Thorton and Marion Sts., 11 fire hydrants. $17,250-$20,000.

Kan., Wichita—Wichcita Water Co. plans 6 in. pipe extensions in 30 blocks incl. Mathewson, Estelle, Fountain, Hydraulic, Lincoln, Martinson, Mosley, Franklin and Kellogg Sts., 18 fire hydrants. P. L. Brockway, City Bldg., engr.

Kan., Winfield—Making preliminary survey and plans laying 4½ mi. mains from end present wells to Albright Gardens. $112,000. H. P. Haynes, Winfield, engr. Noted May 31.

N. D., Mandan—Plans to purchase one 350 gal. pumper for Water Dept. W. J. Seitz, city aud.

Mo., Breckenridge — Making preliminary surveys and plans water and sewerage systems. To exceed $35,000. E. T. Archer & Co., New England Bldg., Kansas City, engrs.

Mo., Cameron—Plans election to vote on $53,433 bonds for waterworks improvements. Burns & McDonell, 401 Interstate Bldg., Kansas City, engrs.

Mo., Columbia—Making preliminary plans improvements to waterworks and light plants, incl. mains, 6 in. and up, increasing reservoir from 1 m.g. to 3 m.g., etc. $160,000.

Mo., Drexel — Making surveys for distribution mains, and 5 m.g. reservoir, etc. J. P. Davis, Jefferson City, engr.

Mo., Jamesport—See "Sewers."

Mo., Maysville—Defeated $44,000 bonds waterworks improvements. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noetd Aug. 16.

Mo., Miller—Soon takes bids waterworks and electric light plant. To exceed $25,000. Alexander Eng. Co., Springfield, engrs.

Mo., Salem—Plans election soon to vote on bonds for waterworks. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Tex., Austin—Election Oct. 15 to vote on $400,000 bonds for 8 m.g. rapid sand filtration plant. J. B. Hawley, Cotton Exch. Bldg., Ft. Worth, engr. Noted July 28.

Tex., Dublin—Making plans main extensions. $18,000. G. Anderson, Dublin, engr.

Tex., Greenville—Defeated $325,000 bond issue complete waterworks system, new source of supply, etc. A. D. Duck, Greenville, engr. Noted Aug. 9.

Tex., Marshall—Election Oct. 9 to vote on $80,000 bonds, for waterworks and $20,000 bonds for sewers. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Apr. 19.

Waterworks (Continued)

Tex., Roscoe—Rejected bids waterworks improvements. Will readvertise. Montgomery Ward Co., City Natl. Bank, Wichita Falls, engrs.

Tex., Wylie—Having plans for waterworks Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. $50,000. Noted Nov. 30.

Okla., Cyril—Voted $31,000 bonds water distribution system, well, pump and engine, tank and tower, 23,100 ft. 2-6 in. c.i. pipe, etc. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Sapulpa—Plans election soon to vote on $100,000 bonds extending and improving water works. F. Dunlop, city clk.

Wash., Kelso—Plans new water system. $40,000. U. G. Jackson, city engr.

Calif., Redwood City—Plans to vote on bonds (to exceed $25,000) to purchase and improve privately owned water works system. C. L. Dimmitt, city engr.

Ont., Fonthill—James, Proctor & Redfern, engrs., 36 Toronto St., Toronto, preparing report on waterworks system, incl. c.i. mains, reservoir, centrifugal pumps, pumphouse, valves, hydrants, etc., for town. $52,000. Noted Sept. 6.

Ont., Goderich — Preparing plans new steel intake pipe for waterworks. $75,000. E. H. Darling, 47 Home Bank Bldg., Hamilton, engr.

Ont., Walkerton — Voted $25,000 bonds rebuilding old waterworks reservoir and erecting new steel standpipe, (200,000 gal.), and additional pumps. F. B. James, Walkerton engr.

BIDS DESIRED

Mass., Stoneham (Boston P. O.)—Oct. 4, by Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, constructing and installing pumping engine, 20 m.g.d., at Spot Pond pumping station, here. G. L. Rogers, secy.

N. Y., Brooklyn — Sept. 19, by N. J. Hayes, comr., Water Supply, Gas & Electricity, Municipal Bldg., New York, mains and appurtenances in Bath, Cropsey, Emmons, 14th, Bedford, Lincoln, Sutter and 15th Aves., Mackenzie, Norfolk, Oxford, 58th, 62nd, 66th, 67th, 70th, East 3rd, East 5th, East 7th, East 8th, East 9th, East 10th, East 12th, East 28th, East 95th, West 10th, Jerome and Osborn Sts., Glenwood and Sheepshead Rds., Shore Blvd., Kings Highway and Parrott Pl., here.

N. Y., New York — Sept. 18, by N. J. Hayes, comr., Water Supply, Gas & Electricity, Municipal Bldg., laying mains and appurtenances in Allerton, Benedict, Bruner, Edison, Ely, Fenton, Grace, Gunther, Holland, Lacombe, Mace, Matthews, McGraw, Newman, Nereid, O'Brien, Stephens, Ward, Wayne, Yates, Davidson, Gouverneur, Orloff, Riverdale, Sedgwick, Tyndall, Van Cortlandt and Aqueduct Aves., East 178th, East 193rd, West 235th and West 254th Sts., Arnow Pl., White Plains Rd., Grand Concourse and Mosholu Parkway.

N. J., Trenton—Sept. 21, for one 15 hp., 230 volt., 1,150 r.p.m. motor, and 6 in. type S double suction split casing centrifugal pump for Water Dept. A. Bugbee, city engr.

N. J., Trenton—Sept. 21, for 450 tons 10 in. Class B c.i. pipe. A. Bugbee, city engr.

N. J., Wallington — Oct. 2, by Passaic Valley Sewerage Comrs., 900 Chamber of Commerce Bldg., 24 Branford Pl., Newark, pumping machinery and equipment for Wallington Pumping Sta., here. J. H. Quigg, clk.

Va., Danville—Oct. 11, filters and pumping machinery. F. Talbott, supt. Water Dept.; adv. E. N.-R. Sept. 13.

S. C., Greenville—J. E. Sirrine & Co., engrs., Greenville, receiving bids complete waterworks and sewerage systems for village.

Wis., Fond du Lac — G. H. Stanchfield, engr., City Hall, taking bids one 10 in. and one 20 in. centrifugal pump and addition to septic sewer tanks.

Tex., Edgewood—Taking bids waterworks improvements incl. 2 crude oil engines directly connected to alternators, motor driven centrifugal pump, c.i. pipe, steeel tank and tower, hydrants and valves. $40,000 bond issue approved by Attorney Generals Dept. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engrs. Noted Aug. 30.

Tex., Galveston—Sept. 27, by J. D. Kelly, city secy., waterworks improvements incl. one Ingersoll-Rand fly-wheel cross compound steam driven air compressor, 1,150 ft. capacity, one Knowles duplex tandem compound direct acting pump, 4 m.g. capacity, one low pressure duplex tandem compound direct acting pump, 6 m.g. capacity, also necessary condensors, piping and equipment. W. D. Masterson, supt. waterworks.

Ore., Portland—Oct. 3, at office G. R. Funk, aud., City Hall, for 25 mi. Bull Run Conduit 3, from Bull Run to Mt. Tabor Reservoirs, in city; adv. E. N.-R. Sept. 13. Noted Aug. 30.

Calif., Huntington Park — Sept. 17, by City Trustees, 1 horizontal centrifugal pump, 350 g.p.m. against 125 ft. head.

Ont., Toronto—Oct. 9, by C. A. Maguire, chn. Bd. Control, City Hall, furnishing 80 m.g. centrifugal pump, 25 m.g. pumping engine, generator, 16 and 36 in. c.i. pipe, stop valves and special castings. $100,000. R. C. Harris, city engr.

Ark., Texarkana—Texarkana Water Co. making plans additional distribution mains, 14,000 ft. 6 in. mains in Texas side of town and approximately 6½ mi. in Arkansas side. Private plans.

BIDS RECEIVED

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., from Rensselaer Valve Co., 50 Church St., New York City, flanged gate valves, thirty 30 in. $605, thirty 24 in. $365, sixty 20 in. $290, thirty 10 in. $97. Noted Aug. 30.

O., Cleveland—Cuyahoga Co. 37,000 ft. 6-10 in. c.i. mains in Impvt. 43, from J. Lewis, Sewer Contractors Exch., $139,000.

Calif., San Diego—Constructing 1,200,000 gal. steel stand pipe for waterworks system, from Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $68,300. Noted July 26.

CONTRACTS AWARDED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, furnishing and setting fire hydrants and appurtenances on existing mains in Flatbush and Flatlands Sects., here, to Watega Contg. Co., $19,674. Noted Sept. 6.

Kentucky—Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., water treating plants at Foster and Maysville, to J. E. Nelson & Sons, 3240 South Michigan Ave., Chicago. Est. cost $40,000 each.

O., Bedford—About 5 mi. 6 and 8 in. c.i. and 1 mi. vitr. tile mains, to W. B. Smith, Sewer Contractors Exch., Cleveland, $52,000, Lanese Co., Columbia Bldg., Cleveland, $55,000, and J. B. Lynn, Sewer Contractors Exch., Cleveland, $60,000.

O., Fairview—About 9 mi. 6, 8 and 10 in. c.i. mains, to Hadded & Kariel, 415 Eagle Ave., Cleveland, $65,000; Joseph, Kalill & Jackson, Bangor Bldg., Cleveland, $94,000; Hanna & Co., Leader Bldg., Cleveland, $65,000. Noted Dec. 28.

Mich., Detroit — Water Bd., furnishing and installing 37 m.g. vertical triple expansion crank and flywheel pumping engine, to Worthington Pump & Mchy. Co., 115 Bway., New York City, $247,000. Noted Sept. 6.

Ill., Bartlett — Drilling deep well for waterworks, to W. L. Thorne, Des Plaines, $9 per ft. for first 200 ft., $7 for each additional foot. Noted Aug. 9.

Wis., Black River Falls—For 150,000 gal. steel water tank on 50 ft. steel tower, to Pittsburg-Des Moines Steel Co., 38 South Dearborn St., Chicago. Noted Aug. 9.

Wis., Cedarburg—City will lay 2,000 ft. 4 in. c.i. mains and 2,500 ft. 4-8 in. vitr. sewer, by day labor. $150,000. W. J. Kirchoffer, Dean Bldg., Madison, engr. Noted June 21.

Wis., Madison — City will lay mains in various streets, by day labor. Taking bids on pipe. $15,000. L. A. Smith, supt.

Wis., Mosinee—Village, 30 x 42 ft. brick pumping station, to A. Barry, Mosinee. Engrs. est. $18,000. Noted May 17.

Kan., Emporia—For 460 tons de Lavaud centrifugally cast water pipe, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $26,324; valves and fire hydrants, etc., to Ludlow Valve Mfg. Co., 1416 R. A. Long Bldg., Kansas City, Mo., $6,721. Noted Aug. 9.

Mo., King City—For 39,450 ft. 2-6 in. c.i. mains, 125 ft. water tower on concrete foundation, 75,000 gal., one 14 x 28 ft. well and pumphouse, etc., to Beeson Mchy. Co., 308 Mutual Bldg., Kansas City. Noted July 19.

Tex., Dallas—See "Sewers."

Okla., Maysville—Water distribution system, incl. pump station, tank, tower, 12,000 ft. 4-6 in. c.i. pipe, etc., to Gibson & Mitchell, Pauls Valley, $33,833. Noted May 3.

Que., St. Lambert—Laying 1,960 ft. 30 in. concrete pipe from waterworks to point in St. Lawrence River, to W. L. Bishop Constr. Co. Ltd., 10 Cathcart St., $33,980. Noted Aug. 22.

Ont., Islington—Etobicoke Twp., laying 4½ mi. 6 in. c.i. mains in Earlswood and O'Connor subdivisions, to L. Stacco, 596 Ferry St., Niagara Falls.

Sewers

PROPOSED WORK

N. J., Trenton—Plans storm sewers. $55,000. A. C. Gregory, city engr.

Fla., Daytona—Election Oct. 1, to vote on $100,000 bonds extending sanitary sewers. C. M. Hodges, Daytona, engr. Noted Aug. 2.

Miss., Hollandale—Rejected bids 15,600 ft. 8-10 in. vitr. clay pipe, brick pump house, 3 flush tanks, one centrifugal pump and motor and 47 manholes. Project withdrawn until spring. Bobo & Collier, Clarksdale, engrs. Noted Aug. 9.

Tenn., Cookeville—See "Waterworks."

Tenn., Union City—See "Waterworks."

O., Coalburg—See "Buildings."

Wis., Athens—See "Waterworks."

Kan., Pittsburgh—Making preliminary plans 7,500 ft. storm sewer to drain into Cow Creek, D. D. 2 and 7. $50,000 to $75,000. L. D. Cornelius, city engr.

Kan., Wichita — Making preliminary plans about 30,000 ft. of 12 to 54 in. storm sewer in Cleveland Ave. Dist. $200,000. P. L. Brockway, City Hall, engr.

Mo., Breckenridge—See "Waterworks."

Mo., Cameron—Plans election to vote on $53,860 bonds for sewers and additions. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs.

Mo., Jamesport—Soon takes bids sanitary sewers and water system. To exceed $25,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noted Aug. 30 under "Waterworks."

Mo., Maitland—Making plans sanitary sewerage system. To exceed $25,000. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Mo., Maysville—Defeated $55,000 bonds for sewers and disposal plant. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noted Aug. 16.

Mo., Salem—Plans election to vote on bonds for new sanitary sewerage system. To exceed $25,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., St. Louis—See "Streets and Roads."

Mo., St. Louis—Fogg & Boyle Real Estate Co. soon takes bids 3,500 ft. 12-36 in. vitr. clay sewers in Mars Pl. subdivision. $20,000-$25,000. Dodds Surveyng Co., 717½ Chestnut St., engrs.

Tex., Clarksville — Plans prepared complete disposal plant. $40,000. Koch & Fowler, Central Bank Bldg., Dallas, consult. engrs. Noted Aug. 9.

Tex., Dallas—Making plans 3 mi. 20 in. mains from end of present mains to White Rock reservoir district. To exceed $25,000. E. A. Kingsley, city engr.

Tex., Grandview—Oct. 6, to vote on $31,000 bonds complete new disposal plant. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Tex., Marshall—See "Waterworks."

Nev., Reno—Plans sewers in University Heights and Leetes addition. $25,000. H. Chism, city engr.

Ont., Crystal Beach—Plans prepared for 6,000 ft. sanitary sewers in western section of town, vitr. tile pipe 8 in. up. $25,000. Ross & Scott, Welland, engrs.

Ont., Riverside—Plans storm and sanitary sewers in Ottawa St., 11,000 ft. vitr. tile pipe, 8 in. up. $64,203. R. W. Code, McGregor Bldg., Windsor, engr.

Ont., Sandwich—Plans 10,000 ft. sanitary and storm sewers in Partington Ave., vitr. tile pipe, 8 in. up. $44,843. C. R. McColl, Gas Bldg., Windsor, engr.

Ont., Toronto—Plans 15 mi. vitr. tile, brick and concrete relief sewers. $424,580. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Sept. 20, by E. Riegelmann, boro pres., Borough Hall, sewers in Hamilton and Stillwell Aves., West 8th, West 10th, West 12th, West 15th, West 16th, West 19th, West 24th, West 27th, West 28th, West 29th, West 35th and West 36th St.

N. Y., St. George—Sept. 17, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sewers in Bradley and Henschcliff Aves.

Pa., Watsontown — Sept. 17, by Boro Council, 2,780 ft. 8 and 10 in. vitr. sewer in 7th and Ash Sts. E. Moritz, secy.

Sewers (Continued)

W. Va., Bluefield—Oct. 9, at office C. E. Ridley, city mgr., 14 mi. pipe and segment block, etc.; adv. E. N.-R. Sept. 13.

S. C., Greenville—See "Waterworks."

O., Barberton—Sept. 17, by Bd. Control, for Part 7 East Side Lateral sewers. $130,000.

O., Berea — Sept. 17, vitr. intercepting sewer. M. Knowles, Inc., Cleveland and Pittsburgh, engrs.; adv. E. N.-R. Sept. 13. Noted Aug. 9.

Tex., Ft. Worth — F. N. Graves, city purch. agt., receiving bids 105,000 lin.ft. 6-8 in. sewer pipe. D. L. Lewis, city engr.

Colo., Denver—Sept. 18, by Dept. Impvts. & Parks, 10 mi. of 10-72 in. brick, monolite concrete, plain concrete or segmental block sewer in Washington Park Storm Sewer Dist. 3. $285,370. A. K. Vickery, city engr. Noted July 12.

BIDS RECEIVED

O., Euclid—Village, Sept. 4, sewers in East 196th St. and Lake Shore Blvd., Sect. 1, from Amato Constr. Co., Ulmer Bldg., Cleveland, $73,699; Sect. 2, from Graham & Henderson, 1274 West 108th St., Cleveland, $93,027; 1,125 ft. steel submerged outfall pipe, Lake Shore Blvd., from Cleveland Eng. Constr. Co., The Arcade, Cleveland, $67,787; sewage plant incl. 82 x 108 ft. tank building, 35 x 35 ft. laboratory, 24 x 24 ft. disinfecting building and 35 x 35 ft. screen house, from D. Lowensohn, 10825 Fairchild Ave., Cleveland, $345,610, engrs. est. $250,000. Noted Aug. 30.

Mich., Detroit—Dept. Pub. Wks., for 1,251 ft. Liddlesdale Ave. Sewer, Sect. 1, from W. Blanck Co., 827 Ford Bldg., $97,786. Noted Aug. 23.

Wis., Beloit—G. E. Heebink, city engr., 5.770 lin.ft., 24 and 27 in. concrete trunk sewers, 1070 lin.ft. 6 in. vitr. pipe riser, in Shirland Ave., from Brogan & Burns, 700 Dousman St., Green Bay, $50,648 and $11.829. Noted Aug. 24.

Wis., Rhinelander—Sewerage system, 26,502 ft. of 8-20 in. vitr. or concrete pipe, from W. D. Lowell, 1415 South East 8th St., Minneapolis, Minn., $78,981.

Ia., Sioux City—For 1,730 lin.ft. 14 x 39 ft. storm water conduit, for changing channel and water of Perry Creek, 50,000 cu.yd. excav., etc., from C. F. Lythe Constr. Co., 504 Nebraska St., gravel construction broken stone floor $314,055, broken stone construction $315,630. Noted Aug. 23.

Wash., Seattle—Bd. Pub. Wks., 5723 ft. of 8-24 in. pipe sewer in 9th Ave. N., et al., from Fiorito Bros., 3950 6th Ave., Seattle, concrete $29,550, clay $30,378.

Calif., Long Beach—Concrete pipe sewerage system in Sanitary Sewer Pump Dist. 1, Chestnut and State Sts., etc., from L. C. Campbell, 350 Merrick St., Los Angeles, $139,228. Noted Aug. 30.

CONTRACTS AWARDED

N. J., Newark—See "Streets and Roads."

N. J., East Orange—For Elizabeth River Drain, 1 mi. long, mostly 72 in. rein.-con. pipe, to Spiniello Constr. Co., Newark, approximately $95,000. Noted Aug. 23.

N. J., Ridgefield Park — Sludge drying beds at East Side and West Side sewage treatment plants, to Suburban Eng. Co., 15 West 38th St., New York City. Engrs. est. $50,000. Noted July 26.

Md., Baltimore — Constructing Gwinn Falls intercepting sewer, Sect. 3, to Ryan Constr. Co., Real Estate Trust Bldg., Phila., Pa., $92,336. Noted Aug. 9.

W. Va., Spencer — City and State Bd. Control, Charleston, intercepting sewer and branches, here, to Fosco, Domineck Co., South Charleston, (Charleston P. O.), $37,500. Noted July 26.

Fla., Miami—For 15 mi. sanitary sewers and laterals, to J. B. McCrary Eng. Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $176,502. Noted Feb. 1.

La., West Monroe—For 44,750 ft. 8 in., 1,194 ft. 10 in., 804 ft. 12 in., 1,943 ft. 15 in., 2,126 ft. 18 in., 3,711 ft. 21 in., 1,394 ft. 24 in. pipe in various streets, to McIntosh Co., New Orleans, $94,000. Noted July 19.

O., Barberton—Bd. Control, constructing No. 6 East Side Lateral sewer, to E. and W. McShaffrey, Rhodes Ave., Akron, $120,458.

O., Northwest Boulevard (Columbus P. O.)—For 14,152 ft. 6-18 in. sanitary sewers in alleys in Plats 4 and 5, and in Grandview Heights, to Cleveland Trinidad Paving Co., Grand Theatre Bldg., Columbus, $21,858. Noted Aug. 30.

Wis., Beloit — Sewers in Shirland Ave. from Rock River to State St., to Brogan & Burns, Green Bay, 24 in. $50,648, 27 in. $11,829. Engrs. est. $60,000.

Wis., Milwaukee—Sewerage Comn., 508 Market St., piping in power boiler house in connection with sewage disposal plant on Jones Island, to Power Piping Co., 829 Beaver St., Pittsburgh, $47,300.

Kan., Lyons—Sanitary sewerage system, to C. H. Everett, Hutchinson, 54,775 ft. 8-15 in. vitr. clay pipe $0.40-$0.95, sewage disposal plant $25,000, etc., total $91,453. Noted Aug. 23.

Kan., Smith Center—See "Streets & Roads."

Mo., Marshall—For 11,811 ft. 6 and 8 in. vitr. clay sewers in Montague-Franklin Sunset Hill Dist. Sanitary Sub-Dist. 13 of Dist. 2, to R. Langston, 730 South Fort St., Springfield, $21,671. Noted June 14.

Mo., University (St. Louis P. O.)—C. C. Willmore Corp., Boatmens Bank Bldg., St. Louis, 12,000 ft. 12-36 in. vitr. clay sewer in University Park, here, to Grant & Meinert, 4219 Botanical Ave., St. Louis, $50,000.

Ark., Forrest City—Laying 13,000 ft. sewer in Forrest City Special Impvt. Dist., to J. B. McCrary Eng. Co., Atlanta, Ga. $22,000.

Ark., McGehee—Sanitary sewers, pumping stations and disposal works, in Sanitary Sewer Dist. 1, to Merkle Mchy. Co., 1733 Walnut St., Kansas City, Mo., $85,306. Noted July 26.

Ark., Piggott—For 15,000 ft. sewer, to Merkle Mchy. Co., 1733 Walnut St., Kansas City, Mo., $38,475; 100 hp. and 75 hp. oil burning engines to Fairbanks-Morse Co., 1304 Liberty St., Kansas City, Kan., $20,629; power plant, to E. E. Porterfield and E. C. Johnson, Piggott, $5,235.

Tex., Dallas—Sewer and water main extensions with paving in Preston Pl., (improvements to 68 lots), to Klein Bros. and Lynch Miller Co., Deer Bldg., $40,000. Engrs. est. $30,000. Owner's name withheld.

Tex., Ft. Worth—Labor for 105,000 ft. 6 and 8 in. sanitary sewer in Polytechnic Heights, Sycamore Heights and Tandys addition, to Janes Constr. Co., Southwestern Life Bldg., Dallas, $91,904. Noted Aug. 23.

Okla., Sand Springs—For 6 mi. sanitary sewers in Dist. 5, incl. 6 in. concrete, 8 in. vitr. clay and 10 in. tile pipe, to Comstock-Smedley, 432 Iowa Bldg., Tulsa, $116,000.

Waste Disposal

PROPOSED WORK

Tex., Austin—Oct. 15, to vote on $50,000 bonds for garbage incinerator. G. E. Leonard, city engr. Noted July 12.

BIDS DESIRED

Ind., Indianapolis—Sept. 25, by Bd. Sanitary Comrs., Room 208 City Hall, garbage reduction plant building, and receiving station. J. A. Craven, pres.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Sept. 6, construction and completion building and runway, furnaces, appurtenances and chimney of Bergen Landing Destructor, 4th Ward, from Hudson City Eng. & Constr. Corp., 25 Hunterspoint Ave., $289,000. Noted Aug. 30.

N. Y., New York—Dept. Plant & Structures, Municipal Bldg., installing furnaces, flues, chimneys and appurtenances for destructor plant, 139th St. and Harlem River, for Dept. Street Cleaning, from C. O. Bartlett & Snow Co., 1040 Federal St., Cleveland, O., $243,000.

O., Lakewood—Garbage and rubbish incinerator plant, 50 tons per day capacity, from C. F. Walters, 136 West 82nd St., New York City, $46,930. Noted Aug. 16.

Bridges

PROPOSED WORK

N. Y., Buffalo—See "Railways."

N. J., New Brunswick—State Hy. Comn., Trenton, plans to reconstruct steel and concrete bridge over Raritan River between here and Highland Park, Middlesex Co., $300,000. Strauss-Bascule Co., engrs. J. L. Vogel, 772 Broad St., Newark, state bridge engr.

Tennessee—State Hy. Dept., Nashville, soon takes bids concrete bridge over Roaring River. J. G. Creveling, comr.

Ky., Louisville—City and Jefferson Co. plan election to vote on $6,000,000 bonds for bridge over Ohio River, here. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, Mass., engrs.

O., Akron—See "Miscellaneous."

O., Willow (Brooklyn, P. O.)—Cuyahoga Co. (Cleveland) plans concrete bridge over Cuyahoga River, here. $750,000. F. R. Lander, Court House, Cleveland, engr.

Ind., Vincennes—States of Indiana and Illinois plan steel truss bridge over Wabash River, here. $300,000. G. F. Burch, Springfield, Ill., bridge engr.

Wis., Madison—Plans rein.-con. bridge over Yahara River, on Jenifer St., about 60 ft. long, 50 ft. roadway, two 8.6 ft. walks. $25,000. H. C. Buser, clk.

Tex., Houston—Plans prepared 240 ft. bridge 70 ft. wide, concrete floor, on Smith St., Buffalo Bayou, concrete or steel. J. C. McVea, city engr.

Quebec—Canadian Pacific Ry., Windsor St. Sta., Montreal, plans 100 ft. through truss span over Black River, two 78 ft. and two 53 ft. deck plate girder spans, one 200 ft. through truss span over North Nation River, on Lachute subdivision. P. B. Motley, engr. of bridges.

Ont., Galt — Plans to vote on $35,000 bonds for new bridge. D. T. Black, city engr.

BIDS DESIRED

N. J., Freehold—Sept. 19, by Bd. Freeholders Monmouth Co., constructing Bridge E-14, Oceanport, also Bridge O-17, on West Long Branch Interlaken Rd. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. E.N.-R. Sept. 13.

Pa., Johnstown—Oct. 2, at office M. L. Masterton, supt. streets and public improvements, City Hall, constructing Napoleon St. Bridge and Coopersdale Bridge. J. E. Greiner & Co., Pittsburgh, consult. engrs.; adv. E.N.-R. Sept. 13.

Pa., York—Sept. 24, at office F. S. Bartenschlager, controller York Co., constructing bridges; adv. E. N.-R. Sept. 13.

Fla., Clearwater—Oct. 16 by B. D. Comrs. Pinellas Co., bridge and bulkhead. C. E. Burleson, co. engr.; adv. E. N.-R. Sept. 13. Noted July 26.

Louisiana—Oct. 2, by State Hy. Comn., Reymond Bldg., Baton Rouge, removing old timber bridges and constructing 34 rein.-con. box culverts varying in size from 3 x 4 ft. to 8 x 45 ft., also one 50 ft. steel plate girder span and one 60 ft. steel truss span on rein.-con. abutments, on State Project 385, Port Allen-New Roads, Port Allen-Plaquemine and Port Allen-Rosedale Highways, West Baton Rouge Parish, incl. 1,800 cu.yd. concrete, 145,000 lb. reinforcing, 72,000 lb. structural steel, etc. J. M. Fourmy, ch. engr.

Michigan—Sept. 25, by State Hy. Dept., Lansing, three 50 ft. concrete girder bridges, No. 020604, 020605 and 020606, Alger Co. F. F. Rogers, state comr. Noted Sept. 6.

Wis., Milwaukee—Sept. 20, by Park Bd., concrete piling for new viaduct on Mason St., terraces and peristyle to be erected. Cost complete $225,000. Clas Shepherd & Clas, 445 Milwaukee St., engrs.

Minnesota—Sept. 26, by State Hy. Dept., St. Paul, Bridge 3458 at Beaver Bay, 300 ft. steel arch span, and Bridge 3583 at Split Rock, 80 ft. deck truss span, both in Lake Co., State Project 1-01, Federal Aid Project 282. $25,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Wash., Omak—Sept. 18, by Comrs. Okanogan Co., (Okanogan) 408 ft. concrete bridge, also removing present structure, near here. Former bids rejected. D. C. Warfel, Okanogan, engr. Noted July 5.

BIDS RECEIVED

New Jersey—Monmouth Co. (Freehold) steel Bridge R-1, Maple Pl., Keyport; also Bridge U-11 Imlaystown, from R. J. Mansfield, 53 Park Pl., New York City, $22,492 and $62,527 respectively. Noted Aug. 23.

North Carolina — State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 495, Warren Co., from Dameron & Sparling, Nashville, $25,982; State Project 592, Rockingham Co., from J. L. Brinkley, Thomasville, $29,018; State Project 641, Iredell Co., from Hanford Bros., Burlington, $63,485; State Project 679, Scotland Co., from E. T. Gwathmey, Norfolk, Va., $26,886; State Project 745, Forsyth Co., from C. A. Helig, Winston-Salem, $31,379. Noted Aug. 16.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Aug. 29, from Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, Mo., 2 concrete slabs and 1 concrete culvert, Route 14, Sect. 7-B Franklin-Hamilton Counties, and Route 14, Sect. 8, Hamilton Co., Combination E, $64,800; from V. C. O'Connor, Newton, 4 concrete girders, Route 33, Sect. 4-D, Jasper Co., $53,579,

Bridges (Continued)

less ½% if personal bond is accepted. Noted Aug. 9.

Minnesota — State Hy. Dept., St. Paul, Sept. 5. Bridge 4090 on State Project 3-39, Federal Aid Project 327, over Clearwater River, Wabasha Co., five 75 ft. truss spans, from Illinois Steel Bridge Co., Gilfillan Bldg., St. Paul, $31,949; Bridge 4138 on State Project 59-23, Federal Aid Project 335, over Zumbro River, Rochester, Olmsted Co., three 65 ft. low truss spans, from Independent Bridge Co., 1101 Metropolitan Life Bldg., Minneapolis, $27,770. Noted Aug. 23.

CONTRACTS AWARDED

South Carolina—State Hy. Dept., Columbia; bridges over Lynches River, Federal Aid Project 180 B, Florence Co., rock asphalt paving, steel superstructures, hardware treated and untreated piling, etc., to Palmer & Conrad, Florence, $46,150. Noted Aug. 30.

S. C., Charleston—Charleston Co., 1,733 ft. concrete bridge over Ashley River, 43 ft. wide, 2 steel bascules, to be constructed instead of draw, opening for vessels 138 ft. wide, to Sanford & Brooks, 24 Commerce St., Baltimore, Md., $1,067,466. Noted Aug. 23.

S. C. Marion — Comrs. Marion Co., 4 treated timber bridges over Lumber River between Marion and Horry Counties, Federal Aid Project 219, to L. A. Chitwood, Columbia, $20,434. Noted Aug. 2.

Ohio—See "Streets and Roads."

Michigan—State Hy. Dept., Lansing, 60 ft. concrete arch, Bridge 580,902 near Monroe, 394 cu.yd. rein.-con., 478 cu.yd. concrete, 28,550 lb. reinforcing to E. C. Nolan & Son, 1497 Collingwood Ave., Detroit, $23,957, plus state cement $2,000. Noted Sept. 6 under "Streets and Roads."

South Dakota—State Hy. Dept., Pierre, concrete viaducts on **(F. A. P. 100 Pennington means Federal Aid Project 100 Pennington Co.) F. A. P. 100 Pennington**, to Youngberg Constr. Co., Aberdeen, $16,112; **F. A. P. 134 Douglas**, to D. D. Bidwell, Egan, $16,421; **F. A. P. 141 Hughes**, to C. J. Wheelock, Pierre, $22,798; **F. A. P. 142 Brown** and **F. A. P. 143 Marshall**, to M. A. Stump, Mobridge, $5,775 and $4,553 respectively. Noted Aug. 16 and 23.

Kan., Osage—See "Dams."

Ark., Pine Bluff — See "Streets and Roads."

California—Amer. Toll Bridge Co., New York, (O. Klatt, c/o Golden Gate Ferry Co., foot Hyde St., San Francisco, secy.), bridge over Carquinez Straits, from Solano to Contra Costa Counties, 11,731 tons structural steel, 2,510 cu.yd. concrete in floors, 362,000 lb. reinforcing steel in floor, 27,300 cu.yd. concrete in piers, 1,776,000 lb reinforcing steel in piers, to Duncanson-Harrelson, Chronicle Bldg., San Francisco, $4,500,000.

Calif., Ventura—Supervs Ventura Co. repairing Montalvo Bridge, 263,874 ft. timber in floor system, 19,620 ft. timber in railing, 11,200 ft. new timber in truss members, 29,696 sq.ft. pavement, to De Waard & Cobham, Granger Bldg., San Diego, $35,948. Noted Aug. 23.

Ont., Chatham — Kent Co., 2 concrete abutments and 2 concrete piers in connection with Prairie siding swing bridge, to Birmingham & Son, Kingston, $36,450.

Dams

PROPOSED WORK

Tenn., Lawrenceburg — Soon takes bids hydro-electric dam for municipal light plant. $80,000. Freeland, Roberts & Co., Independent Life Bldg., Nashville, engrs.

Ark., Winslow—T. B. Harris, Winslow, and L. Kelley, c/o Kelley Trust Co., 9 North 7th St., Ft. Smith, and others, making preliminary plans concrete dam, 15 ft. high, in gorge between here and Schaberg. $225,000. Engineer not announced.

Tex., San Antonio—Plans to construct retention dam or straighten river. $4,000,000. D. D. Harrigan, Moore Bldg., engr.

BIDS DESIRED

Wis., Iron River—Iron River Water & Light Co. taking bids rein.-con. and earth dam, 5 ft. base, 1 ft. top. $25,000. T. F. MacMillen, pres. Noted Aug. 23.

CONTRACTS AWARDED

Wis., Waubeka, (Fredonia P. O.)—E. K. Klessig will build rein.-con. and steel dam by day labor. J. Donohue Co., Sheboygan, Wis., engr.

Kan., Osage — Addition to earth dam, spillways, grading road and constructing new concrete bridges, to F. Schofner, Atchinson, $46,246.

Ont., Thessalon—Hope Lumber Co. will build timber dams here by day labor. $60,000.

Railways

PROPOSED WORK

New York—New York Central R.R., Exchange St. Sta., Buffalo, plans 2 mi. double track from Gardenville Yard to Cheektowaga, also subway under Ellicott Rd. and bridge above grade of French Rd., Buffalo and Depew Blvd., and Depew & Lancaster R.R., $550,000; 2½ mi. double track beginning at main line connection in Depew and connecting with West Shore R.R. at Cheektowaga, $700,000. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr.

California — Southern Pacific R.R. Co., 65 Market St., San Francisco, had plans prepared industrial trackage on Beale St., San Francisco. $122,000. G. W. Boschke, ch. engr.

Ontario—Hydro Electric Comn., London, plans to extend street railway in Windsor. $250,000. A. Beck, London, chn. Work under supervision of T. U. Fairlie, engr., Hydro Office, Windsor.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, plans single track branch line from point near Cobalt into Lorrain Silver camp, incl. 10-15 mi. 80 lb. rails. $300,000 to $500,000. S. B. Clement, North Bay, ch. engr.

Ontario — York Twp., Toronto, having estimates made extending 5 street railway lines from city of Toronto into township, incl. 12 mi. double track, electric poles, etc. $2,173,265. F. B. Goldike, 40 Jarvis St., Toronto, engr.

BIDS DESIRED

California—Oct. 3, by Bd. Pub. Wks. of San Francisco City and San Francisco Co., furnishing and delivering track materials for municipal railway under Contr. 136, 370 gross tons rail, 930 pairs joint plates, 30 pairs joint plates, with bolts and nuts, 6,100 lock washers, 14,600 tie plates, 1,500 anticrupers, frogs, switches, etc. M. M. O'Shaughnessy, city engr.

CONTRACTS AWARDED

Illinois—Chicago, Milwaukee & St. Paul R.R. Co., Ry. Exch. Bldg., Chicago, grading 23 mi. for second track between Talmadge and Webster, on Terre Haute Div., to Peterson, Shirley & Gunther Co., Woodman of World Bldg., Omaha, Neb. Engrs. est. $150,000.

Oregon—Southern Pacific Co., 65 Market St., San Francisco, Calif., grading 31 mi. 1st section, connecting Eugene and Klamath Falls, to J. Hampshire, Grants Pass.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Daytona—Election Oct. 1, to vote on $260,000 bonds constructing park by dredging and filling in east of Beach St. and west of Channel of Halifax River. C. M. Hodges, Daytona, engr. Noted Aug. 2.

Wis., Green Bay — Brown Co. Farm Drainage Bd., 605 Cherry St., completing plans several miles open ditching and tiling to drain about 3,500 acres near Green Bay. $25,000. L. M. Shindler, 721 Clark St, Appleton, engr.

BIDS DESIRED

N. Y., Riverhead—Sept. 27, by Salt Water Bays Comn. at office of State Engineer and Surveyor, Telephone Bldg., Albany, excavating channel connecting Moriches, Quantuck, Shinnecook and Peconic Bays, Suffolk Co. D. B. LaDu, chn.; adv. E. N.-R. Sept. 13.

Minn., Granite Falls—Sept. 19, by G. H. Wilson, aud. Yellow Medicine Co., (Granite Falls), and R. D. Houdersheldt, aud. Lyon Co. (Marshall), Judicial Ditch 10, Sects. 1 to 6 inclusive, 1,581,407 cu.yd. excav., etc., $180,280; Sects. 7 to 10 inclusive, 379,991 ft. 6-28 in. tile, etc., $202,214. E. W. Youngdale, Granite Falls, engr.

Mo., Benton—Oct. 1, by Scott Co., 21,500 cu.yd. earth excav., 4,000 cu.yd. earth fill, etc., along Main Ditch of D. D. 10. Swank-Tanner Eng. Co., Charleston, engrs.; adv. E. N.-R. Sept. 13.

Mo., Kirksville — Sept. 15, by C. E. Jacoby Eng. Co., engrs., Shukert Bldg., Kansas City. 209,150 cu.yd. main ditch, 20 acres clearing and 3,500 acres draining, here, for Brashear D. D.

CONTRACTS AWARDED

Miss., Cleveland—Comrs. Northern D. D., 16 mi. lateral ditches near Shelby, involving 269,922 cu.yd. ditches varying from 3 to 10 ft. bottom width an from 1.5 to 13.4 ft. in depth, to Miller & Harris Bros., Louisville, Ky., $0.14 and $0.16.

Wis., Green Bay—Farm Drainage Dist. 5, 4½ mi. 6-8 in. tile outlet drain in Lawrence Twp., to A. Tomasum, 257 Park Ave., Fond Du Lac. Noted Aug. 16.

Ont., Port Arthur—Dominion of Canada, Dept. Pub. Wks., Parliament Bldgs., Ottawa, hydraulic dredging in harbor here, to Canadian Dredging Co., Midland, $246,920.

Streets and Roads

PROPOSED WORK

New York—F. S. Greene, comr. highways, Albany, received no bids Aug. 31, constructing and reconstructing 0.64 mi. Repair Contr. 3062, Dutchess Co., $38,438. Noted Aug. 23.

N. J., Asbury Park—Plans resurfacing 2 mi. Cookman Ave. and Kingsley St. $167,000. N. Rogers, Asbury Park, engr.

Pennsylvania—Election in November to vote on $50,000,000 bond issue for road work.

Pa., Erie—Plans to pave 29th and 36th Sts., brick. $47,600. F. G. Lynch, city engr.

Virginia—Nov. 6, to vote on $1,200,000 bonds for new road work. H. G. Shirley, state highway comr.

Fla., Dade City—Pasco Co. election Sept. 18, to vote on $125,000 bonds surfacing with asphalt on rock Rd. 1; $50,000 paving with rock, marl or clay Rd. 2, $25,000 for Rds. 3, 4, 5 and 6, $50,000 for Rd. 7; $25,000 reconstructing with asphalt on rock Rd. 8. J. A. Burnside, clk.

Fla., Daytona—Election Oct. 1, to vote on $200,000 bonds constructing Myrtle Lane, Ivey Lane, et al. C. M. Hodges, Daytona, engr. Noted Aug. 2.

Tennessee — Dept. Highways and Pub. Wks., Nashville, plans to have surveys made 29 mi. Dixie Highway from Jellico to La Follette, Campbell Co., asphalt on concrete. J. G. Creveling, comr.

Tenn., Benton—Polk Co. plans to construct various roads. $25,000.

Kentucky—State Hy. Dept., Frankfort, plans surfacing 2.489 mi. Barboursville Rd., 18 ft., Federal Aid Project 61 B. Knox Co. J. S. Boggs, state highway engr.

Ky., Louisville — Plans reconstructing portions 3rd and 4th Sts., 40 ft. $25,000.

Ky., Paintsville—Plans 3,300 lin.ft. curb and 2,950 sq.yd. concrete or asphalt paving. $25,000. C. A. Temple, city engr.

Ky., Pineville—Bell Co. plans constructing roads near Harlan. $65,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids Aug. 24, grading, bridging and paving 2.632 mi. Sect. "I" Niles-Ashtabula Rd., Trumbull Co., rein.-con., $107,481. Noted Aug. 30.

O., Akron—W. F. Peters, dir. Pub. Serv., takes bids latter part of September, grading, laying sidewalks and paving 70,100 sq.yd. Glendale Ave., Brown and North Main Sts., vitr. brick or asphalt, $575,000. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—Summit Co. plans improving 1.7 mi. Cuyahoga Falls-Kent Rd., 18 ft.; 2.53 mi. Twinsburg-Solon Rd. and 1.9 mi. Akron-Massillon Rd., both 20 ft. J. Weaver, County Bldg., engr.

O., Canton—Soon takes bids widening and resurfacing Cleveland Ave., asphalt. $30,000. W. E. Sarver, City Bldg., engr.

O., Canton—Stark Co. soon takes bids resurfacing 1 mi. Alliance-Minerva Rd., 20 ft., $26,000; improving 1 mi. Canton-Waynesburg Rd., 18 ft., $27,500. A. M. Wise, Court House, engr.

O., Lisbon—Columbiana Co. plans grading Canton Hill, also filling in ravine spanned by old Canton bridge. About $100,000. L. Kirk, co. engr.

O., Steubenville—Jefferson Co. plans resurfacing 3 mi. Hammondsville Hill Rd., 18 ft., bituminous macadam. $71,000. State appropriated $35,000 toward cost.

Michigan—State Hy. Dept., Lansing, rejected bids grading and gravel surfacing 6.88 mi. State Trunk Line 66-17, Sects. A and B, Kalkaska Co., and 5.977 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co. Noted July 26 and Aug. 30.

Mich., Highland Park (Detroit P. O.)—Plans prepared improving 3rd Ave. and Kings Highway. 13.444 cu.yd. excav. and 31,541 sq.yd. rein.-con. or sheet asphalt. L. C. Whitsit, 28 Gerald Ave., engr.

Streets and Roads (Continued)

Mich., Royal Oak—Plans prepared paving 16,000 sq.yd. Farnum and Gardenia Sts., 7 in. vibrolithic or rein.-con. $75,000. P. H. Beauvais, city mgr.

Kan., Anthony—Harper Co. soon takes bids grading and sand clay surfacing 9.987 mi. Attica Rd., 18 ft., Federal Aid Project 154, Sect. A. Eidemann & Marshall, Topeka, engrs.

Kan., Washington—Washington Co. making plans grading 11.5 mi. road. E. C. L. Wagner, 609 Kemper Bldg., Kansas City, Mo., engr.

Kan., Wichita—Sedgwick Co. soon takes bids grading and surfacing 1.980 mi. Valley Center Extension, 18 ft. M. Roseberry, co. engr. Noted Sept. 6.

S. D., Elk Point — Union Co. plans to gravel surface 12.5 mi. Federal Aid Project 153, $62,150. R. E. Lyle, co. aud.

N. D., Dickinson—Stark Co. soon takes bids gravel surfacing 6.6 mi. Federal Aid Project 14, $25,000.

Mo., Kirksville—Making preliminary plans paving Missouri St., brick on concrete; South Main, East Jefferson, 1st and Marion Sts., concrete. To exceed $50,000. B. Crabtree, city engr.

Mo., St. Louis—Fogg & Boyle Real Estate Co. making preliminary plans glading, concrete curbing and guttering and asphalt paving 11,500 sq.yd. in Mars Pl. subdivision. $40,000. Dodds Surveying Co., 717½ Chestnut St., engrs.

Mo., St. Louis—J. A. Hodges, 3127 South Grand Blvd., making preliminary plans grading, laying sidewalks and asphalt paving 10,600 sq.yd. Loughborough, Field and Sharp Aves., etc., in subdivision opposite Carondelet Park South. $32,500-$35,000; soon takes bids 3,000 ft. 12-36 in. vitr. clay sewers in above streets, $18,000-$20,000. Private plans.

Mo., University (St. Louis P. O.)—Soon takes bids improving University Park Subdivision, here, 17,700 lin.ft. concrete curbing and guttering, 100,000 sq.ft. sidewalks, 32,000 sq.yd. asphaltic concrete paving, etc. $50,000-$60,000. Pitzman Eng. & Survey Co., 615 Chestnut St., St. Louis, engrs.

Mo., Webb City — Making preliminary plans paving 8,000 ft. streets between double tracks of Southwest Missouri R.R., brick or concrete. $40,000.

Ark., Camden — O. E. Westfall, secy., takes bids about Sept. 15, grading, surfacing, etc., 5,000 ft. in Dist. 5, 8,000 cu.yd. grading, 12,900 sq.yd. Topeka mix surface on 5 in. concrete, 8,566 sq.yd. 6 in. concrete sidewalks, etc. Humphreys, Alexander & Humphreys, Camden, engrs.

Ark., Morrillton—Soon takes bids grading and paving 11,000 sq.yd. in Dist. 4, 2 in. asphalt on 5 in. concrete. $42,500.

Tex., Abilene—Taylor Co. plans election soon to vote on $350,000 bonds hard surfacing highways. W. A. Rinney, Abilene, engr.

Tex., Bay City—Matagorda Co. making plans graveling 5 mi. Highway 12 C, 18 ft. $35,000. E. N. Gustafson, Angleton, engr.

Tex., Carthage—Panola Co. making plans grading and gravel surfacing 11.5 mi. State Highway 8, Rd. Dist. 1. $169,540. Titus & Dillon, Center, engrs.

Tex., Center—Shelby Co. making plans grading and gravel surfacing 13 mi. State Highway 35, Tenaha Dist., 16 ft. $150,000. Titus & Dillon, Center, engrs.

Tex., Coleman — Coleman Co. election Sept. 22, to vote on $200,000 bonds 21.08 mi. highway improvement in Rd. Dist. 4, from Goldsboro to Taylor Co. line, 18 ft. Total cost $400,000. Federal Government and State will appropriate toward cost.

Tex., Corsicana—Navarro Co. making plans rebuilding Mildred Rd. from here to Mildred oil field. $30,000. McClendon & Purnell, Corsicana, engrs.

Tex., Decatur—Wise Co. making plans grading and gravel surfacing 11.5 mi. State Highway 39, from point south of Chico north to Jack Co. line. $127,000. H. R. Smith, co. engr.

Tex., Ennis — Plans permanent paving various streets. $60,000 bonds voted. H. McCandless, city engr. Noted June 14.

Tex., Galveston—Making plans paving 2 mi. 14th and 35th Sts. from Bay to Gulf Sts., rock asphalt on shell base. $50,000. C. A. Holt, city engr.

Tex., Galveston — Making plans brick, concrete or rock asphalt paving ¾ mi. 25th St. from Church to Seawall Sts., 40 ft. Cost to exceed $25,000. C. A. Holt, Jr., city engr.

Tex., Gonzales—Gonzales Co. and State plan crushed rock topping on 16 mi. road from Glacier to Gulf Highway, 18 ft. $150,000. Election soon to vote on bonds. J. G. Ibry, co. engr.

Tex., Laredo—Webb Co. plans bituminous topping 3 highways radiating from here, 32 mi. long, 18 ft. $500,000. State and Federal Government will appropriate toward cost. S. F. Knowlton, Laredo, engr.

Tex., Marshall—Election Oct. 9, to vote on $50,000 and $10,000 bonds for paving and sidewalks. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Pearsall—Frio Co. election Oct. 18, to vote on $300,000 bonds highway improvement, Precinct 4, from Frio Co. line on west to Dilley, connecting with Meridian Highway.

Tex., Quanah—Making plans paving 20 blocks, 40 ft., various types, chiefly brick. Elrod Eng. Co., 3206 Elm St. Dallas, engrs.

Tex., San Antonio—Bexar Co. making plans improving 8.2 mi. Castroville Rd., 18 ft., asphalt. $148,000. A. C. Pancoast, 102 Turner St., engr.

Tex., Texarkana — Making plans paving 9 blocks Beech St. from 15th to 24th Sts., 40 ft., 3 in. vertical fibre brick on 5 in. concrete. O. Yenglin, Texarkana, engr.

Tex., Tyler—Smith Co. making plans concrete paving, etc., 3 mi. Arp Rd., 18 ft. $100,000. D. K. Caldwell, co. engr.

Tex., Waxahachie—Ellis Co. had plans prepared gravel surfacing, etc., 3 mi. Highway 14 through Palmer, 18 ft. $30,000. W. S. Spalding, Waxahachie, engr.

Okla., Blackwell—Having plans prepared grading and paving 1st, 7th, Oklahoma, McKinley, Dewey and Kansas Sts., 20,000 sq.yd. vertical fibre brick, 11,500 lin.ft. curbing, 11,500 lin.ft. gutter, etc. $98,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Wewoka—Having plans prepared grading and paving 10 blocks. To exceed $100,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colorado — State Hy. Dept., Denver, rejected bids gravel surfacing 2.911 mi. road between Hesperus and Durango, 24 ft., Federal Aid Project 71 C, La Plata Co. L. D. Blauvelt, State Office Bldg., highway engr. Noted Aug. 9.

Wash., Seattle—Plans improving Avalon Way, incl. Fauntleroy Ave., Alaska St., etc. Plans incl. paving 18 ft. strip from foot of Avalon Way to 36th St., 7 in. concrete; 18 ft. roadways on Alaska St. and Fauntleroy Ave., and 25 ft. paving on Barton St. $250,000. J. D. Blackwell, city engr.

Calif., Bakersfield—Plans paving Nile St. east of Baker St. To exceed $90,000. W. D. Clark, city engr.

Calif., Colfax—Plans to vote on $25,000 bonds paving various streets, probably concrete.

Calif., Fresno—City Council received no bids grading, guttering, curbing, sidewalks and paving McKinley Ave. Noted Aug. 23.

Calif., Huntington Park (branch P. O., Los Angeles)—Making plans paving 120,000 sq.ft. Albany St., 4 and 5 in. asphaltic concrete. H. McCurdy, Pacific Electric Bldg., Los Angeles, engr.

Calif., Los Angeles—Had plans prepared improving Vernon Ave., 166,477 sq.ft. 6 in. concrete, 18,410 sq.ft. walks, etc.; Liberty St., 15,396 sq.ft. oil and roll, 4,538 sq.ft. walks, 2,321 sq.ft. gutter, etc.

Calif., Modesto—Stanislaus Co. having plans prepared paving with concrete or asphalt 2.5 mi. Dist. 4, 3.5 mi. Dist. 6; paving with black base 0.625 mi. in Dist. 1; surfacing and constructing shoulders 2 mi. Dist. 5. J. H. Hoskins, co. surv.

Calif., San Leandro — Having plans prepared extending Oakes Blvd. to Foothill Blvd.; cutting street through between Oakes Blvd. and Haas Ave. to boulevard extending Haas Ave. to banks of San Leandro Creek and extending Dowling from Dutton Ave. across creek to Estudillo Ave. $200,000. R. H. Goowding, city engr.

Calif., Santa Barbara — Plans curbing, guttering, sewers and paving 95 blocks. G. D. Morrison, city engr.

Calif., Santa Cruz—Had plans prepared improving Younglove Ave., 50,017 sq.ft. 6½ in. asphalt macadam, etc. H. Williams, city engr.

Calif., San Diego—Common Council had plans prepared improving Ivy, 31st and Fern Sts., 85,513 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, 2,256 sq.ft. concrete sidewalks, etc. F. A. Rhodes, city engr.

Calif., Santa Rosa—Sonoma Co. plans 18 mi. permanent highway from Sebastopol to Monte Rio via Guerneville. To exceed $700,000.

Ontario—Dept. Provincial Highways Toronto, plans paving 2½ mi. Ottawa-Prescott Highway, 35,000 sq.yd. waterbound macadam or bituminous macadam. $100,000. G. Hogarth, 110 University Ave., Toronto, ch. engr.

Ont., Toronto—Plans 20,000 sq.yd. asphalt and brick block pavement and 10,000 lin.ft. concrete curbing and guttering, on Woodbine Ave. $88,000. R. C. Harris, city engr.

Ont., Toronto—Having plans prepared widening 2,000 ft. Bloor St. from 66 to 86 ft., asphalt. $445,000. R. C. Harris, city engr.

Ont., Toronto—York Twp., 40 Jarvis St., soon takes bids bituminous concrete pavement on Killarney Rd. $4,190; grading on Durant, Ralph and Weatherall Aves. $5,130; concrete sidewalks on Kirknewton Rd., Barker, Beresford, Clovelly, Dundurn, 1st, Holmesdale, Muriel, Ralph, Thelma and Weatherall Aves. $33,095. F. B. Goldike, 40 Jarvis St., engr.

BIDS DESIRED

Massachusetts—Sept. 18, by W. F. Williams, state highway comr., Boston, 17,441 ft. highway, 18-30 ft., through North Attleboro, bituminous macadam and concrete. $250,000.

Conn., Norwalk—Sept. 22, by C. L. Barton, mayor, and Bd. of Councilmen, at Room 3 City Hall, concrete and brick pavement. D. B. Eula, engr. in charge; adv. E. N.-R. Sept. 13.

N. Y., Brooklyn—Sept. 20, by E. Riegelmann., Boro pres., Borough Hall, repaving with permanent asphalt on 6 in. concrete roadways of Calyer, Fulton, Hinsdale and 86th Sts., Park Pl., and strip 20 ft. wide in center of roadway of 73rd St. from Narrows Ave. to Colonial Rd. and from point 350 ft. east of Colonial Rd. to Ridge Blvd., repaving with granite block grade 1, strip 20 ft. wide in center of roadway of 73rd St. from Colonial Rd. to point 350 ft. east; grading, curbing and flagging West 8th St.

N. Y., St George — Sept. 17, by J. A. Lynch, pres. Richmond Boro, Borough Hall, paving with bituminous concrete on concrete roadways of Grove and Castleton Aves., and Clove Rd.; laying concrete curb and gutter, 4 ft. wide, on south side Lincoln Ave.

N. Y., St. George—Sept. 19, by J. A. Lynch, pres. Richmond Boro, Borough Hall, grading, laying concrete curb and vitr. brick gutter, laying concrete sidewalks, etc., Duer Lane.

N. Y., Warsaw—Sept. 20 by Letchworth Park Com. of American Scenic and Historic Preservation Society, Wyoming Co. National Bank, for highway in Letchworth Park. W. J. Humphrey, chn.; adv. E. N.-R. Sept. 13.

N. J., Trenton—Sept. 18, by Bd. Freeholders Mercer Co., asphalt paving 9,600 sq.yd. Parkway Ave., 2,300 lin.ft. concrete curb, 6,000 sq.ft. concrete gutter, $43,000, 5,230 sq.yd. Hamilton Ave., 1,050 lin.ft. concrete curb, etc. $25,000. W. F. Harris, co. engr.

N. C., Mt. Gilead—Sept. 20, by Bd City Comrs., 17,500 sq.yd. pavement, 10,000 ft curb and gutter, 3,000 sq.yd. concrete sidewalks, etc. $60,000. L. V. Edwards, Winston-Salem, engr.

Fla., Clearwater—Oct. 16, by B. Comrs. Pinellas Co., paving Rds. 1, 2, 3, 4, 6, 7 and 8, vitr. brick with bituminous filler, asphalt block with asphalt filler, sheet asphalt or bituminous macadam penetration method, all on compacted lime rock base with concrete curb or portland cement concrete; Rd. 5, relaid vitr. brick with bituminous filler and double bituminous surface treated lime rock shoulders. C. E. Burleson, co. engr.; adv. E. N.-R. Sept. 13. Noted July 26.

Louisiana—Sept. 25, by State Hy. Dept., Reymond Bldg., Baton Rouge, grading 15.03 mi. State Project 90, New Roads-Simmedport Torras Highway, and graveling 4.54 mi. same project, Point Coupee Parish. J. M. Fourmy, ch. engr.

Louisiana—Sept. 20, by State Hy. Comn., Reymond Bldg., Baton Rouge, 2.224 mi. State Project 378, Abbeville-Jennings Highway, Cameron Parish, also furnishing 2,015 cu.yd. washed gravel or 2,687 cu.yd. clam shells. J. M. Fourmy, ch. engr.

Streets and Roads (Continued)

Louisiana—Sept. 25, by State Hy. Dept., Reymond Bldg., Baton Rouge, surfacing 7.66 mi. State Project 384 Gibsland-Bryceland Highway, Bienville Parish, also gravel surfacing 6.111 mi. Federal Aid Project 136A. Lafayette-Broussard Highway, Lafayette Parish and 11 mi. State Project 336, Sects. A and B, Winnsboro-Delhi Highway, Franklin Parish. J. M. Fourmy, ch. engr.

La., Abbeville—Sept. 18, by Police Jury Vermillion Parish, 11 mi. roadwork. P LeBlanc, secy.

Miss., Aberdeen — Sept. 26, by Comrs. Monroe Co., constructing 19 mi. concrete highway between Aberdeen and Nettleton. $600,000. H. C. Deitzer, Jackson, engr.

Kentucky—Sept. 26, by State Hy. Dept., Frankfort, surfacing with rock asphalt on concrete 6.502 mi. Mt. Sterling-Owingsville Rd., 18 ft., Federal Aid Project 98, Montgomery Co. J. S. Boggs, state highway engr.

O., Akron—Sept. 20, by E. A. Kemmler, engr., City Bldg., paving 3.6 mi. Brown, Glendale and North Main Sts., 30-42 ft., brick. $500,000.

Indiana—Sept. 17, by J. D. Williams, dir. State Hy. Comn., Indianapolis, paving 4.842 mi. Federal Aid Projects 29 and 65, Sect. C, Gibson Co., brick, bituminous concrete or concrete.

Michigan—Sept. 19, by State Hy. Dept., Lansing, grading and surfacing 1.956 mi. State Trunk Line Rd. 12-38, Dickinson Co., 23,023 cu.yd. excav., 21,708 sq.yd. concrete, asphalt or bituminous concrete. F. F. Rogers, state comr.

Michigan—Sept. 20, by State Hy. Dept., Lansing, surfacing 4.4 mi. State Trunk Line Rd. 68-3, Ontonagon Co., 3,000 cu.yd. excav., 10,325 tons stamp sand. F. F. Rogers, state comr.

Mich., Grosse Pointe Park (Detroit P. O.) —Sept. 18, by Village Clerk, repaving 5,000 sq.yd. Bedford Rd., sheet asphalt or Willite, $25,000. C. H. Marden, 502 Whitney Office Bldg., Detroit, engr.

Ill., Sparta—Sept. 17, for 20,247 sq.yd. paving. J. F. Swain, clk.; adv. E. N.-R. Sept. 13.

Wis., Elkhorn—Sept. 21, by Walworth Co. State Road and Bridge Com. at office H. J. Peters, co. highway comr., grading and surfacing 1.4 mi. Elkhorn-Tibbetts Rd., 3,745 cu.yd. earth excav., 13,022 sq.yd. 16 ft. concrete, etc.

Ia., Oskaloosa—Sept. 17, by N. Wray, city clk., 7,121 sq.yd. paving various types, 5,492 lin.ft. curb and gutter. $30,000. D. B. Russell, city engr.

Kan., Topeka—Sept. 28, by Clerk Shawnee Co., grading and concrete surfacing 0.593 mi. Capital Highway, Federal Aid Project 106, Sect. B. A. C. Lagerwall, co. engr.

S. D., Watertown—Sept. 17, paving 13,785 sq.yd. various streets, concrete, asphaltic concrete, vitr. brick or creosoted wood blocks. $32,000 or more. B. Mather, city aud.

N. D. Minot — Sept. 21, by Ward Co., gravel surfacing 15 mi. Federal Aid Project 85. $25,000. R. W. Kennard, co. aud.

Ark., Forest City—Sept. 17, by Comrs. Rd. Dist. 12, St. Francis Co. 38,000 cu.yd. excav., 16,600 tons gravel, etc. A W. Buford, dist. engr. Noted Sept. 6.

Tex., Abilene—City Comrs. taking bids paving with concrete, brick or warrenite bitulithic, Oak, North 1st and Victoria Sts. Cost to exceed $25,000. H. H. Batjer, city engr.

Oklahoma—Sept. 19, by State Hy. Dept. Oklahoma City, grading and paving with vertical fibre brick, asphalt or concrete 267,875 sq.yd. Federal Aid Projects 102, 103 and 99, Stephens Co., 147,189 cu.yd. earth and 18,500 cu.yd. rock excav. $805,000. F. L. Simmons, state highway engr.

Okla., Sapulpa—Sept. 17, by City Clerk, 21,000 sq.yd. concrete, 7,500 lin.ft. curb and gutter and 6,200 cu.yd. excav. $83,000. F. E. Lawrence, city engr.

Nevada—Sept. 19 by State Hy. Dept., Carson City, grading, surfacing with concrete and selected material, building culverts and 1 concrete and steel overhead railroad crossing, Projects 25 and 70, between Keystone and East City Limits of Ely, White Pine 2-D-1.

Washington — Sept. 25, by State Hy. Comn., Olympia, grading and surfacing with crushed rock 8.6 mi. State Rd. 22 from Detillion Bridge north, Stevens Co.; 1.4 mi. Sunset Highway from Spokane westerly, Spokane Co. J. Allen, state highway engr.

Calif., Glendale—City Trustees receiving bids improving Colorado St., 538,990 sq.ft. grading, 519,516 sq.ft. 1½ in. National surface on 4 in. asphaltic concrete, 204,950 sq.ft. scarifying and oiling, 23,453 lin.ft. curbing, 19,473 sq.ft. gutter, etc. B. F. Dupuy, city engr.

Calif., Glendale—City Trustees receiving bids improving Sycamore Canyon Rd., 31,989 sq.ft. gutter, 17,092 lin.ft. curb, 442,637 sq.ft. 1½ in. National on 4 in. asphaltic concrete, and laying 4-12 in. water pipe (latter to be furnished by city), etc. B. F. Dupuy, city engr.

Calif., San Rafael—Sept. 20, by City Council, improving 6th and H Sts., 23,100 sq.ft. 2 in. asphaltic concrete, 1,000 cu.yd. excav., 1,753 lin.ft. concrete curb, etc. H. K. Brainerd, city engr. Noted June 21.

BIDS RECEIVED

Massachusetts—State. Hy. Comn., Boston, paving about 5,000 ft. road in Braintree, bituminous macadam, from E. C. Sargent, 149 Putman St., Quincy, $33,129.

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Aug. 27, paving (1) Amherst St. (2) Berea St. (3) Congress St. (4) Fleming St. (5) Collingswood Ave. (6) Midvale Ave. (7) Ramona Ave. repaving (8) Carolina St. (9) Urban St., widening and repaving (10) Genesee St., with (a) asphalt (b) brick, from H. P. Burgard Co., 1968 Fillmore St., (1a) $23,690 (2a) $12,125 (3a) $4,674 (4a) $3,665 (9a) $6,725; Rock Asphalt & Constr. Co., Morgan Bldg., (5a) $17,083 (6a) $9,740 (7a) $19,473 (8a) $25,575 (10a) $71,979; Erie Contg. Co., Morgan Bldg., (3b) $5,381 (4b) $3,835 (5b) $17,857 (6b) $10,856 (7b) $20,158; B. F. Spire, 24 Colonial Circle, (2b) $12,450. Noted Aug. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Sept. 10, grading, curbing, laying sidewalks, etc., on Beach 92nd St., from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $31,830. Noted Sept. 6.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Sept. 6, sheet asphalt repaving (1) West 149th St. (2) West 150th St. (3) West 153rd St. (4) East 79th St. (5) 77th St. (6) 74th St., from Interboro Asphalt Co., 2306 Creston Ave., (1) $36,889; J. E. Gaffney, 438 West 91st St., (2) $19,479 (3) $19,327; W. J. Fitzgerald, 547 West 45th St., (4) $12,159 (5) $9,239 (6) $9,983. Noted Aug. 30.

N. Y., New York—Park Bd. Municipal Bldg., Sept. 6, sheet asphalt repaving roadway of West Dr. north of 102nd St., in Central Park, from Cleveland Trinidad Paving Co., Flushing, $42,180. Noted Aug. 3.

N. J., Trenton—From J. J. Barrett Co., North Olden Ave., asphalt paving Liberty St. $40,551, asphalt repaving West Hanover St. $11,796, asphalt resurfacing Princeton Ave. $24,936; from Utility Constr. Co., 5 Spring St., New Brunswick, repaving with granite block (between car tracks) on West Hanover St., $12,312, between car tracks on Princeton Ave., $1,310. Noted Aug. 30.

North Carolina — State Hy. Dept., Raleigh, grading and concrete paving 4.95 mi. State Project 902, Buncombe Co., from Wilson Constr. Co., Rutherfordton, $195,957, 5.94 mi. State Project 611, Anson Co., from J. O. Hayworth, Chicago, $454,529, 14.35 mi. State Project 185 C, Pitt Co., from Groves Co. and Shepherd, Inc., Greenville, $404,938, 9.96 mi. State Project 180, Perquimans Co., from Smith Bros. Inc., Sumpter Bldg., Dallas, Tex., $207,911, 4.57 mi. State Project 745, Forsyth Co., 8.04 mi. State Project 641, Iredell Co., 8.22 mi. State Project 592, Rockingham Co. and 4.03 mi. State Project 507, Alamance Co., from Ziegler & Dalton Constr. Co., Junction City, Kan., $172,305, $286,700, $252,983 and $110,880 respectively; grading and topsoiling 7.96 mi. State Project 495, Warren Co., and grading 8.23 mi. State Project 421, Franklin Co., from J. A. Marrow, Clarksville, Va., $38,298 and $38,600 respectively. Noted Aug. 16.

Louisiana—State Hy. Dept., Reymond Bldg., Baton Rouge, gravel surfacing 4 mi. Project 101A and 9.2 mi. Project 101B, Jefferson Highway Sabine Parish, from Alexandria Constr. Co., Alexandria, $33,043 and $49,991 respectively; 5.5 mi. Project 101A, Jefferson Highway Natchitoches Parish, from C. W. George, Arcadia, $25,088. Noted Aug. 9.

O., Canton—Stark Co. Sept. 4, improving 1 mi. Sect. A, Whipple Rd., 20 ft., waterbound macadam, from Wise Bros., Canton, $36,780. Engrs. est. $35,000.

O., Cleveland — Paving various streets Florian and Reno Aves., East 115th and West 110th Sts., from Baldwin Bros., 4500 Euclid Ave., $44,151, $47,980, $17,013 and $54,256 respectively; East 114th St., Seller's Ave. and Clairdoan Ave., from H. G. Herring, Powers Exchange, $6,663, $4,706 and $5,795 respectively; East 117th St., from Garland Bros., 5806 Franklin Ave., $17,656; West 46th St., from Cleveland Trinidad Paving Co., The Arcade, $41,110.

O., Columbus — Franklin Co. Aug. 29, grading and paving 1.93 mi. Rose Hill Rd., 16 ft., Truro and Jefferson Twps., waterbound macadam, from Burns-Williams Co., 316 Stoneman Bldg., $37,223. Noted Aug. 23.

O., Cuyahoga Heights (Cleveland P. O.) —Curbing and paving 29,320 sq.yd. East 49th St., granite block, from Enterprise Paving & Constr. Co., 8444 Bway., Cleveland, $34,544. Noted May 3.

Ind., New Albany—Paving East Elm St., from Walter Bros., New Albany, $7.08 per lin.ft. Engrs. est. $25,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.11 mi. State Trunk Line Rd. 51-6, Ottawa Co., 7,084 cu.yd. excav., 13,173 sq.yd. concrete from Cline & Boilens, Spring Lake, $29,129. Noted Aug. 16.

Michigan — State Hy. Dept., Lansing, grading 4.152 mi. Federal Aid Project 82, Sect. A, Wayne Co., from Donaldson & Hull, Dryden, $28,866, also 1.112 mi. State Trunk Line Rd. 60-4, Berrien Co., from R. C. Atchinson, Niles, $30,717. Noted Aug. 23 and 27.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving 4 mi. Route 2, Sect. 23, Fayette Co., from W. C. Johnson, 512 South High St., Belleville, $88,197. Noted Aug. 30.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Aug. 29, concrete paving 5.72 mi. 1-19 Crawford means **(5.72 mi. Route 1, Sect. 19, Crawford Co.)** from C. W. Clark Co., Terre Haute, Ind., 5.72 mi. **1-19 Crawford**, $120,157; from L. S. Kuhn, Bloomington, 11.39 mi. **2-56, 2-62 and 2-62B, McLean, Combination B**, $254,500; from W. C. Johnson, 512 South High St., Belleville, 5.13 mi. **12-15 Marion** $99,981; from French Constr. Co., Fairfield, 6.42 mi. **13-11 Gallatin**, $153,080; from Young & Hall, Nokomis, 9.27 mi. **16-19 Montgomery**, $193,919; from Harrison Eng. and Constr. Co., Wichita, Kan., 13.01 mi. **3-78-69 Monroe means (Route 3, Federal Aid Project 78, Sect. 69, Monroe Co.)** 13.01 mi. **3-78-69 Monroe** and **3-78-70 Randolph-Monroe, Combination C**, $268,000; from Hoefkin Bros., 9.61 mi. **12-34-27 Clinton** and **12-80-28 St. Clair, Combination D**, $181,433; from Pickus Constr. Co., 2316 East 3rd St., Sioux City, Ia., 6.52 mi. **21-24-3 Lake**, $149,309; from Sutton & Moore, Canton, 5.44 mi. **31-79-22 Fulton**, $111,212; from Pronger & Black, Blue Island, 3.11 mi. Federal Aid Project 3, Sect. U-1, Cook Co., $77,589; grading **152,230 cu.yd. 1-28A White means (152,230 cu.yd. Route 1, Sect. 28-A, White Co.)**, from J. Austin, Kirkwood, Mo., **152,230 cu.yd. 1-28A, White**, $73,575; from Armstrong Eng. Co., Taylorville, 288,155 cu.yd. **1-39A and 1-40A Massac, Combination F**, $92,937; from I. D. Lain, Bloomington, 30,950 cu.yd. **2-63A McLean-Woodford**, $17,858 less 1% if personal bond is accepted; from Byers, Wilson Constr. Co., Manchester, Ia., 245,464 cu. yd. **16-21A Montgomery**, $114,907; from Cameron, Joyce & Co., Keokuk, Ia., 107,720 cu.yd. **34-1A Saline**, $46,300 and 69,130 cu. yd. **34-2A Saline**, $50,887; from A. M. Hoolan, Wainwright Bldg., St. Louis, Mo., 279,085 cu.yd. **34-5A Hardin**, $185,130. Noted Aug. 23.

Minnesota — State Hy. Dept., St. Paul, Sept. 5, 7.3 mi. State Project 3-44, Federal Aid Project 328, between St. Cloud and St. Joseph, 102,000 cu.yd. excav., from McKusick Constr. Co., Temple Court, Minneapolis, $0.60 per cu.yd., 77,600 sq.yd. concrete paving from Ostrand & Hallett, Crosby, $2,245; State Project 10-46, Federal Aid Project 313, between Benson and Kerkhoven, 259,000 cu.yd. excav., from M. W. Barnard & Son, 612 Globe Bldg., Minneapolis, $0.3025; from Nelson, Fulton & Nelson, 355 Temple Court, Minneapolis, State Project 3-39, Federal Aid Project 327, between Kellogg and Minneiska, 296,000 cu. yd. excav. $0.2875, State Project 44-22, Sect. 1, Federal Aid Project 329, between Prosper and Mabel, 80,000 cu.yd. excav., $0.32, State Project 44-22, Sect. 2, Federal Aid Project 330, between Mabel and Spring Grove, 125,-

Streets and Roads (Continued)

000 cu.yd. excav., $0.32, and State Project 44-22, Sect. 3, Federal Aid Project 331, between Spring Grove and Caledonia, 130,000 cu.yd. excav., $0.32. Noted Aug. 23.

Minn., St. Paul—Paving with sheet asphalt 3 blocks Goodrich Ave., 4 blocks Palace St., and 9 blocks West 7th St., from Fielding & Shepley, 216 University Ave., $14,223, $22,720 and $61,999 respectively; 8 blocks Front St. and 6 blocks Jackson St., from Hanlon & Okes, 338 Lumber Exch., Minneapolis, $63,448 and $34,385 respectively; alternate bid on brick paving Jackson St., from Fielding & Shepley, 216 University Ave., $50,000.

Tex., Bonham—Fannin Co. grading and rein.-con. surfacing 7.35 mi. State Highway 5, Federal Aid Project 344, 18 ft., from J. C. Feild & Co., Denison, $243,524. Engrs. est. $292,228. Noted Aug. 16.

Tex., Ft. Worth—Paving, etc., Illinois Irma, New York and Lee Sts., from West Texas Constr. Co., Cotton Exch. Bldg., 1,900 cu.yd. excav. $0.90, 4,450 ft. curb and gutter $1.05, 5,885 sq.yd. paving $3.18, etc. Noted Aug. 30.

Tex., Ft. Worth—Paving Belmont, West 10th, Terrell and Green Sts., warrenite bitulithic, from West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth $3.18. Engrs. est. $50,000.

Okla., Marlow — Grading and paving Bway. and Main Sts., 14,500 sq.yd. asphalt, 3,600 cu.yd. excav., from Western Paving Co., Tradesmens Bldg., Oklahoma City, $74,937. Noted Aug. 16.

California—State Hy. Dept., Sacramento, improving highway between Santa Clara River and 0.2 mi. easterly, Los Angeles Co., from Gibbons & Reed, 905 South Olive St., Los Angeles, 600 cu.yd. embankment at $0.80 per cu.yd., 380 yd. Class A concrete $19, 160 yd. Class A concrete, slope pavement $24; 1.1 mi. between Roseville and Lincoln, Placer Co., from Kaiser Paving Co., Amer. Bank Bldg., Oakland, 1,500 cu.yd. excav. $0.50, 2,675 cu.yd. concrete $13.81; 8.07 mi. road, San Joaquin Co., from Irey & Holden, Lodi, 13,700 tons broken stone $3. Noted Aug. 16.

Calif., Oakland—From Hutchinson Co., 1706 Bway., improving Alcatraz Ave., 127,202 sq.ft. grading at $0.065 per sq.ft., 118,237 sq.ft. bituminous concrete $0.50, 8,260 sq.ft. concrete gutter $0.275, etc.; Madison St., 75,066 sq.ft. grading $0.049, 72,455 sq.ft. asphaltic concrete $0.328, etc.; 9th Ave., 1,997 lin.ft. concrete curb $0.60, 3,993 sq.ft. concrete gutter $0,275, 50,586 sq.ft. 2 in. warrenite bitulithic on existing macadam $0.254, etc.; Jackson St., 2,963 ft. curb without steel guard $0.66, 3,987 sq.ft. concrete gutter $0.385, 104,295 sq.ft. asphaltic concrete $0.328, etc.; 6th St., 52,800 lin.ft. gutter $0.049, 2,024 lin.ft. concrete curb $0.66, 2,400 sq.ft. curb and gutter $0.785, 50,400 sq.ft. 2 in. warrenite bitulithic on 6 in. concrete $0.248, etc. Noted Aug. 16.

Calif., Santa Ana—Improving Fairview Ave., from S. Finley, Santa Ana, 112,747 sq.ft. 6 in. asphaltic concrete at $0.225 per sq.ft., 3,174 ft. curb $0.85, etc. Noted Aug. 30.

Calif., San Diego—Common Council, improving Ash St., from Griffith Co., 25 14th St., 145,042 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous at $0.169 per sq.ft., 1,508 lin.ft. concrete curb $0.65, 5,799 sq. ft. concrete sidewalk $0.22, etc., total $27,725.

CONTRACTS AWARDED

Vermont — Dept. Highways, Montpelier, will pave, etc., 1.33 mi. road, 18 ft., in Windsor, 2,778 cu.yd. rein.-con., 7,795 cu. yd. earth excav., by day labor. Bids rejected, too high. Noted Aug. 16.

Vermont—Dept. Highways, Montpelier, paving 1.85 mi. Federal Aid Project 35, in Ferrisburg, to P. C. Ricci, Rutland, $74,246. Noted Aug. 16.

Massachusetts—State Hy. Comn., Boston, paving with bituminous macadam 16,457 ft. road in Gay Head, to M. F. Roach, East Bridgewater, $84,987; 4,800 ft. road in Westboro, to J. J. Loonie, c/o State Hy. Comn., Boston, $26,693; about 6,000 ft. road in Whately, to Lane Constr. Co., Meriden, Conn., $33,570; 23,000 ft. road in Bourne, to Canedy Constr. Co., New Bedford, $69,940; about 15,000 ft. road in Hingham, Bradford, Weston and Allerton, to W. Roxbury Trap Rock Co., West Roxbury, $87,238.

Mass., Boston—Paving 15,000 sq.yd. Stuart and Elliot Sts. granite block and asphalt, to M. F. Gaddis, 5 Paulding St., Roxbury (Boston P. O.), $60,704.

Rhode Island — State Bd. Pub. Wks., Providence, paving 3.53 mi. road in Westerly and Bradford, 18 ft., bituminous concrete, to Bonfiglio Perini & Sons, Ashland, Mass., $57,596; 2.63 mi. in West Greenwich and Exeter, 18 ft., rein.-con., Contr. 2308, to J. Bristow, Narragansett Pier, $109,133. Noted Aug. 30.

Conn., Danbury—State Hy. Comn., concrete paving 14,100 ft. Sugar Hollow Rd., 20 ft., to P. Bacco, 300 State St., Stamford, $123,494. State to furnish cement.

Conn., New Britain — Paving with 8½ rein.-con. and hillside brick 1,000 ft. Broad St., to Battaglia & Leardi, New Britain. Est. cost $27,000. Noted March 22.

New York—F. S. Greene, comr. highways, Albany, constructing and reconstructing 3.42 mi. Repair Contr. 3057, Columbia and Rensselaer Counties, to C. B. Lindholm, 53 North St., Pittsfield Mass., $125,272; 1.94 mi. Repair Contr. 3058, Greene Co., to L. Mayersohn, 89 South Mann Blvd., Albany, $72,323; 2.14 mi. Highway 1675, Orange Co., to H. Hull, Highland Mills, $95,880; 0.33 mi. Repair Contr. 1382 Westchester Co., to Petrillo Bros., Inc., 434 North High St., Mt. Vernon, $20,581; 2.64 mi. Repair Contr. 3059 Rensselaer Co., and 2.94 mi. Highway 1663, Chautauqua Co., to E. J. Bailey, Brocton, $130,876 and $129,427 respectively; 2.34 mi. Highway 1658, St. Lawrence Co., to J. M. McCarthy, Potsdam, $81,353; 3.97 mi. Highway 8154, Steuben Co., to J. F. Gill Co., North Water Gap, Pa., $153,436; 7.7 mi. Highway 8155, Tioga and Tompkins Counties and 6.78 mi. Highway 1676, Tompkins Co., to Cleveland & Sons Co., Brockport, $296,454 and $238,669 respectively; 4.29 mi. Repair Contr. 3056, Tompkins Co., to C. D. Murray, 701 Westcott St., Syracuse, $150,893; 4.7 mi. Repair Contr. 1373, Genesee Co., to H. W. Patterson, Hornell, $158,374. Noted Aug. 23.

New York—F. S. Greene, comr. highways Albany, constructing and reconstructing 1 mi. Repair Contr. 3063, Dutchess Co., to Carnes & Rosoff, Brooklyn, $51,512, engrs. est. $52,581; 4.98 mi. Repair Contr. 3060, Orange Co., to R. Hopkins Co., 86 State St., Albany, $262,956, $277,626; 3.37 mi. Highway 1640, Orange and Ulster Counties, to T. Miele, 8 5th Ave., New Rochelle, $160,557, $160,703; 0.6 mi. Repair Contr. 3053, Albany Co., to D. J. Walsh, 311 North St., Pittsfield, Mass., $34,631, $35,941; 0.35 mi. Highway 5402, Jefferson Co. to J. Thompson, Carthage, $35,051, $36,693; 2.34 mi. Highway 1658, St. Lawrence Co., to H. P. Burgard Co., 1968 Fillmore St., Buffalo, $80,861, $83,147; 2.75 mi. Highway 8124, Oneida Co., to J. H. Corbett, Jr., Syracuse, $115,666, $128,736; 1.5 mi. Repair Contr. 3047, Fulton Co., to H. W. Roberts & Co., Utica, $58,474, $59,582; 7.2 mi. Highway 8143, Otsego Co., to Stento & Serafini, 84 Court St., Binghamton, $259,502, $270,322; 1.25 mi. Repair Contr. 1374, Sullivan Co., to S. K. Johnson, Norwich, $69,190, $69,214; 1.64 mi. Highway 5696, Seneca Co., to Ribstein-Holter Co., Inc., 16 State St., Rochester, $56,836, $60,440; 2.48 mi. Highway 1661, Genesee Co., to W. J. Gallagher, Medina, $86,039, $91,764; 2.99 mi. Highway 1656, Steuben Co., to J. W. Flynn, 141 Broad St., Waterford, $131,187, $158,050; 2.47 mi. Repair Contr. 3061, Cattaraugus Co., to Rochester Vulcanite Pavement Co., Exch. Pl. Bldg., Rochester, $89,900, $98,167. Noted Aug. 23.

N. Y., Lockport—Niagara Co., improving and rein.-con. paving 1.113 mi. River Rd. north of North Tonawanda, 20 ft., to W. C. Rich, Youngstown, O., $51,202. Noted Aug. 23.

N. Y., New York—J. Miller, pres. Manhattan Boro. Municipal Bldg., sheet asphalt repaving Edgecomb Ave., to Interboro Asphalt Co., 2306 Creston Ave., $62,094; West 63rd, West 68th, West 69th and West 108th Sts., to Sicilian Asphalt Paving Co., 41 Park Row, $4,359, $57,345, $19,735 and $11,061 respectively; East 107th and West 158th Sts., to C. D. Beckwith, Inc. 2875 Bway., $32,395 and $73,838 respectively; 109th St., to Brusstar Constr. Co., Harlem River and 150th St., $41,810; West 83rd St., to Cleveland Trinidad Paving Co., Flushing, $67,878; 93rd and East 97th Sts., to Uvalde Asphalt Paving Co., 1 Bway., $18,001 and $19,873 respectively; widening and sheet asphalt repaving 56th St. to W. J. Fitzgerald, 547 West 45th St., $48,924. Noted Aug. 16 and 30.

N. J., Freehold—Monmouth Co. rein.-con. paving 2 mi. Red Bank-Oceanport Rd., to Jannarone Constr. Co., 225 Passaic Ave., Belleville, $102,430 concrete paving Riverside Dr., in Red Bank, to Tuller Constr. Co., Red Bank, $115,970. Noted Aug. 16.

N. J., Newark—Essex Co., paving 21,000 ft. Mt. Pleasant Ave., to Osborne & Marsellis, Bellevue Ave., Montclair, $21,055; grading and paving 16,000 ft. Campbell Ave., Caldwell, 33 ft., 2 in. asphaltic concrete on 6 in. concrete, to Franklin Contg. Co., 20 Washington Pl., $28,219; concrete sewers in 5,000 ft. Harrison Ave., Roseland, to J. F. Boylan, Washington Ave., Belleville, $13,924. Noted Sept. 6.

N. J., North Bergen—Bd. Freeholders Hudson Co., Jersey City, concrete paving ⅞ mi. Bulls Ferry Rd., here, to Curtin Bros., 45 Madison St., Guttenberg, $78,399.

Maryland—State Rds. Comn., Baltimore, gravel surfacing 2 mi. highway in St. Marys Co., Contr. SM-25, to T. B. Lewis & Son, Hyattsville, $22,308. Noted Aug. 9.

N. C., Beaufort—Sidewalks and paving various streets, to Simmons Constr. Co., Brevard Court, Charlotte, $100,000. Noted Aug. 30.

N. C., Charlotte—Mecklenburg Co. surfacing 8 mi. Lawyers Rd., 18 ft., asphalt on concrete, to Noll Constr. Co., Charlotte, $240,000.

South Carolina—State Hy Comn., Columbia, sand clay surfacing 17 mi. Federal Aid Project 208, Colleton Co., to G. F. Bamberg, Bamberg, $93,000. Noted Aug. 30.

S. C., Camden—Sheet asphalt paving various streets to Southern Paving Constr. Co., Camden, $85,000.

Fla., Madison—Madison Co., grading and sand clay surfacing 15.9 mi. Old Troy Rd., Project 10, and 9.46 mi. road from Madison via Rocky Ford to Georgia Line, Project 8, both 30 ft right of way, surface 16 ft wide, to Slago & Harper, Madison, $31,000 and $28,000 respectively; 17.93 mi. Belleville-Monticello Rd., Project 12, 30 ft. right of way, surface 16 ft. wide, to F. C. Glass, Lee, $35,000.

Ala., Birmingham—Highland Park Land Co., grading and paving with bitulithic and chirt 10 blocks in Central Park Highlands, 30 ft., to Dunn Constr. Co., Chamber of Commerce Bldg., $25,134.

Mississippi—State Hy. Dept., Jackson, grading and paving 13.5 mi. road between Clanton and Coffee, to J. B. Parker, Crystal Springs, $169,000; grading and gravel surfacing 5.1 mi. road between Vicksburg and Rolling Fork, to Clarke & Judkin, Vicksburg, $63,530.

Miss., Grenada—Grenada Co., graveling 16 mi. West Rd. between Grenada and Tallahatchie line, to J. R. Strouddy, Okolona, $115,941.

Tenn., Rockwood — For 40,000 sq.yd Asphaltic concrete on 5 in. concrete, to West Constr. Co., Chattanooga, $75,000. Noted Aug. 23.

Ky., Ashland—Paving Blackford St., from South Ashland fire station to Ferguson Farm, to Hunt-Forbes Constr. Co., Ashland. Est. cost $75,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.06 mi. Sect. "O," 0.687 mi. Sect. "Toronto" and 0.687 mi. Sect. "Toronto" Ohio River Rd., Jefferson Co., brick, to E. A. Freshwater Constr. Co., Painesville, $150,000, $37,800 and $29,500 respectively; 2.809 mi. Sect. "M-1" and 3.388 mi. Sect. "N" Ohio River Rd., Lawrence Co., bituminous macadam, asphalt, also bridge on Sect. "N," of above Rd., to Weeks Constr. Co., Dayton, $67,801, $81,348 and $13,327 respectively; 2,504 mi. Sect. "P" and 1.815 mi. Sect. "M" Youngstown-Warren Rd., Trumbull Co., brick with concrete curb, also 1.887 mi. Sect. "A" Aurora-Warren Rd., Portage Co., bituminous macadam, asphalt, to Reedy Bros., Warren, $138,203, $57,680 and $19,790 respectively; 1.967 mi. Sect. "D" Morristown-New Athens Rd., Belmont Co., bituminous macadam, asphalt, to B. C. Stringer, Rayland, $63,317; concrete curbing 8.13 mi. Sect. "N, O, P and R-2" Akron-Youngstown Rd., Mahoning Co., to Mango & Gross, Niles, $36,772. Noted Aug. 30.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 1.106 mi. Sect. "Georgetown" **Cincinnati-West Union Rd.**, Brown Co., bituminous macadam, tar, to Burris, Hanlon, Jones & Park, Hammersville, $30,650; 1.004 mi. Sect. "H" **Roundhead Ada Rd.**, Hardin Co., rein.-con., and 2 mi. Sect. "A" **Marysville-Kenton Rd.**, Hardin Co., bituminous macadam, asphalt, to P. B. Putnam, Van Wert, $23,499 and $55,500 respectively; 0.721 mi. Sect. "Harrisville" **Bridgeport-Cadix Rd.**, and 1.258 mi. Sect. "B" **Dennison-Cadiz Rd.**, both Harrison Co., bituminous macadam, asphalt, to Seaborn Bros., Youngstown, $19,859 and $40,763 respectively; 2.052 mi. Sect. "A," and 3.416 mi. Sect. "B-1" **Hillsboro-Ripley Rd.**, Highland Co., bituminous macadam, asphalt, to A. K. Grandle, Leesburg, $51,349 and $70,856 respectively; 5.785 mi. Sects. "G and L" **Mt. Gilead-**

Streets and Roads (Continued)

Galion Rd., Morrow Co., rein.-con., to J. F. Stambaugh, Ada, $152,719; 0.535 mi. Sect. "R" **Zanesville-Dresden Rd.**, and 3.44 mi. Sect. "A" **Newark-Coshocton Rd.**, waterbound gravel, also grading Sect. "R" **Zanesville-Dresden Rd.**, and 3.44 mi. Sect. "A" **Muskingum-Coshocton Rd.**, all foregoing in Muskingum Co., to Keystone Constr. Co., Columbus, $3,314, $27,120, $1,864 and $14,440 respectively; 0.538 mi. Sect. "G" **Zanesville-New Lexington Rd.**, Perry Co., bituminous macadam, tar, to J. W. Carey, Ada, $18,490; 0.517 mi. Sect. "S-2" **Newark-New Lexington Rd.**, Perry Co., bituminous macadam, asphalt, to W. M. Gray, Columbus, $15,839; 2.602 mi. Sect. "A," 2.121 mi. Sect. "B" and 0.556 mi. Sect. "H" **Ottawa-Defiance Rd.**, Putnam Co., Kentucky rock asphalt, to O. L. Smith, Leipsic, $61,315, $50,545 and $13,042 respectively; 1.725 mi. Sects. "F and G" **Canton-Massillon Rd.**, Stark Co., brick, to G. W. Hadley, Canton, $75,721; 1.375 mi. Sect. "J-1" **Niles-Ashtabula Rd.**, Trumbull Co., rein.-con., to W. M. Keesecker, Youngstown, $41,061; 0.118 mi. Sects. "L and G" **Cincinnati-West Union Rd.**, Clermont Co., bituminous macadam, asphalt, to C. Graber, Owensville, $17,577; 4.04 mi. Sects. "G and H" **Dayton-Chillicothe Rd.**, Greene Co., bituminous macadam, asphalt, to A. C. Pickleheimer, Cincinnati, $36,119; 1.01 mi. Sect. "A-1" **Payne-Hicksville Rd.**, Paulding Co., bituminous macadam, asphalt, to Putnam & Sunday, Van Wert, $9,419; widening 2.481 mi. Sect. "J-1" and 0.189 mi. Sect. "J-2" **Mansfield-Shelby Rd.**, Richland Co., plain concrete, to A. J. Baltes, Norwalk, $34,236 and $2,951 respectively; concrete curbing 3.9 mi. Sect. "F" **Coshocton-New Comerstown Rd.**, Coshocton Co., to W. M. Brode, New Comerstown, $18,112; 1.74 mi. Sect. "G" **Lima-Sandusky Rd.**, Hancock Co., to W. H. and H. A. Souder, Fosteria, $8,244. Noted Aug. 30.

O., Akron—Dept. Pub. Service, grading curbing and cindering 1,100 cu.yd. 7th Ave., to T. Timmis, $11,409; grading, curbing and paving 1,705 sq.yd. Pine Alley, standard brick, asphalt fill, to Di Foti Constr. Co., $14,721; 4,235 sq.yd. Burton and Grand Aves., also 2,100 sq.yd. Berwin St., sheet asphalt, asphalt fill, Trinidad, to T. E. McShaffrey Constr. Co., 171 South Forge St., $30,639 and $18,352 respectively.

O., Akron—W. F. Peters, dir. Pub. Serv. grading laying sidewalks and paving 2,150 sq.yd. Rentschler Court, trinidad asphalt, to T. E. McShaffrey Constr. Co., 171 South Forge St., $1.75 per sq.yd., total cost $26,951. Engrs. est. $26,821. Noted Aug. 23.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., improving Benjamin Franklin, John Adams, Lincoln High and Patrick Henry Schools, grading, to V. Q. Galier, Rose Bldg., $27,461; masonry work, to A. MacDougell Co., Irene Ave., $24,564; landscaping, to T. Lionti, 14500 Sylvia Ave., and Independence Nurseries Co., Independence, $16,380 and $7,108 respectively. Noted Aug. 23.

O., Columbus — W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 684 ft. Lynn St., 21 ft., asphalt, to Franklin Asphalt Paving Co., 209 South High St., $8,250; 748 ft. Washington Ave., 20 ft., and 544 ft. Neff Ave., 24 ft., both asphalt, to L. L. Aller, Worthington, $6,651 and $8,810 respectively; 404 ft. Milton Ave., 24 ft., asphalt, to B. F. Patterson, 1214 Neil Ave., $4,954; 691 ft. alley north of 18th Ave., 15 ft., concrete to Yale Constr. Co., 146 Yale Ave., $1,226; 695 ft. alley north of 18th Ave., 15 ft., concrete, to R. J. Dienst, 480 South 5th St., $2,602; 633 ft. alley west of Hamlet St., 20 ft., 937 ft. alley west of Summit St., 15 ft., and 636 ft. alley west of 4th St., 15 and 16 ft., all concrete, to Columbus Contg. Co., 1471 West Broad St., $3,231, $3,984 and $3,231 respectively. Noted Aug. 23.

O., Lisbon—Columbiana Co., paving 1.33 mi. East-Palestine-New Waterford Rd., bituminous macadam, to J. D. Paxon, 119 West Main St., Salem, $25,250.

O., Ravenna — Portage Co., resurfacing road between Garrettsville and Nichols Corner, and increasing width from 14 to 16 ft., to Ready Bros., Warren, $39,163. Engrs. est. $42,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.69 mi. State Trunk Line Rd. 17-6, Sects. A and B, and 3.916 mi. Federal Aid Project 74, Sect. D, Washtenaw Co., to Dawson Bros., Ypsilanti, $34,652 and $106,919 respectively; 6.983 mi. State Trunk Line Rd. 46-20, Sanilac Co., to A. McDonell, Omer, $88,418.

SEWERS—ASHLAND, KY.

Following are lowest three bids opened by T. Boggess, city engr., Aug. 7, for constructing 25 mi. sanitary sewers, (A) S. L. Sluss Constr. Co., Iaeger, Va., (awarded contract); (B) Thoney Pietro Co., Ashland; (C) Oakwood Constr. Co., Ashland. The unit bids were as follows:

	A	B	C
21 ft. 6 in. pipe, 3 ft. average cut	$0.60	$0.75	$1.00
98,541 ft. 8 in. pipe, 6.8 ft. average cut	0.95	0.90	1.25
5,818 ft. 10 in. pipe, 7.2 ft. average cut	1.20	1.25	1.55
2,729 ft. 12 in. pipe, 5.7 ft. average cut	1.35	1.40	1.65
4,528 ft. 15 in. pipe, 6.2 ft. average cut	1.85	3.00	1.70
5,152 ft. 18 in. pipe, 7.3 ft. average cut	2.00	3.50	2.45
1,030 ft. 20 in. pipe, 9 ft. average cut	2.50	4.00	2.75
9,390 ft. 24 in. pipe, 10.5 ft. average cut	4.00	5.00	4.10
1,090 ft. 27 in. pipe, 11 ft. average cut	8.70	6.50	6.10
2,500 cu.yd. rock excavation	6.00	8.00	5.00
596 manholes, 7.1 ft. depth	75.00	75.00	70.00
11 drop manholes, 13.4 ft. depth	150.00	150.00	150.00
Clyffside cribbing (lump sum)	5,180.00	4,000.00	2,500.00
Clyffside outlet (lump sum)	2,200.00	2,500.00	750.00
4,000 lin.ft. brick paving	1.50	1.00	2.00
Long run outfall (lump sum)	21,805.00	28,000.00	24,400.00
50 cu.yd. 1:3:6 concrete	20.00	25.00	10.00
13th St. connection (lump sum)	500.00	800.00	250.00
Extended totals	$270,626	$296,467	$297,289

WATER MAIN—CLEVELAND, O.

Following are lowest three bids opened by Dept. Pub. Utilities, Div. of Water, Aug. 11, for furnishing and laying Lorain Ave. Main, (A) Joseph Kalill & Jackson Co., 621 Bangor Bldg., (awarded contract); (B) Joseph & Lewis, 877 Orange Ave.; (C) Langenhan Constr. Co., 408 Marshall Bldg. The unit bids were as follows:

	A	B	C
16,500 cu.yd. excavation and backfilling	3.00	3.50	3.60
35 M.ft. B.M. lumber and wooden sheeting, left in place	40.00	30.00	50.00
1,890 tons furnishing and laying cast iron, straight, bell and spigot pipe	81.00	84.00	85.00
55 tons furnishing and laying cast iron, bell and spigot standard fittings	166.00	190.00	185.00
2 tons furnishing and laying cast iron, bell and spigot special fittings	180.00	190.00	185.00
4 tons furnishing and laying cast iron, flanged fittings	225.00	200.00	240.00
Setting nineteen 20-in. gate valves, furnished by the city	75.00	100.00	50.00
Setting eight 16-in. gate valves, furnished by the city	40.00	80.00	40.00
Setting fifteen 12-in. gate valves, furnished by the city	18.00	20.00	25.00
Setting one 10-in. gate valve, furnished by the city	18.00	15.00	20.00
Setting three 8-in. gate valves, furnished by the city	15.00	10.00	15.00
Setting five 4-in. gate valves, furnished by the city	6.00	5.00	10.00
Setting five 4-in. hydrants, furnished by the city	10.00	30.00	40.00
75 cu.yd. brick masonry	30.00	20.00	30.00
50 cu.yd. concrete masonry	20.00	20.00	30.00
1,000 lb. steel reinforcement and miscellaneous wrought iron	0.10	0.10	0.10
500 lin.ft. furnishing and laying 12-in. vitrified pipe drains	3.00	2.00	1.00
300 lin.ft. furnishing and laying 10-in. vitrified pipe drains	3.00	1.70	1.00
300 lin.ft. furnishing and laying 8-in. vitrified pipe drains	2.00	1.50	1.00
500 lin. ft. furnishing and laying 6-in. vitrified pipe drains	2.00	1.20	0.75
500 lin.ft. furnishing and laying 4-in. vitrified pipe drains	1.50	1.10	0.50
18 furnishing and setting 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the city	48.00	20.00	50.00
700 lin. ft. furnishing and laying 2-in. galvanized iron pipe	2.00	1.00	1.00
8 tons furnishing and delivering surplus cast iron water pipe and fittings	50.00	50.00	50.00
Extended totals	$227,302	$239,420	$242,840

BOULEVARD—MAYS LANDING, N. J.

Following are lowest three bids opened by Comrs. Atlantic Co., Atlantic City, Aug. 8, for repairing Absecon Blvd. and bridges, (A) C. H. Earle, 173 Main St., Hackensack, (awarded contract); (B) Sutton & Gorson; (C) Standard Bitulithic Co. The unit bids were as follows:

	A	B	C
25,337 cu.yd. excavation	$1.00	$1.25	$1.15
51,007 cu.yd. road gravel embankment	1.75	1.50	1.98
69,228 cu.yd. extra embankment	0.75	1.18	1.42
109,062 sq.yd. concrete base	2.00	1.90	2.02
105,919 sq.yd. asphalt block surface	2.80	2.78	2.60
80,000 sq.yd. shoulder gravel	0.50	0.50	0.58
105,919 sq.yd. sand mortar cushion	0.175	0.10	0.25
1,000 sq.yd. concrete gutters	3.00	3.00	3.05
2,000 lin.ft. trench drains	1.50	1.00	1.50
250 lin.ft. 12 in. c. i. pipe cross drains	4.25	3.75	4.50
60 lin.ft. 15 in. c. i. pipe cross drains	6.00	6.00	7.00
100 lin.ft. 12 in. galvanized pipe	2.75	3.00	3.25
100 lin.ft. old c. i. pipe relaid	2.00	2.00	3.00
18 cu.yd. concrete construction	25.00	25.00	25.00
4 concrete catch basins	100.00	150.00	90.00
4 concrete curb inlets	30.00	100.00	75.00
41,140 lin.ft. reconstructed guard rail	0.60	0.70	0.90
5,882 lin.ft. wooden curbs	0.30	0.45	0.35
Bridge No. 1 complete in place (lump sum)	42,000.00	41,284.00	42,187.00
Bridge No. 2 complete in place (lump sum)	6,000.00	6,100.00	9,272.00
Bridge No. 3 complete in place (lump sum)	7,200.00	7,700.00	8,156.00
Bridge No. 4 complete in place (lump sum)	10,000.00	10,780.00	10,406.00
Bridge No. 5 complete in place (lump sum)	5,250.00	5,450.00	6,200.00
Bridge No. 6 complete in place (lump sum)	8,800.00	9,620.00	10,012.00
Bridge No. 7 complete in place (lump sum)	9,000.00	9,400.00	9,112.00
Bridge No. 8 complete in place (lump sum)	28,000.00	28,700.00	27,621.00
Bridge No. 9 complete in place (lump sum)	33,500.00	32,400.00	35,044.00
500 lin.ft. inc. or dec. pile length—Bridge No. 1	500.00	500.00	750.00
1000 lin.ft. add. anchor piles—Bridges 1–9	2,000.00	1,200.00	1,750.00
5,000 lb. additional tie rods, turnbuckles, etc	1,000.00	750.00	1,250.00
Extended totals	$928,349	$935,712	$1,007,184

Mich., Pontiac—Oakland Co., paving 7 mi. Nine Mile Rd. from Southfield Rd. to Macomb Co. line, 82,000 sq.yd. 8 in. one course concrete, to R. D. Baker Co., 1631 Elmhurst Ave., Detroit, $268,500.

Wisconsin — State Hy. Comn., Madison, grading, concrete surfacing, etc., Fennimore-Montfort Rd., Project 337, Sect. 1, Grant Co., to A. Larson & Co., Eau Claire, 7,000 sq.yd. concrete $1.78, etc., total $20,838. Noted July 12.

Ia., Clinton—Clinton Co., grading primary road southeast of Charlotte, to Littig Constr. Co., 1st Natl. Bank Bldg., Davenport, 110,768 cu.yd. excav. $0.27, etc.; Jenner Bros., Davenport, 55,259 cu.yd. excav. $0.30, 2,817 cu.yd. loose rock excav. $0.50, 5,615 cu.yd. solid rock excav. $1.75, etc.

Streets and Roads (Continued)

Ia., Des Moines—For 28,000 sq.yd. of 8 in. concrete paving on East 30th St. and Vandalia Rd., to Hawkeye Constr. Co., 223 Securities Bldg., $2.66 per sq.yd. Engrs. est. $75,000.

Ia., Muscatine—Muscatine Co., grading 12 mi. Grant highway from Stockton to Elizabeth, Ill., to S. J. Groves & Sons, 306 Globe Bldg., Minneapolis, Minn., $100,300.

Ia., Mt. Pleasant—Henry Co., grading 7.26 mi. Federal Aid Project 151, to W. W. Cummings, Ottumwa, 160,111 cu.yd. excav. $0.27 and 1.560 cu.yd. excav. $0.30; Lanstsen & Nielsen, Nevada, 5,732 ft 6 in tile $0.127, 7,870 ft. 8 in. $0.17 and 530 ft. 12 in. $0.32, etc. Noted Aug. 16.

Ia., Storm Lake—Buena Vista Co., grading Primary Project 49, to J. Clinton, Storm Lake, 5,081 cu.yd. excav. $0.37; Scothorn & Hartzell, Earley, 8,038 cu.yd. excav. $0.36; J. G. Johnson, Greenville, 15,654 cu.yd. excav. $0.32; H. Peterson, Lu Verne, 131,550 ft. 6 in. tile $0.1095 and 1,000 ft. 8 in. $0.163.

Minn., Duluth—Grading and building culverts on 5 mi. Congdon Blvd., 37 ft., to D. H. Clough, 405 Palladio Bldg., $48,561. Roadway will be paved with concrete next year.

Kan., Bennington—Grading and concrete surfacing 0.748 mi. Salina-Bennington Rd., 18-50 ft., to Rexroad Constr. Co., Minneapolis, $42,937. Noted Aug. 31.

Kan., Marysville—Paving various streets brick on concrete, to J. Stanton Constr. Co., 6th and Kiowa Sts., Leavenworth, $55,509.

Kan., Osage—See "Dams."

Kan., Smith Center — Paving various streets with brick, also storm sewers, to H. J. Taylor Constr. Co., Belleville, $47,158.

Kan., Winfield—Grading and paving with asphalt on concrete 3,200 ft. Main St., to M. R. Ammerman, 248 North Market St., Wichita, $34,480.

South Dakota—State Hy. Dept., Pierre, improving roads (F.A.P. 75 B Perkins means Federal Aid Project 75, Sect. B, Perkins Co.) grading 10.35 mi. **F.A.P. 75, B, Perkins** and 14.28 mi. **F.A.P. 141, Hughes,** to C. J. Wheelock, Pierre, $41,660 and $44,607 respectively; 6.88 mi. **F.A.P. 147, Hutchinson,** to Tobin & Maloney, Madison, $20,868; 9.27 mi. **F.A.P. 105, A and B, Brown,** to W. Geddes, Ellendals, $21,480; 11.74 mi. **F.A.P. 134, Douglas,** to D. D. Bidwell, Egan, $38,109; 14.58 mi. **F.A.P. 142, Brown,** to H. L. Hanson, Stratford, $41,911; 11.05 mi. **F.A.P. 143, Marshall,** to Jahnig & Davis, Britton, $47,187; 7.37 mi. **F.A.P. 157, Jones,** to G. W. England & Son, Murdo, $31,907; gravel surfacing 18.01 mi. **F A.P. 78, Tripp,** to Sheehan & Bjerkness, Sioux Falls, $71,018; 8.76 mi. **F.A.P. 136, Hamlin,** to R. R. Wiley, Summit, $8,998; 17.54 mi. **F.A.P. 28, Chas. Mix,** 12.35 mi. **F.A.P. 61, C. Aurora** and 9.34 mi. **F.A.P. 73, Campbell,** to Tobin & Maloney, Madison, $37,304, $29,718 and $12,202 respectively. Noted Aug. 16 and 23.

Wyo., Sheridan—To Warren Constr. Co., 289 East Salmon St., Portland, Ore., paving with Warrenite bitulithic on 3 in. bituminous, Dists. 22 and 23. Noted Aug. 23.

Mo., St. Louis—Bd. Pub. Serv., City Hall, granite curbing and paving 2,180 sq.yd. De Soto St., 1,145 sq.yd. Linton St., and 920 sq. yd. Christy St., vitr. brick, to Eyermann Constr. Co., 1216 South Grand St., $12,344, $6,397 and $5,058 respectively; 7,450 sq.yd. Whittier St. and 5,335 sq.yd. Ohio St., bitulithic on concrete, to Granite Bituminous Paving Co., Ry. Exch. Bldg., $18,938 and $28,449 respectively.

Ark., Augusta — Woodruff Co., grading and gravel surfacing 20 mi. in Rd. Dist. 15, 14 ft., to R. L. Gasten, A. O. U. W. Bldg., Little Rock, $194,000.

Ark., Blytheville — Paving, grading and gravel surfacing various streets, to J. H. Rouse, Cape Girardeau, Mo., concrete $2.23, gravel surfacing $1, excav. $0.35, etc., total $408,851. Noted May 3.

Ark. El Dorado—Improvements in Impvt. Dist. 16, 13,000 cu.yd. excav., 21,000 ft. concrete curb, 36,000 sq.yd. concrete paving, 7,000 ft. 15 in. storm sewer, 5,000 ft. 6 in. sanitary sewer, etc., to Plains Paving Co., Staley Bldg., Wichita Falls, Tex., Dist. 19, 10,670 sq.yd. concrete paving, 8,940 ft. curb, etc., Dist. 23, 17, 160 sq.yd. paving, 13,420 ft. curb, etc., to O. V. Martin Con. Co., Ft. Smith. Noted July 1[illegible]

Ark., Little Rock—Pulaski Co. paving 25 mi. Little Rock and Spring Lake Highway, 47,000 cu.yd. excav., 8,000 lb. reinforcing steel, 130,000 sq.yd. gravel, 4.5 mi. average haul, etc., to Shelby & Bateman, Little Rock.

Ark., Pine Bluff—Grading, paving and installing 3 steel bridges on Plum Bayou Rd., 985.44 cu.yd. concrete, 120,000 cu.yd. earth excav., 54,750 tons gravel, etc., to Brady, Carr & Gwin, Pine Bluff, $126,766.

Ark., Russellville — Grading and paving with rein.-con. 2,500 ft. A. and Washington Sts., to P. Huggler, Russellville, $26,000.

Tex., Breckenridge—Stephens Co., 157,000 sq.yd. Caddo Rd., Topeka mix (modified), to Womack Constr. Co., Sherman, $230,000. Noted Aug. 23.

Tex., Dallas—Dallas Co., surfacing 55,500 sq.yd. Garland-Sachse Rd., [illegible] in. bituminous, to Hill, Wilson & Watson, North Texas Bldg., $0.24 sq.yd.

Tex., Dallas—See "Sewers."

Tex., Dallas—Taylor & Irwin, Southwestern Life Bldg., grading, macadam surfacing, concrete, curb, gutter and side walks, Irwindell addition, Cockrell Hill Sect., to A. F. Moberly and M. C. Wilhite, 5830 Richmond St., cost to exceed $25,000.

Tex., Dallas—Widening North Lamar St. from Elm to Pacific Sts., to Standard Constr. Co., Insurance Bldg., Dallas, $300,000.

Tex., Farmersville—Paving 15,000 sq.yd. various streets, 3 in. vertical fibre brick on 4 in. concrete, to Plains Paving Co., Staley Bldg., Wichita Falls, $45,000.

Tex., Ft. Worth—Paving Cherry, West Myrtle and Green Sts., to West Texas Constr. Co., Cotton Exch. Bldg., $3.18; Lee St. to General Constr. Co., Cotton Exch. Bldg., $2.80. Total cost to exceed $50,000. Noted Aug. 2.

Tex., Graham—Paving 4 blocks Public Sq., 3 in. vitr. brick on 5 in. concrete, to Plains Paving Co., Staley Bldg., Wichita Falls, about $25,000 cost.

Tex., Paris—Concrete paving 2.58 mi. Highway 3 through Brokston, 18 ft., to J. C. Field & Co., Denison, $66,591. Noted Aug. 16.

Tex., Houston—Paving Sunset Rd. from Main to Ashby Sts., 2 in rock asphalt, to S. Shambaugh, West Bldg., $45,765.

Okla., Oklahoma City—Grading and paving 40th St. from Georgia to Classen Sts., 4,650 sq.yd. asphalt, etc., to Western Paving Co., Tradesmens Bldg., Oklahoma City, $27,113.

Okla., Oklahoma City—Widening 8 blocks Hudson St., 4,500 sq.yd. asphalt, 6,500 lin.-ft. curbing, 6,500 lin.ft. gutter, etc., to Western Paving Co., Tradesmens Bldg., $37,569.

Colorado—State Hy. Dept., Denver, concrete paving 1.329 mi. road between Rocky Ford and Swink, Federal Aid Project 247 A, Otero Co., to J. Finger & Sons, Ft. Collins, $41,369.

Nevada—State Hy. Dept., Carson City, to K. Hodgman, Winnemucca, grading and surfacing with selected material, Project 44, between Pancake Summit and Illipah, White Pine 2-B, Constr. 86, $31,445; to Strange & Vallandingham, Salt Lake City, Utah, grading, gravel surfacing and building culverts on Project 15-R, between West Elko Co. Line and Vivian, Elko 1-A-2, Contr. 87, $45,870.

Oregon—State Hy. Comn., Salem, grading and surfacing 7.19 mi. John Day Highway, Umatilla Co., to Carlson & Nyberg, Spokane, Wash., 38,000 cu.yd. common excav. $0.32, 16,000 cu.yd intermediate excav. $0.32, 3,000 cu.yd. solid rock $1, 7,300 cu.yd. broken stone surfacing top $2.20, 7,300 cu.yd. broken stone surfacing base $2.20, 700 cu.yd. broken stone maintenance $2., total $63,692.

Oregon—State Hy. Comn., Salem, furnishing material resurfacing 12.5 mi. Columbia River Highway, Wasco Co., broken stone and creek gravel, to Root & Joslin, Spokane, Wash., $27,940, work will be done by force account; materials for 15 mi. Columbia River Highway, Morrow and Umatilla Counties, to J. K. Shotwell, Hermiston, $22,780, work by force account plus 10 per cent.

California—State Hy. Dept., Sacramento, constructing concrete shoulders and asphaltic concrete paving 3.4 mi. road between San Bruno and San Mateo, San Mateo Co., to Pacific States Constr. Co., Call Bldg., San Francisco, $207,782; concrete shoulders and concrete paving 1.2 mi. between Roseville and Lincoln, Placer Co., to Kaiser Paving Co., Amer. Bank Bldg., Oakland, $37,805; waterbound macadam shoulders on 8.07 mi. road west boundary to Banta, San Joaquin Co., to Irey & Holden, Lodi, $41,100. Noted Aug. 16 and 23.

Calif., Glendale — Improving Sycamore Canyon Dr., to E. L. Flemming, 105 North Park Ave., Pomona, 2,295 lin.ft. grading at $3.80 per lin.ft., 3,726 ft. gutter $0.21, 55,830 sq.ft. 5 in. oil macadam $0.13, 2,098 ft. 8 in. c.i. water pipe $6,650, etc. Noted Aug. 30.

Calif., Los Angeles—Improving 10th St. to Griffith Co., Railway Bldg., total for grading $4,200, 81,077 sq.ft. concrete $0.22, 3,337 ft. curb $0.65, 17,262 sq.ft. walks $0.22, etc. Noted Sept. 6.

Calif., Los Angeles—Improving Topanga Canyon Ave., to Boulevard Land Co., 111 West 4th St., total for grading $53,768, 94,062 sq.ft. concrete $0.35, 14,936 lin.ft curb $0.60, 438,941 sq.ft. walks $0.60, etc. Noted Aug. 30.

Ore., Portland—Paving 12 blocks Russell St., to Municipal Paving Plant, City Hall, $38,881. Engrs. est. $39,460.

Calif., San Diego—Common Council paving 30th St., to G. R. Daley, 4430 Boundary St., $58,556. Noted Aug. 16.

Calif., San Diego—San Diego Co., to California Constr. Co., Union Bldg., paving highway from Fallbrook to San Diego-Riverside Co. line, $196,180, Nutmeg to Lime Sts., in city of Escondido, $39,100, road from Bernardo to Escondido, $61,280; to H. D. Churchill, 253 South Bway., Los Angeles, paving road from Buena to Bonsall, $255,960. Noted Aug. 9.

Calif., San Diego—Common Council improving Imperial Ave. from 32nd to 40th Sts., to G. R. Daley, 4430 Boundary St., $28,439; Imperial Ave. and 10 other streets to H. G. Fenton, 168 10th St., $60,497. Noted Aug. 9.

Calif., San Diego—Common Council, improving 12th St., extension in Balboa Park, to Griffith Co., 25 14th St., 2,140 cu.yd earth excav. at $0.20 per cu.yd., 159,142 sq. ft. 1½ in. asphaltic concrete on bituminous $0.15, total $24,299. Noted Aug. 16.

Quebec—Provincial Government, Quebec, macadamizing roads to O'Connor Bros Ltd., 20 St. Nicholas St., Montreal, 3.48 mi. in St. Stanislasde Kostka $25,402, 5.9 mi. in Godmanchaster Twp. $17,750; to Kennedy Constr. Co., Ltd., 310 Shaughnessy Bldg., Montreal, in St. Vincent de Paul $21,083, 2.37 mi. in St. Francois de Salles $12,183; to J. Trudeau & Fruessier, Valenciennes, 0.88 mi. in Belle Ulage $6,297, 0.57 mi. in Rigaud $5,021, 3.13 mi. in St. Madeline de Rigaud $23,215.

Que., Montreal—Asphalt pavements, to Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., Rose de Lima St. $14,350, Jacques Hertel St. $54,000, Rosemount Blvd., $11,920; to Sicily Asphaltum Paving Co., 60 St. Viateur St., DeLaRoche St. $28,850, DeGaspe St. $12,897; concrete sidewalks to Rondou Corlier & Co., 3506 Christophe Colomb St., Valmont St. $6,036; to J. Toralli, 186 St. Marguerite St., Harvard Ave. $5,409, Old Orchard Ave. $5,475; to Leger & Lamoreux Ltd., St. Denis Bldg., St. Gerard St., $6,933, Boyer St., $6,265, 3rd Ave., $21,507; to F. Lapan, 601 Lacordaire St., Grey Ave., $6,164, 2nd Ave. $6,965. Noted Sept. 6.

Que., St. Lambert—For 30,000 sq.yd. asphalt pavements on various streets to Quinlan, Robertson & Janin Ltd., 50 Notre Dame St. W., $3.19 per sq.yd., total $95,700.

Ont., Dunnville—For 15,000 sq.yd. concrete pavement, 8,200 lin.ft. concrete curbing and guttering on Broad St., to Britnell Contg. Co., Baxter St., Toronto, $40,527.

Ont., Port Dover—J. Sloan, town clk., 14,000 sq.yd. tarvia macadam pavement and 2,000 lin.ft. curb and gutter, to Paving & Mastic Co., Simcoe, $40,000. Noted Aug. 23.

Ont., Toronto—To Kilmer & Barber, 24 Adelaide St. W., resurfacing with asphalt De Grassi Ave. $12,532, Hogarth Ave. $7,265, paving with asphalt on concrete Davenport Rd. $26,580, Ladykirk Ave. $4,748, 7th St. $3,111, Munro St. $11,601; to Godson Contg. Co., Manning Chambers, asphalt on Runnymede Rd. $26,682; to Constructing & Paving Co., Confederation Life Bldg., asphalt on Garfield Ave. and Rose Park Crescent $23,441; to Warren Bituminous Paving Co., 54 University Ave., bituminous concrete on Springmount Ave. $12,240; to Commissioner of Wks., City Hall, asphalt on Edward St. $17,798, Heath St. E. $25,439 and Lincoln Rd. $1,756.

Industrial Works

PROPOSED WORK

Mass., Taunton—Municipal Light Dept., City Hall, having plans prepared for power plant on Court St. $225,000 to $250,000. Jackson & Moreland, 387 Washington St., Boston, engrs.

Conn., South Manchester — H. Stephens, 161 Center St., had plans prepared by R. M. Gosler, 19 Madison St., 1 story, (ultimately 3 story) 60 x 90 ft. garage and rear additions, concrete, brick and steel, plain foundation, Center St. $40,000.

Industrial Works (Continued)

N. Y., Binghamton—Cutler Ice Co., Front St., plans plant addition. I. H. Thomas, pres.

N. Y., New York—G. G. Miller, archt. and engr., 1482 Bway., preparing plans rein.-con., brick and steel garage, plain foundation, Longfellow Ave. and Home St. $150,000. Owner's name withheld.

N. Y., North Tonawanda—Ontario Paper Co., Thorold, Ont., plans mill, Little Island, here. $3,000,000. W. Curtis, genl. mgr.

N. Y., Saratoga—Baker Mfg. Co. had plans prepared 1 story, 50 x 87 ft. brick foundry, plain foundation, Ballston St. $50,000. Private plans.

Md., Baltimore—Gas & Electric Co., Constitution and Monument Sts., plans 1 story, 118 x 169 ft. repair shop, etc. $69,590.

W. Va., North Fork—Community Garage plans 2 story, 106 x 106 ft. sales and service building, steel. S. S. McNeil, pres. and mgr. L. Richards, Crumpler, archt.

N. C., Aberdeen—The Prizery & Rehandling Co., plans large plant, iron-clad. $50,000. A. H. McLeod, Aberdeen, interested.

N. C., Kinston—City plans gas plant. $100,000. W. B. Coleman, clk.

N. C., Raleigh—J. W. Evans, East Morgan St., plans 2 story, 100 x 100 ft. repair shop, brick, Blount and Morgan Sts. $50,000. Engineer not announced.

Ala., Bessemer—Harbison-Walker Refractories Co., Farmers Bldg., Pittsburgh, Pa., plans plant, here. $600,000.

O., Cleveland — H. D. Koblitz, Osborn Bldg., had plans prepared by R. M. Hulett, 1104 Prospect Ave., 1 story, 89 x 116 ft., brick and timber garage and commercial building, East 55th St. and Cedar Ave. $50,000.

O., Cleveland—I. G. Kohn, 640 Guardian Bldg., had plans prepared by Lehman & Schmitt, Electric Bldg., 1 and 2 story, 60 x 126 ft., brick and steel garage and commercial building, 2027 East 105th St. $50,000.

Ind., Muncie — Indiana State Normal School having plans prepared by Kibele & Garrard, 355 Johnson Bldg., 1 story power house, at State Normal School, here. $60,000.

Mich., Detroit—Pitman & Thieme, c/o S. E. Remey, archt., 1140 Griswold St., having plans prepared 1 story and basement, 90 x 120 ft. brick and steel garage and repair shop, plain foundation, Hamilton Blvd. $40,000.

Mich., Jackson—Michigan Seating Co. having plans prepared by H. L. Mead, Grand Rapids, 5 story and basement, 72 x 132 ft. brick, steel and stone addition to factory, plain foundation. $150,000.

Mich., Union City—Ford Garage Co. plans garage and service station. $75,000. Engle & Stanton, owners.

Ill., Chicago—Goss Printing Co. having plans prepared by R. G. Schmid & Co., 77 West Washington St., 4 story, 100 x 150 ft., concrete and brick addition, 1535 South Paulina St. $250,000.

Wis., Elkhorn—H. Wheeler plans 2 story garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Janesville — Rock County having plans prepared by E. E. Dillon, Washington Bldg., Madison, 1 story, 50 x 90 ft., rein.-con., brick and steel boiler house and coal bin. $40,000. M. L. Paulson, Evansville, chn. building com.

Wis., Madison—Chicago & Northwestern Ry. Co., c/o B. R. Kulp, engr., 201 South Blair St., having plans prepared 2 story, 50 x 100 ft. machine and repair shop, brick and rein.-con. $40,000. Private plans.

Wis., Milwaukee—Boston Store, 319 Grand Ave., plans 1 story, brick and concrete garage, plain foundation, Virginia St. $50,000. N. Stone, pres. Architect not selected.

Wis., Milwaukee—Luick Ice Cream Co., 183 Ogden Ave., had plans prepared 4 story, 120 x 120 ft., brick and concrete garage, Van Buren St. Leenhouts & Guthrie, 424 Jefferson St., archts.

Wis., Racine—Racine Investment Co., 401 Lake St., having plans prepared by E. B. Funston Co., 503 Robinson Bldg., 2 story, 82 x 120 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Minn., East Grand Forks — Minnesota Sugar Co., 811 Metropolitan Bank Bldg., Minneapolis, plans factory, here. $1,500,000. H. A. Douglas, pres. Engineer and architect not selected.

Minn., St. Paul—Western Fruit Express Co., 1505-1506 Pioneer Bldg., having plans prepared car repair shop, brick and concrete, "Hamline Site" in Midway Dist. $50,000. F. G. Luth, mechanical supt. Private terms.

Mo., Cameron—Plans election to vote on $64,550 bonds for electric light plant improvements. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs.

Mo., Columbia—See "Waterworks."

Mo., St. Louis—Electric Storage Battery Co. of Phila., Federal Reserve Bank Bldg., having preliminary plans prepared by Kleipstein & Rathmann, Chemical Bldg., 2 and 3 story, rein.-con. and brick factory, plain foundation, 30,000 sq ft. floor space, Vandeventer St. $200,000. First of group of 3 similar buildings.

Tex., Corsicana—Humble Oil & Refining Co. plans casing head gasoline plant, at Mildred Pike. $200,000. Private plans.

Tex., Dallas—A. A. Jackson, 901 South Pearl St., plans light industrial building, Elm and Lamar Sts. Cost to exceed $50,000. Architect not announced.

Tex., Dallas—Texas Farm Labor Union, c/o R. R. Claridge, Bonham, plans warehouse and cold storage plant, here. $40,000. Engineer and architect not announced.

Wash., Hillyard — Western Fruit Express Co., 1505-1506 Pioneer Bldg., St. Paul, having plans prepared car repair shop, brick and concrete, here. $50,000. F. G. Luth, mechanical supt. Private plans.

Calif., Long Beach—Long Beach Press having plans prepared by W. H. Austin, 1st Natl. Bank Bldg., 12 story, basement and sub-basement, 75 x 150 ft., newspaper plant and office, rein.-con., Bway. $1,000,000.

Calif., Los Angeles—Baldwin Motor Co., 1201 South Figueroa St., having plans prepared by W. D. Lee, Sun Drug Bldg., 4 story and basement, 75 x 200 ft. rein.-con. garage, South Figueroa St.

Calif., Los Angeles—Lloyd & Casler, Orpheum Bldg., had plans prepared by L. A. Smith, Lily-Fletcher Bldg., 3 story and basement, 50 x 150 ft., brick or concrete, warehouse and loft, Wall St.

Calif., Los Angeles—Los Angeles Motor Bus Co., Railway Bldg., had plans prepared 2 story, garage and office, rein.-con., North Virgil St. $60,000. Private plans.

Calif., Los Angeles — L. R. Lurie, 315 Montgomery St., San Francisco, had plans prepared by O'Brien Bros. Inc., 315 Montgomery St., San Francisco, 2 story and basement, rein.-con. auto stage terminal, Los Angeles and 6th Sts., here. $200,000.

Calif., Los Angeles—I. Nussbaum, 5806 South Vermont Ave., having plans prepared by W. F. Bowen, Union League Bldg., 5 story and basement, rein.-con. warehouse, Slausson and Vermont Sts. To exceed $150,000.

Calif., Oakland—Chevrolet Motor Co. of California, Foothill Blvd. and 69th Ave., making plans 1 story and basement, rein.-con. addition to auto plant. To exceed $150,000. Private plans.

Calif., Oakland—Mutual Creamery Co., 3724 East 14th St., having plans prepared by A. W. Smith, Amer. Bank Bldg., 1 story, brick, creamery, 5th and East 11th Sts. $40,000.

Ont., Chesley—W. & C. Window Regula-Cor Co. having plans prepared for plant. $100,000. R. J. Ranney, mgr.

Ont., Cochrane—Temiskaming & Northern Ontario Ry., North Bay, plans plant. $200,000. S. B. Clement, North Bay, ch. engr.

Ont., Hamilton—Canadian Westinghouse Co., Traders Bank Bldg., Toronto, having plans prepared by B. H. Prack, 50 Bay St., Toronto, and soon takes bids 1 story, 205 x 550 ft. rein.-con., brick and steed foundry, plain foundation, Aberdeen St. W. $300,000.

BIDS DESIRED

R. I., Providence—Lockwood, Green & Co., 24 Federal St., Boston, taking bids 2 story, 61 x 110 ft. roll shop and 1 story, 76 x 121 ft. press room, brick and steel, plain foundation, 171 Westminster St., for Textile Finishing Mchy. Co., 171 Westminster St. $200,000. Noted Aug. 9.

N. Y., Palmyra—Sept. 20 by J. F. Strobel, archt., E and B Bldg., Rochester, 1 story and basement, 100 x 200 ft. rein.-con., brick and steel warehouse and factory, for Garlock Packing Co., here. $200,000.

D. C., Wash.—M. Cafritz, 913 15th St., N.W., receiving bids for garage. $200,000. H. H. Warnick, 1108 16th St., N.W., archt.

S. C., Greenville — J. E. Sirrine & Co., engrs., Greenville, receiving bids 2 story and basement, 60 x 120 ft., rein.-con. plant, for Steele-Heddle Mfg. Co.

O., Cleveland—W. H. Hatch, archt., 1114 Guardian Bldg., taking bids 3 story and basement, 34 x 77 ft., brick and steel factory, 2420 Cedar Ave., for Van Gastel Cleaning Co. $40,000. Noted Aug. 9.

O., Cleveland—P. Matzinger, archt., Caxton Bldg., taking bids 1 story, 88 x 124 ft., brick and iron factory addition, for Cleveland Refrigerator Co., c/o F. Pietrowsky, pres., 6600 Sideway Ave. $40,000.

O., Toledo—Page Dairy Co. taking bids 1 story, 80 x 100 ft., rein.-con., brick and steel garage, Wade and William Sts. $50,000. Mills, Whines & Bellman, 1234 Ohio Bldg., archts. and engrs.

Mich., Dearborn—A. Kahn, archt., 1000 Marquette Bldg., Detroit, taking bids and opens same about Sept. 20, 1 story and basement, 56 x 140 ft. rein.-con., brick and steel addition to power house, plain foundation, also 300 ft. connecting tunnel, 9 ft. in diam., Oakwood Blvd., for Ford Motor Co., Highland Park (Detroit P. O.).

Ill., Chicago—L. Bromberg, 1337 Oakley Blvd., receiving bids 1 story, 100 x 250 ft. auto sales and service station, Milwaukee Ave. near Crawford St. $100,000. A. M. Ruttenberg, 64 West Randolph St., archt.

Wis., Arlington—E. A. Banks, Cambria, taking bids 2 story and basement, 60 x 90 ft., brick, rein.-con. and steel plant, plain foundation, here. $50,000. Private plans.

Wis., Beaver Dam — Roedl & Jacobs Lumber Co. taking bids 2 story, 40 x 132 ft., brick and timber warehouse, plain foundation. $40,000. Private plans.

Wis., Chippewa Falls—C. Bigler, 14 East Central St., taking bids 2 story, 30 x 100 ft., brick and concrete warehouse, plain foundation. $40,000. Private plans.

Wis., Cobb — O. F. Guderian and H. Terens, Markesan, taking bids 2 story, 60 x 95 ft., brick, rein.-con. and steel plant, plain foundation, here. $50,000. Private plans. Noted Aug. 16.

Calif., San Francisco—L. J. Devlin, archt., Pacific Bldg., receiving bids 2 story and basement, concrete laundry, Filbert St. and Van Ness Ave., for Roman Catholic Archbishop of San Francisco, 1100 Franklin St.

BIDS RECEIVED

Mich., Marquette—N. A. Nelson, archt., Ironwood, 2 story and basement, 72 x 124 ft. concrete, brick and tile garage, plain foundation, from Niewenkamp & Thompson, Ironwood. $56,560, for E. W. Cork, Marquette. Noted Aug. 23.

D. C., Wash.—Labor Co-operative Educational and Publishing Society, Inc., publication building at 30 B St. S.W., from Schneider & Spleidt Co., 1422 F St., N.W., $167,900. Noted May 31.

CONTRACTS AWARDED

Conn., West Hartford (Hartford P. O.)—Prospect Garage, Prospect Ave., 1 story, 100 x 100 ft., brick and steel garage, plain foundation, to S. C. Poriss Co., 54 Church St., Hartford. Archts. est. $40,000. Noted July 18.

N. Y., Brooklyn — Natl. Lead Co., 111 Bway., New York, 5 story, rein.-con., brick and steel laboratory, plain foundation, York St., here, to R. H. Brown Co., 356 Pearl St. Archts. est. $100,000.

Md., Baltimore—Archers Laundry, c/o J. Archer, proprietor, Howard and Mulberry Sts., 3 story, 103 x 242 ft., brick and concrete laundry, Eutaw, McCulloh and St. Marys Sts., to J. H. Miller, Inc., Eutaw and Franklin Sts., Baltimore. Archts. est. $375,000. Noted July 12.

N. C., Charlotte—Carolina Baking Co., 602 South Church St., 2 story, 100 x 128 ft. bakery, brick and terra cotta, to J. A. Jones Constr. Co., Realty Bldg., $200,000. Noted Feb. 22.

Miss., Vicksburg—Alabama & Vicksburg Ry. Co., 64 x 208 ft. corrugated steel repair shop, 21.5 ft. high, concrete foundation Cherry St., to Truscon Steel Co., Albert Extension, Youngstown, O. Est. cost $57,000.

Tenn., Lebanon—Lebanon Woolen Mills Co., 1 story, 50 x 65 ft. and 60 x 75 ft. buildings for woolen mill, brick and steel, to Tennessee Mfg. & Constr. Co., Lebanon. $50,000. Noted Aug. 16.

Ky., Auburn — Dark Tobacco Growers Coop. Assn., 150 x 196 ft. warehouse, brick and steel, to Peart & Lancaster, Auburn. Est. cost $40,000.

O., Amherst—Cleveland Stone Co., c/o C. W. Walters, pres., Union Bldg., Cleveland, 1 story, 125 x 250 ft., brick and steel factory, here, to Forest City Steel & Iron Co., 1500 West 110th St., Cleveland. Archts. est. $75,000.

O., Cleveland — Brush Garage Co., c/o Watson Co., archts., 4614 Prospect Ave., 2 story and basement, 110 x 110 ft., brick

Industrial Works (Continued)

and rein.-con. garage, Prospect Ave. near East 55th St., to Crowell & Little Constr. Co., 3751 Prospect Ave. Archts. est. $100,000. Noted Sept. 6.

O., Cleveland—Cleveland Cap Screw Co., 2921 East 79th St., 2 story, 66 x 95 ft., brick and steel factory, to L. Dantel Son, 5710 Hough Ave. Archts. est. $40,000.

O., Cleveland — Thorsell Bros., Mayfield and Sheffield Rds., 1 story, 50 x 100 ft., brick and timber garage and repair shop, to Rau Constr. Co., 682 East 140th St. Archts. est. $40,000.

O., Dayton—McCall Publishing Co., general contract 1 and 2 story, 280 x 440 ft., brick and steel plant, to Frank Hill Smith Co., Houk Rd., $350,000; 512 tons steel, to Berger Co. and Dayton Structural Steel Co., 184 Howell St., $53,000.

O., Euclid—See "Sewers."

O., Toledo—Beck Motor Sales Co., 1944-46 Spielbusch St., 60 x 85 ft. garage and salesroom, to W. F. Pioch, 333 North Erie St., $40,000.

O., Toledo — Fame Laundry Co., 2125 Ashland. St., plant addition to Watts Suhrbier Co., 1235 Miami St., $41,000.

Mich., Detroit—See "Buildings."

Mich., Detroit — Caughey-Jossman Co., 5075 Grand River Ave., 80x286 ft. garage and service building and 100x115 ft. sales room, Grand River Ave., to Everett-Winters Co., 751-754 Book Bldg., Mack International Motor Truck Co., lessee.

Mich., Detroit—H. C. Nicholson, 5843 Commonwealth Ave., 1 story and basement, 60 x 136 ft. brick and steel garage, plain foundation, Commonwealth Ave., to W. S. Pocock, 815 Hammond Bldg. Archts. est. $40,000.

Mich., Menominee — Lloyd Mfg. Co., North State St., 3 story and basement, 72 x 210 ft. rein.-con. addition to factory, plain foundation, to H. J. Selmer Co., McCartney Natl. Bank Bldg., Green Bay, Wis. Engrs. est. $75,000.

Ill., Chicago — Ronneberg & Pierce, archts., 10 South La Salle St., 3 story, 48 x 50 ft. factory, mill construction, 1114-1118 West Monroe St., to Broline-Nolan Co., 5 North La Salle St., for D. O. James Mfg. Co., 1120 West Monroe St. Archts. est. $50,000. Noted Aug. 16.

Ill., Chicago — J. Hocke, archt., 7602 Chappell Ave., 1 story, 100 x 125 ft. auto sales and service station, 3417-25 Diversey Parkway, to Johnson-Anderson Co., 7120 Evans Ave., for F. E. Jonas, 133 West Washington St. Archts. est. $45,000.

Wis., Appleton—Riverside Fibre & Paper Co., Government Canal, 1, 2 and 5 story, 67 and 89 ft. x 251 ft., rein.-con. finishing mill, plain foundation, to C. R. Meyer & Son Co., 50 State St., Oshkosh. Archts. est. $325,000.

Wis., Cuba City—Zinc Hill Mining Co. will build 1 story, 75 x 120 ft., brick and rein.-con. plant, plain foundation, by day labor. $50,000. Private plans.

Wis., Manitowoc — Grimm Aluminum Casting Co. South 21st St., 1 story, 50 x 84 ft., brick and steel foundry, plain foundation, 21st and Franklin Sts., to M. S. Dempsey, 1911 Marshall St., Manitowoc. Steel to Worden-Allen Co., Port Washington Rd., Milwaukee. Noted Aug. 9.

Wis., Manitowoc—E. W. Krug Mfg. Co., 918 South 19th St., 1 story, 80 x 90 ft., rein.-con., brick and steel machine shop, plain foundation, to J. J. Schoblaska Co., 917 South 21st St., Manitowoc. Private plans.

Wis., Milwaukee—M. Carpenter Baking Co., 102 7th St., 1 story, 40 x 106 ft. and 50 x 52 ft. additions, brick and concrete, plain foundations, to G. J. Dunn, 615 Downer Ave., and F. Wilke, 1253 36th St. Archts. est. $50,000.

Wis., Milwaukee — Milwaukee Electric Ry. & Light Co., 2nd and Sycamore Sts., 2 story, 50 x 70 ft., brick and concrete boiler house, plain foundation, Edison Ave., to P. W. Bringe Co., 940 3rd Ave. Archts. est. $70,000. Noted Aug. 9.

Wis., Sheboygan—Bemis Riddel Co., 15th and Illinois Aves., 4 story, 65 x 140 ft., rein.-con., brick and steel factory, plain foundation, to Van Doeslaar Co., 1712 North 2nd St., Sheboygan. Archts. est. $50,000.

Minn., Duluth—Security Van and Storage Co., 14 East Michigan St., 7 story and basement, 85 x 100 ft. storage warehouse, brick and steel, Michigan St. and Lake Ave. S., to Jacobson Bros., Columbia Bldg., $250,000.

Minn., St. Paul—Golden Rule Department Store, c/o S. W. Dittenhoefer, secy., 95 East 7th St., 6 story and basement, 85 x 110 x 231 ft. warehouse, rein.-con. and brick, Lafayette and Woodward Aves., general contract to F. J. Romer Constr. Co., 190 Ramsey St., $275,000.

Neb., Omaha—Fairmont Creamery, 12th and Jones Sts., 2 story and basement, 132 x 132 ft. garage and poultry house, rein.-con. and brick, general contract to E. P. Gould & Son, 32nd St., $90,000.

Tex., Corsicana — Navarro Ice Co. 1 story, 90 x 150 ft. ice plant, brick and concrete, 12th St., to Carson & Gallahar, Corsicana, cost plus percentage basis. Archts. est. $100,000. Noted Aug. 16.

Tex., Lubbock—Lubbock Cotton Compress Co., will build cotton compress, storage sheds, concrete, etc., by day labor. $75,000.

Calif., Oakland—California Wire Cloth Co., 1001 22nd Ave., 1 story, brick factory, to Macdonald & Kahn, 120 Montgomery St., San Francisco. Cost to exceed $40,000.

Calif., Oakland—J. R. Kaelin 1933 Fifth Ave., 1 story and mezzanine, laundry, garage and boiler house, brick, 23rd Ave. and Boehmer St., to H. J. Christiansen, 505 17th St., $56,125.

Calif., San Francisco — J. Pasqualetti, Humboldt Bank Bldg., 2 story and basement, rein.-con. garage, Market St. near 15th St., to American Concrete Co., 785 Market St., $40,000. Noted Sept. 6.

Calif., San Francisco—W. M. Schlaes, 2 story and basement, (ultimately 4 story) garage, rein.-con., Ellis St. near Mason St., to Cahill Bros., 110 Sutter St., $75,000.

Ont., Collingwood—Canadian Postel Lock Nut & Bolt Co., factory to D. Well, Collingwood. Engrs. est. $60,000.

Ont., Ford—Ford Motor Co. of Canada, 1 story, 144 x 200 ft. heat treating plant, concrete and steel to Wells & Gray, Ltd., Ford. Engrs. est. $500,000. Noted July 19.

Ont., Hamilton—Hamilton Hydro Comn., substation on Beach Rd. to W. H. Yates Constr. Co., 17 Main St. E., $43,100. Prices wanted on transformers and general equipment, $58,000.

Que., Montreal—J. B. Baillargeon Co., 329 Ontario St. E., will build 8 story, 109 x 155 ft. rein.-con., brick, steel and stone, Ontario St., by day labor. $200,000. A. Surveyer & Co., 511 St. Catherine St. W., engrs. Noted Sept. 6.

Buildings

PROPOSED WORK

Mass., Barnstable—High School—Town of Barnstable appropriated $150,000 for 2 story high school in Hyannis Village. J. M. Leonard, Osterville, chn. building com.

Mass., Newton—School—French Church of St. John the Evangelist, Watertown St., had plans prepared by C. R. Greco, 8 Beacon St., Boston, and takes bids in early fall for 2 story and basement, 90 x 120 ft., brick and rein.-con., plain foundation. $150,000 or more.

Conn., Winsted—Theater—A. Pasquarello having plans prepared by C. C. Palmer, archt., West Main St., New Britain, 2 story, 75 x 170 ft., rein.-con., brick and steel, plain foundation. Oak St. $150,000.

N. Y., Brooklyn—Apartment—J. Horowitz, c/o W. T. McCarthy, archt. and engr., 159 Remsen St., having plans prepared 10 story, brick, steel and stone, plain foundation, Eastern Parkway. $1,000,000.

N. Y., Brooklyn—Apartment—S. L. Malkind, archt. and engr., 16 Court St., preparing plans brick, steel and stone, plain foundation, Bath Ave. $1,000,000. Owner's name withheld.

N. Y., Jamestown—Church—First Presbyterian Church had tentative plans prepared by Cram & Ferguson, 15 Beacon St., Boston, Mass., 1 story, Prendergast St. $150,000. C. Herrick, pres.

N. Y., New York—Apartment—R. T. Lyons, archt. and engr., 342 Madison Ave., preparing plans brick, steel and stone, plain foundation, 109 West 46th St. $350,000. Owners name withheld.

N. Y., New York—Apartment—Springsteem & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, 90x 125 ft., brick, steel and stone, plain foundation, St. Nicholas Terrace. $250,000. Owners name withheld.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., 4 story, brick, steel and stone addition, Grandview Pl. and 167th St. $690,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., plans brick, steel and stone school, 1st Ave. and East 99th St. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Pa., Phila.—Apartment—I. N. Smith, Hotel Marlyn, 40th and Walnut Sts., takes bids Sept. 20, 4 story and basement, 124 x 233 ft. brick, steel and limestone, plain foundation, 40th and Walnut Sts. $300,000. E. A. Wilson, 1208 Chestnut St., archt.

D. C., Wash.—Apartment-Hotel—B. S. Simmons, archt., Dist. Natl. Bank Bldg., preparing plans apartment hotel, 112 apartments, etc., Massachusetts Ave., 13th and M Sts., N.W. $1,000,000. Owners name withheld.

D. C., Wash.—Bank and Office—Washington City Central Trust Co., Metropolitan Bank Bldg., having plans prepared by Coolidge & Shattuck, Ames Bldg., Boston, Mass., bank and office building, 15th St. and New York Ave., here, $1,500,000.

D. C., Wash.—Schools—Dist. Comrs., 509 Dist. Bldg., having plans prepared addition to Tenley School, $160,000; also new school at P St., between North Capitol and M St., N.W.

W. Va., Huntington—Store—West Virginia Hardware & Supply Co. having plans prepared by Meanor & Handloser, Robson-Prichard Bldg., 2 story, 150 x 245 ft., concrete and steel. $250,000.

N. C., Charlotte—Theatre and Office—J. H. Cutter, Commercial Bank Bldg., having revised plans prepared by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, for 3 story. Noted May 24.

Fla., Ft. Lauderdale — Hotel — Tarpon Bend Hotel Co., c/o W. S. Pratt, Miami, having plans prepared by Pfieffer & O'Reilly, archts., and C. J. O'Reilly, engr., Lemon City, 10 story, 60 x 300 ft., rein.-con., Tarpon Bend, here. $360,000.

Fla., Palm Beach—Apartment—D. P. Robinson & Co., and associates, 125 East 46th St., New York City, having plans prepared by J. E. R. Carpenter, archt., 598 Madison Ave., New York City, and E. McCullough, engr., 125 East 46th St., New York City, 6 story, 300 rooms, steel and tile, Ocean Blvd., here. $1,000,000.

Fla., Tampa—Office—Florida Realty Co. having plans prepared by M. L. Elliott, archt., Citizens Bank Bldg., and N. W. Geller, engr., 2516 Michigan Ave., 25 story office, to be known as Guarantee Title Bldg. $2,000,000.

Miss., Jackson—Orphanage—Mississippi Methodist Episcopal Orphanage having plans prepared by H. N. Austin, archt., Jackson, 3 story, brick. Cost to exceed $150,000.

La., New Orleans—Church—First Baptist Church, Delachaise and St. Charles Sts., having plans prepared by F. J. MacDonald, Hibernia Bank Bldg., 5 story, 47 x 120 ft., St. Charles and Delachaise Sts. $175,000.

Tenn., Nashville—Hotel—Marr & Holman, archts., Stahlman Bldg., preparing plans 12 story. $1,300,000. Owner's name withheld.

Ky., Ashland—Hotel—Buckingham Hotel Co., soon takes bids 9 story, 143 x 200 ft. $1,325,000. J. R. Gieske, Foster Bldg., Huntington, W. Va., archt.

Ky., Bowling Green—Hotel—T. O. Helm plans 4 story, brick, 840 State St. $165,000. Private plans.

Ky., Louisville—Community House—St. Georges Community, 26th and Oak Sts., plans community house, 26th and Oak Sts. $150,000.

Ky., Louisville—Schools—Bd Educ. plans school at Okolona and one at Camp Taylor suburbs of Louisville. $150,000. Engineer and architect not selected.

Ky., Louisville — Station and Office—Louisville Ry. Co., Traction Bldg., having plans prepared by Joseph & Joseph, Francis Bldg., 6 story, 2nd and Liberty Sts. $1,000,000.

O., Bedford—Commercial—L. Abrams Co., Engineers Bldg., Cleveland, plans 4 story, brick and steel, Columbus and Main Sts., here. $150,000. F. W. Bail, Hanna Bldg., Cleveland, archt.

O., Canton—High School—Plans election to vote on $295,000 bonds 2 story and basement 6th St. S. W. C. J. Keplinger, pres. Bd. Educ.

O., Cincinnati—Hotel—Hotel Alms Co., Alms Pl., plans 12 story, rein.-con. and brick, plain foundation. $2,000,000. H. Hake, Telephone Bldg., archt.

O., Cincinnati—Office—Amer. Druggists Fire Insurance Co., 1004 Mercantile Library Bldg., having plans prepared by J. G. Steinkamp & Bro., 1212 Mercantile Library Bldg., 10 story, 85 x 100 ft., Walnut St. and Central Parkway. $600,000.

O., Cincinnati—School—Cincinnati Conservatory of Music, Highland Ave. and Oak St., Mt. Auburn, plans alterations and 6

Buildings (Continued)

new buildings $1,250,000. W. B. Tuthill, 185 Madison Ave., New York City, archt.

O., Cleveland — University — Roman Catholic Diocese, plans to raise $3,000,000 modern university consisting of 3 buildings. J. F. Smith, Swetland Bldg., administrator.

O., Coalburg — Restaurant, etc. — New York Central R.R., c/o G. Herr, West 3rd St. and Lakeside Ave., Cleveland, had plans prepared 3 story and basement, brick, steel and concrete restaurant, bunkhouse and sewage disposal plant, here. $150,000. Private plans.

O., Lakewood (Cleveland P. O.)—Apartment—Yellowstone Realty Co., c/o M. Lavine, 333 Society for Savings Bldg., Cleveland, having plans prepared by Braverman & Havermaet, Ulmer Bldg., Cleveland, 3 story and basement, brick and steel, Clifton Blvd. near Donald Ave., here. $200,000.

O., Portsmouth—Court House—Comrs. Scioto Co. having plans prepared by Weiner & Adkins, 8th St., Cincinnati, stone. $750,000.

O., Warren—High School—Bd. Educ. plans high school. $500,000.

Mich., Detroit—Bank—Natl. Bank of Commerce, West Fort St., having plans prepared by A. Kahn, 1000 Marquette Bldg., 2 story and basement, 85 x 130 ft. rein.-con., brick and steel, plain foundation, Fort St. $150,000.

Mich., Detroit—Hotel—Varney & Varney, archts., 1422 Washington Blvd., preparing plans 8 story and basement, 85 x 150 ft. rein.-con., brick and steel, plain foundation, Alexandrine St. W. $400,000. Owner's name withheld.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson & Higginbotham, Industrial Bank Bldg., 2 story and basement, rein.-con., brick and steel, plain foundatiin, Beaumont Ave. $150,000.

Mich., Springwells—School—Bd. Educ. having plans prepared by H. J. Keough, 3440 Cass Ave., Detroit, 2 story and basement, 86 x 160 ft. brick and steel, plain foundation. $170,000.

Ill., Carbondale—Gymnasium—Southern Illinois Teachers College having preliminary plans prepared by E. Martin, state archt., Dept. Pub. Wks. and Buildings, Springfield, 1 and 2 story, 90 x 216 ft. brick, stone and rein.-con., here. $150,000.

Ill., Chicago—Apartment-Hotel—N. E. Feiwell, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., having plans prepared 8 story, 100 x 150 ft., Granville and Winthrop Sts. $1,000,000.

Ill., East St. Louis—Lodge—Knights of Columbus, 9th and Illinois Sts., having preliminary plans prepared by Barnett, Haynes & Barnett, Century Bldg., St. Louis, Mo., 3 story and basement, 140 x 190 ft., rein.-con. and brick, State St. and Washington Pl. $300,000.

Ill., Effingham—Station—Illinois Central R.R., 135 East 11th Pl., Chicago, and Pennsylvania R.R., Pennsylvania Sta., Pittsburgh, Pa., plan 2 story, brick passenger station, and 1 story baggage station, here. $150,000. F. L. Thompson, Chicago, and J. F. Leonard, Pittsburgh, engrs. of buildings and bridges.

Wis., Madison — Clubhouse and Auditorium—Knights of Columbus Bldg. Assn., c/o J. Blied, chn., 29 West Main St., plans 4 story, rein.-con., brick and steel, plain foundation. $500,000. Architect not selected.

Wis., Mineral Point—High School—Bd. Educ. having plans prepared by E. Tough, Washington Bldg., Madison, 2 story and basement, 80 x 110 ft., rein.-con., brick and steel, plain foundation. $150,000 bonds voted. A. M. Tucker, clk.

Wis., Wausau—School—School Bd. had plans prepared by Openhamer & Obel, Spencer Bldg., for grade school and addition to Central School, 2 story and basement, 53 x 160 ft. and 30 x 45 ft., brick, tile and concrete, plain foundation. $150,000. Soon takes bids on excavation and foundation. S. B. Tobey, supt.

Wis., West Bend—Business—A. C. Fuge Hardware Co. having plans prepared by J. E. Hennen, archt., 74 South Main St., Fond du Lac, 3 story and basement, 86 x 123 ft., tile, brick and steel, plain foundation. $150,000.

Minn., Minneapolis—School—Bd. Educ. plans 2 story and basement, brick and tile, Mississippi River Blvd. $150,000. Bureau of Design, Bd. Educ., archts.

Kan., Augusta—Church—First Methodist Episcopal Congregation, having plans prepared by D. Schuler, archt., 539 First Natl. Bank Bldg., Wichita, 2 story and basement, rein.-con., brick and stone.

BRIDGE—CHARLESTON, S. C.

Following are lowest three bids opened by State Highway Comn., Aug. 14, for constructing Ashley River Bridge, Charleston Co., Federal Aid Project No. 215, (A) Sandford & Brooks, Baltimore, Md.; (B) Koss Construction Co., Des Moines, Ia.; (C) Hardaway Contg. Co., Columbus, Ga. The unit bids were as follows:

APPROACHES—INCLUDING ALL SUBSTRUCTURE

	A	B	C
4,860 lin.ft. 18 in. square concrete piles	$3.10	$3.60	$3.70
7,200 lin.ft. treated timber piles (fenders)	0.95	2.00	1.00
47,120 lin.ft. 16 in. square concrete piles	2.89	3.25	3.50
7,554 cu.yd. class AA concrete (superstructure)	32.22	29.00	26.50
390 cu.yd. class D concrete	10.00	15.00	20.00
1,560,800 lb. deformed steel bars	0.528	0.05	0.05
3,000 ton rip rap	4.25	6.00	5.00
3,148 lin.ft. concrete railing	4.20	4.00	3.00
5,900 sq.yd. roadway pavement (sheet asphalt)	1.60	2.50	2.00
10,000 cu.yd. sand fill	0.85	2.00	0.40
63,700 lb. structural steel	0.105	0.10	0.08
4,000 cu.yd. extra excavation	1.00	1.50	1.00
16 M. ft. B.M. treated lumber (fenders)	145.00	140.00	100.00
5,440 cu.yd. class AA concrete (seals), price to include excavation	28.62	40.00	37.00
5,368 cu.yd. class AA concrete (shafts)	32.06	21.00	36.00
21,320 lb. iron castings	0.12	0.10	0.12

BASCULE SUPERSTRUCTURE

	A	B	C
756,780 lb. structural steel	$0.098	$0.11	$0.085
60,500 lb. trunnions, bearings, castings, etc	0.33	0.31	0.30
84,300 lb. operating and lock machinery	0.33	0.35	0.30
480 cu.yd. counterweight concrete	28.00	22.00	30.00
14,000 lb. deformed steel bars	0.08	0.05	0.05
572 sq.yd. wood block pavement (treated)	3.75	2.50	5.00
11,500 lb. metal fastenings for floor	0.08	0.10	0.06
304 lin.ft. metal railing	3.75	5.00	3.00
Electrical operating power equipment complete (lump sum)	27,700.00	25,000.00	22,000.00
4 operators houses	2,000.00	1,000.00	2,500.00
Maintenance of traffic (lump sum)	4,500.00	6,000.00	5,000.00
Removal of old bridge (lump sum)	11,500.00	10,000.00	5,000.00
Extended totals	$1,067,466	$1,092,270	$1,093,487

Kan., Augusta — Theater — D. Bisagnio having preliminary plans prepared 2 story, 60 x 125 ft., rein.-con., brick and stone, plain foundation. $150,000. Architect not announced.

Kan., Topeka—Library—City making preliminary plans 2 story and basement, rein.-con. and brick, plain foundation. Plans election to vote on $250,000 bonds.

Neb., Falls City—Courthouse—W. F. Gernandt, archt., 1408 North 8th St., Omaha, takes bids about Oct. 1, 2 story and basement, 66 x 100 ft., rein.-con., brick, steel and terra cotta, for Richardson Co. $200,000. Noted Mar. 22.

Mo., Springfield—Science Hall—State Teachers College, having preliminary plans prepared 2 story and basement, brick, concrete and local stone. $200,000. Engineer and architect not selected.

Mo., St. Louis—Temple—Lambskin Lodge A. F. & A. M., c/o F. G. Fussel, secy., 3305 Utah St., having preliminary plans prepared by Nolte & Nauman, Fullerton Bldg., 2 story, 75 x 100 ft., brick, concrete and stone, Parkview Ave. $125,000-$150,000.

Ark., Blythville—Church—First Methodist Episcopal Congregation plans 2 story and basement, brick and stone. $200,000. A. N. Butts and M. W. Pyles, head com. in charge. Architect not selected.

Ark., Forrest City—Hotel—Hockenbury System Inc., 200 North 3rd St., Harrisburg, Pa., making preliminary plans 6-8 story, rein.-con. and brick, plain foundation, here, $150,000. Private plans.

Tex., Commerce—Auditorium—East Texas State Teachers' College having plans prepared by C. H. Page & Bros., archts. and engrs., Austin Natl. Bank Bldg., Austin, concrete and stone. $275,000-$300,000.

Tex., Eagle Lake—High School—Giesecke & Harris, archts. and engrs., 406 Littlefield Bldg., Austin, takes bids about Sept. 20, 2 story, 125 x 140 ft., rein.-con., brick and stone, concrete pile. $150,000.

Tex., Ft. Worth—Dormitory—Masonic Orphans' Home making plans and takes bids latter part September, 3 story, brick and concrete, plain foundation. $150,000. W. G. Clarkson, First Natl. Bank Bldg., archts. and engrs.

Tex., Ft. Worth — Sanitarium — C. H. Harris, 5th and Rosedale Sts., making plans brick and concrete, 5th and Rosedale Sts. $250,000. Engineer and architect not announced.

Tex., Ft. Worth—Y. M. C. A., 914 Monroe St., will revise plans and readvertise for 4 story and basement, brick, stone and concrete, 5th and Lamar Sts. $300,000. W. G. Clarkson, 1st Natl. Bank, archt. and engr. Noted Aug. 2.

Tex., Houston—Apartment—J. M. Glover, archt. and engr., Binz Bldg., making plans 6 story and basement, brick and concrete. $300,000. Owner's name withheld.

Tex., Houston—Hospital—City Com. and Harris Co. will have revised plans prepared and readvertise 4 story and basement, hospital. $200,000. W. A. Dowdy, city archt. Noted Apr. 5.

Tex., Houston — Synagogue — Congregation Beth-Is-Rael having plans prepared by Finger & Cato, engrs. and archts., Woolworth Bldg., 2 and 3 story, brick, stone and concrete. $275,000.

Tex., Kingsville—Administration — State Teachers' College having plans prepared by Endress & Cato, Bankers' Mortgage Bldg., Houston, brick, stone and concrete, here. $300,000. M. O. Flowers, Lockhart, chn. Bd. Regents.

Tex., Marshall—Schools—Election Oct. 9 to vote on $250,000 bonds for schools. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Apr. 19.

Tex., San Antonio—Apartment—S. L. Jeffers, 1 Bushnell Pl., having plans prepared by H. T. Phelps, archt., 516 Hicks Bldg., and M. L. Diver, engr., Calcasieu Bldg., 7 story, 80 x 110 ft., rein.-con., brick and stone, Ave. E and 3rd St. $160,000.

Tex., San Antonio—Medical Arts—Subscription & Loan Co. had plans prepared and expect to call for bids by Sept. 25, 12 story, rein.-con., steel, terra cotta and cut stone, concrete pile foundation, Houston St. and Ave. E. $900,000. W. E. Simpson Co., N. B. of C. Bldg., engrs. R. H. Cameron, 1115 City N. B. Bldg., archt. Noted May 10.

Okla., Oklahoma City — Apartment — Laird-Arms Co., c/o Bailey & Alden, archts., Colcord Bldg., having plans prepared 12 story, 162 x 200 ft., brick, 10th St. $1,400,000.

Okla., Oklahoma City—Office and Bank—Doctors & Dentists Building Co., having plans prepared by Layton, Smith & Forsythe, 701 Southwest Natl. Bank Bldg., 13 story, 1st St. and Bway. $1,000,000.

Okla., Ponca City—Lodge—R. P. Baughman, having plans prepared by Smith & Senter, Okmulgee, 5 story, 50 x 140 ft., concrete and steel, East Walnut St. $200,000.

Calif., Burlingame—Church—First Methodist Church of Burlingame, c/o P. V. and R. S. Tuttle, archts., 557 12th St., Oakland, having preliminary plans prepared 2 story and basement, hollow tile and brick, here. $150,000.

Calif., Glendale—Theatre, Store and Office—W. McMillan, et al., c/o A. G. Lindley & C. Selkirk, archts., American Bank Bldg., having plans prepared rein.-con., Brand Blvd. To exceed $150,000.

Calif., Long Beach—Bank and Office—Security Trust & Savings Bank having plans prepared by Curlett & Beelman, Union Bank Bldg., Los Angeles, 12 story and basement, 75 x 150 ft., brick and steel, 1st and Pine Sts. $1,000,000.

Calif., Long Beach—Store and Hotel—H. Earp, et al., 718 East 6th St., having plans prepared by E. H. Gates, 1261 American Ave., 3 story and basement, 75 x 185 ft., brick or concrete, American Ave.

Calif., Long Beach—Theatre and Apartment—F. Markwell, Markwell Bldg., having plans prepared by H. H. Lochridge, Markwell Bldg., 3 story, 111 x 150 ft., Belmont Pier.

Buildings (Continued)

Calif., Los Angeles—Apartment—G. E. Barrett, 931 Bartlett Bldg., plans 125 x 175 ft., about 12 story, 6th and Rampart Sts.

Calif., Los Angeles—Apartment—H. A. Page, 406 Acacia Ave., plans 4 or 5 story, East Palmer Ave. To exceed $150,000.

Calif., Los Angeles—Church—St. Basils Catholic Church, Catalina and 7th Sts., plans church, fireproof, Harvard Blvd. and Wilshire St. To exceed $350,000. E. R. Kirk, pastor.

Calif., Los Angeles — Market — Youngs Market Co. Inc., 638 South Bway., had plans prepared by C. F. Plummer, Story Bldg., 150 x 150 ft., 7th St. and Union Ave. To exceed $250,000.

Calif., Los Angeles—Orphanage—Jewish Orphans Home, 137 West Adams St., having plans prepared by S. T. Norton and F. H. Wallis, 716 South Spring St., group of 1 and 2 story building, West Moreland Ave. $150,000.

Calif., Los Angeles—Store—First Natl. Bank of Los Angeles, Bell St., having plans prepared by A. C. Martin, Higgins Bldg., 5 story and basement, brick and steel, Bway. $350,000.

Calif., Oakland—Post Office—Oakland Building & Mortgage Co., 308 12th St., having plans prepared by Schuler & McDonald, 308 12th St., two 1 story, rein.-con. and steel, Willow St. between 15th and 16th Sts. $200,000. United States Government, lessee.

Calif., Paso Robles—High School—Paso Robles Union High School Dist. having plans prepared by O. L. Clark, Chapman Bldg., Los Angeles, group of concrete buildings. $200,000.

Calif., Sacramento—Store and Loft—W. S. and H. H. Hart, 2199 3rd Ave., having plans prepared by Woollett & Lamb, Mull Bldg., 3 story and basement, brick and terra cotta, K St. $200,000.

Calif., San Bernardino—Schools—City plans to vote on $200,000 to $300,000 bonds for improvements to schools.

Ont., Hamilton—School—Bd. Educ. having plans prepared by Witton & Walsh, 7 Hughson St., 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, Murray St. $150,000.

Ont., Toronto — Exchange — Standard Stock & Mining Exch., 56 King St. W., having plans prepared by N. A. Armstrong, Ltd., 11 King St. E., 7 story and basement, rein.-con., brick, steel and stone, plain foundation, 76 King St. W.

Ont., Toronto — Sunday School — High Park Methodist Church, High Park Ave., had plans prepared by Belfry & Wilson, 2 Bloor St., E., 3 story and basement, 70 x 140 ft. rein.-con., brick and steel, plain foundation, High Park Ave. $150,000.

BIDS DESIRED

N. Y., New York—High School—Sept. 25, by Bd. Educ., 500 Park Ave., James Morris High School, brick, steel and stone, plain foundation, Boynton Ave. and 172nd St. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—Hotel—See "Contracts Awarded."

N. Y., Richmond Hill—School—Sept. 18, by Bd. Educ., 500 Park Ave., New York, P. S. 108, brick, steel and stone, plain foundation, Suwanee Ave. and 18th St., here. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt and engr.

N. J., Ocean City—Bank and Office—Sept. 14, by P. A. Davis & Dunlap, archts., 1713 Sansom St., Phila., superstructure for 7 story, 62 x 96 ft., rein.-con., brick and limestone, 8th and Asbury Sts., here, for Ocean City Bank. Will take bids Sept. 1 for concrete piling. Total cost $190,000.

Ky., Louisville—Infirmary and Home—Oct. 9, by D. X. Murphy & Bro., archts., Louisville Trust Bldg., 5 story, 50 x 388 ft. infirmary with 42 x 115 ft. wings, also 4 story, 42 x 215 ft. home, brick, rein.-con. and stone, Eastern Parkway, for St. Josephs Infirmary, 5th St. $1,000,000. Noted Aug. 30.

Ky., Louisville—Temple—Oct. 20, by Nevin, Wischmeyer & Morgan, archts., Starks Bldg., constructing temple, 4th and Breckenridge Sts., for Scottish Rite Assn., 438 6th St. $750,000. Noted June 14.

D. C., Wash.—Apartment—C. D. Sagar, 924 14th St., receiving bids for apartment building. $180,000. G. T. Santmyer, 1415 K St., N.W., archt.

O., Cleveland—Apartment—C. A. Hanson, c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids 3 story and basement, brick and steel, Fairchild Dr. $300,000.

Mich., Dearborn—Library—Sept 25, by Bd. Directors Public Library, 2 story and basement, rein.-con., brick, steel and stone, plain foundation, Michigan Ave. $150,000.

Ill., Chicago—Apartment—A. Fader, 22 West Monroe St., receiving bids 3 story and basement, 65 x 198 ft., 7411-29 Jeffery Ave. $175,000. L. M. Mitchell, 138 North La Salle St., archt.

Ill., Chicago—Apartment, Store, etc.—Loewenberg & Loewenberg, archts., 111 West Monroe St., receiving bids 3 story apartment, store and office building, Elston St. and North Kenneth Ave., for Ecker Bros., c/o architects. $300,000.

Ill., Evanston—Store and Office—Loewenberg & Loewenberg, archts., 111 West Monroe St., Chicago, receiving bids 2 story, 116 x 120 ft. store and office, 518 Davis St., here. $175,000. Owner's name withheld.

Wis., Milwaukee—Apartment and Sales—M. Tullgren & Sons, archts., 425 East Water St., taking bids 3 story and basement, 60 x 150 ft., brick and concrete, plain foundation, Wells St., for Statzer Granite Co., 723 Grand Ave. $150,000.

Wis., Sheboygan Falls—School—Oct. 2, by Sheboygan Co. Normal School Bd., (Sheboygan) 2 story, 88 x 132 ft., rein.-con., brick and steel, here. $150,000. O. F. Huhn, chn. E. A. Shubenrauch, North 8th St., Sheboygan, archt.

Ia., Iowa City—Hospital—Sept. 19, by State Bd. Educ., Des Moines, 3 story and basement, rein.-con., brick, tile and stone, at State University, here, $175,000. W. H. Gemmill, secy. Proudfoot, Bird and Rawson, 810 Hubbell Bldg., Des Moines, archts.

Minn., Duluth—Apartment Hotel—Sept. 29, by Carlsted Bros. at office of Whitney Wall Co., 301 Torrey Bldg., 4 story and basement, 100 x 140 ft., brick and steel, 3rd St. and 1st Ave. W. $250,000. Holstead & Sullivan, 407 Torrey Bldg., archts. and engrs.

Minn., Duluth—Hotel—Sept. 28, by C. Schroeder & Sons, 86 Michigan St., Milwaukee, Wis., 8 story and basement, 165 x 180 ft., brick and steel, Linden Rd. and 12th Ave. E., here. $1,000,000. M. Tullgren & Sons Co., 425 East Water St., Milwaukee, Wis., archts. and engrs.

Minn., Duluth—Lodge—Sept. 22, by E. Bourgard, chn. com. Knights of Columbus, 224 West 1st St., 3 story and basement, 100 x 140 ft., brick and stone, 2nd St. and 2nd Ave. W. $150,000. Halstead & Sullivan, 410 Palladio Bldg., archts. and engrs.

Minn., Virginia—School—Oct. 10, by F. Johnson, secy. Bd. Educ., 2 story and basement, 60 x 115 ft., rein.-con. and brick, South Side. $150,000. C. W. Kelly, 505 Lonsdale Bldg., Duluth, archt. and engr.

N. D., Mandan—High School—Sept. 24, by Bd. Educ., 2 story and basement, 65 x 136 ft. rein.-con., brick, stone and tile. $150,000. G. R. Horton, Jamestown, archt.

Tex., Arlington—Lodge—Sept. 22, by R. H. Cameron, archt. and engr., 115 C. N. B. Bldg., San Antonio, 3 story, 90 x 140 ft., rein.-con., brick, stone and terra cotta, concrete pile foundation, for Eastern Star Lodge of Texas. $160,000.

Tex., San Antonio—Y. M. C. A. taking bids 8 story, 90 x 120 ft., rein.-con., brick, steel and stone, Pecan and Navarro Sts. $400,000. Adams & Adams, 516 Gibbs Bldg., archts. W. E. Simpson Co., N. B. of C. Bldg., engrs. Noted June 14.

Calif., Los Angeles—Schools—Sept. 19, by Bd. Educ., constructing Sawtelle School, 2 story, 4th St. and Nebraska Ave. and school on 59th St. and 2nd Ave. $84,000 each.

BIDS RECEIVED

N. Y., Wende (Millgrove P. O.)—Home and Infirmary—Supervs. Erie Co., City Hall, Buffalo, general contract 2 and 3 story, brick, stone and steel, here, from H. Shenk, Erie, Pa., $1,079,000; plumbing and heating from Chippewa Plumbing Co., Inc., 329 Delaware Ave., $92,500 and $71,500 respectively. Noted July 26.

N. J., Brunswick—Recitation—Dept. Agencies and Institutions, Trenton, general contract, 2 story, 78 x 150 ft., rein.-con., brick and steel, at State Agricultural College for Women, here, from C. J. Smith Constr. Co., 204 Academy St., Trenton, $199,936. Noted Aug. 30.

Ky., Louisville—Temple—Kosairs Assn., 7 story temple, incl. 155 rooms, auditorium and proscenium arch stage, Bway., general contract from C. A. Koerner & Co., 318 East Burnett St. Archts. est. $1,350,000. Noted Aug. 2.

Mich., Detroit—Art—Arts Comn., East Jefferson Ave., 2 story and basement, 148 x 195 ft., 95 x 290 ft. and 112 x 148 ft., Woodward Ave., from Bryant & Detwiler Co., 2336 Dime Bank Bldg., $461,334 using Georgia marble, $448,364 using Vermont marble.

Minn., Willmar — Cottages — State Bd. Control, Capitol, St. Paul, Sept. 4 (change of date), two 2 story and basement, 55 x 120 ft., rein.-con., brick and tile, at State Hospital for Insane, here, from J. H. Olson, Willmar, $123,930. Noted Sept. 6.

CONTRACTS AWARDED

R. I., Providence—Church—Our Lady of Mt. Carmel Church, Spruce St., brick church, to Famiglietti Bros., Bway., cost plus basis. Engrs. est. $175,000.

N. Y., Brooklyn—Apartment—M. Jonas, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, will build brick, steel and stone, plain foundation, 4th Ave. and 72nd St., here, by day labor. $300,000.

N. Y., Brooklyn—Clubhouse—Independent Order of Odd Fellows, c/o Schneider & Werthers, archts. and engrs., Grand Central Terminal, New York, brick and steel clubhouse, 301-09 Schermerhorn St., here, to I. H. Meyer Corp., 590 Sterling Pl. Archts. est. $500,000.

N. Y., Buffalo—Home—Erie Co. general contract for home and infirmary, to H. Schenk, Erie, Pa., $1,079,000; heating and ventilating apparatus, to Chippewa Plumbing Co., 329 Delaware Ave., $71,500.

N. Y., Far Rockaway—Exchange—New York Telephone Co., 15 Dey St., New York, 3 story, 80 x 200 x 225 ft., rein.-con. and brick, here, to Turner Constr. Co., 244 Madison Ave., New York.

N. Y., New York—Apartment—Lanberth Building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, Haven Ave., by day labor. $250,000.

N. Y., New York—Apartment—H. and S. Sonn & Co., c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 14 story, 75 x 150 ft., brick, steel and stone, plain foundation, 112 East 39th St., by day labor.

N. Y., New York—Apartment—W. H. B. Realty Co., c/o G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., will build brick, steel and stone, plain foundation, Ft Washington Ave., by day labor. $250,000.

N. Y., New York—Hotel—Lapidus Eng Corp., 200 West 72nd St., will build 14 story, 100 x 150 ft., brick, steel and stone, plain foundation, 206 West 70th St. $2,000,000. Owner will do general work and let subcontracts. G. F. Pelham, 200 West 72nd St., archt. and engr.

Ky., Louisville—Administration—Standard Sanitary & Mfg. Co., 4th and Shipp Sts., 4 story, 85 x 150 ft., rein.-con., Shipp St., to L. W. Hancock, Louisville Trust Bldg. Archts. est. $150,000. Noted Sept. 6.

Ky., Murray — School — State Normal School Comn., Frankfort, 3 story, 60 x 120 ft., to Forbes Mfg. Co., Hopkinsville. Archts. est. $150,000. Noted Aug. 16.

O., Cleveland—Apartment—J. Nozik, 996 Linn Dr., 3 story and basement, 87 x 132 ft., brick and timber, 1924 East 75th St., to B. Zuckerman, 11605 Kinsman Rd. Archts. est. $200,000. Noted Sept. 6.

O., Cleveland—Commercial—Watson Co., archts., 4614 Prospect Ave., 4 story (ultimately 8 story) 66 x 189 ft., brick, steel and concrete, Euclid Ave. near East 18th St., to Schirmer O'Hara Co., 2031 Euclid Ave., for Rogers Building, c/o J. J. Callow, 1900 Euclid Ave. Archts. est. $250,000. Noted Aug. 16.

Ind., South Bend—Store and Office—Tuttle Building Co., Michigan and Colfax Sts., 10 story, 100 x 160 ft., concrete and terra cotta, to Bedford Stone Constr. Co., 810 Fletcher Saving and Trust Bldg., Indianapolis, $600,000.

Mich., Detroit—Hotel—Bollin-McKinney Hotel Co., c/o L. Kamper, Kamper Bldg., 8 story and basement, 86 x 116 ft. rein.-con., brick, steel and stone, plain foundation, John R St., to Lynch Constr. Co., 1200 Washington Blvd. Archts. est. $800,000. Noted May 3.

Ill., Chicago—Apartment—R. W. Matteson, 541 Diversey Parkway, 4 story, 70 x 220 ft., 2744-50 Hampden Court, to A. Lindstrom, 77 West Washington St. Archts. est. $275,000.

Ill., Chicago—Church—St. Clara's Catholic Parish, 1 story, 80 x 150 ft., 64th St and Woodlawn Ave., to A. and E. Anderson Co., 19 South La Salle St. Archts. est. $225,000.

Ill., Quincy—Theatre and Store—Pinkelman & Cory, Gem Theatre, 4 story, 88 x 187 ft., rein.-con. and brick, Washington St., to J. G. Guhmna, Title Guaranty Bldg., St. Louis, Mo. Archts. est. $250,000.

Wis., Milwaukee—School—School Bd., 3 story and basement, brick, tile and concrete, plain foundation, Franklin St., concrete and excavation, to Jahns & Knuth, 1331 28th St., $116,500; masonry, to H. Schmitt & Sons, 430 Farwell Ave., $58,859; structural steel, to C. Hennecke Co., 1353 North Pierce St., $14,065; steam heating to Wenzel & Henoch Co., 498 27th St., $39,887; carpentry, to H. Jahns, 1915 Chestnut St., $43,300. Archts. est. $400,000.

Buildings (Continued)

Wis., Neillsville—Church—St. Marys Congregation, 2 story, 60 x 110 ft., brick and tile, plain foundation, to Immel Constr. Co., 200 North Main St., Fond du Lac. Architects est. $150,000.

Minn., Minneapolis—High School—Bd. Educ., City Hall, 3 story and basement, rein.-con., brick and tile, 13th Ave. S. E. and 6th St., general contract to Fleisher Constr. Co., 1000 Builders Exchange, $479,000.

Ia., Waterloo—Store—P. Davis Dry Goods Co., 510 Commercial St., general contract 5 story and basement, rein.-con., brick, tile and Bedford stone, Commercial St., to J. G. Miller & Son, 813 Black Hawk Bldg., $248,900. Noted Feb. 1.

Kan., Salina—Office—Kansas Weslyan University, 3 story and basement, brick and stone, to Eberhardt Constr. Co., Salina. Archts. est. $200,000.

Mo., St. Louis—Store and Office—Owner, c/o Saum & Saum, archts., 713 Chestnut St., 2 story and basement, 100 x 100 ft., rein.-con., brick and stone, plain foundation, Grand Blvd. and Gravois Ave., to S. Charleville, 3402 Osage St. Archts. est. $150,000.

Ark., Leavenworth—High School—Bd. Educ., 2 story and basement, 120 x 170 ft., rein.-con., brick and stone, plain foundation, to G. Walker, Leavenworth, $171,000.

Tex., Ft. Worth—Business and Club—A. F. & A. M. Lodge, No. 1114, 5th and Magnolia Sts., 2 story and basement, 75 x 120 ft., concrete, steel, brick and stone, plain foundation, general contrac to K. H. Muse, 201 West Railroad St., $127,000.

Tex., Houston—Y. W. C. A., 3 story and basement, concrete, brick and stone, Dallas and Crawford Sts., to Southwestern Constr. Co., West Bldg., $158,410. Noted Aug. 9.

Okla., Norman—Church—R. M. McFarlan Memorial Congregation, 3 story and basement, 72 x 107 ft., rein.-con., brick, steel and stone, general contract to Holmboe Co., 422 West 2nd St., Dallas, Tex. Archts. est. $500,000.

Okla., Tulsa—Office—Southwestern Bell Telephone Co., 4th and Boston Sts., 2 story and basement, 75 x 140 ft., rein.-con., brick, stone and terra cotta, general contract to Shallenberger Constr. Co., 614 East 4th St., $155,000.

Colo., Denver—Schools—School Dist., 85 x 225 ft. school and 50 x 75 ft. gymnasium, 1 and 3 story, Lincoln St. and 44th Ave., general contract to Windsor & Lund, Interstate Trust Bldg., $139,300.

Wash., Seattle — Hotel — Community Hotel Corp., constructing Hotel Olympic, to Grant, Smith & Co., Henry Bldg., $4,000,000. Noted June 7.

Calif., Los Angeles—Apartment—F. A. Powell, et al., 10 story, fireproof, Hollywood Blvd., to Richardson Building & Eng. Co., 141 North Larchmont Blvd. Est. cost to exceed $750,000.

Calif., Los Angeles—Church—Plaza Community Center Church, c/o Train & Williams, archts., Western Mutual Life Bldg., 50 x 75 ft., rein.-con. church and 4 story, 50 x 75 ft. institutional building, Los Angeles St., to Simpson & Co., 701 Antonio St.

Calif., Los Angeles—High School—Bd. Educ., constructing Fairfax High School, 2 story, 320 x 450 ft., rein.-con. and brick, Fairfax Ave., to North Pacific Constr. Co., Detwiler Bldg., $446,140. Noted Aug. 30.

Calif., San Francisco—Apartment—C. Johnson, 36 Steiner St., will build 6 story and basement, rein.-con., Jones and Sacramento Sts., by day labor. $200,000. Noted Aug. 30.

Calif., San Francisco—Club—Elks Club, 540 Powell St., steel for 13 story and basement, Post St. near Powell St., to Golden Gate Iron Wks., 1541 Howard St., $142,000. Noted Aug. 30.

Calif., San Francisco—School—City and San Francisco Co., constructing Portola Primary school, general contract to Anderson & Ringrose, 320 Market St., $141,650. Noted Aug. 23.

Calif., San Francisco—Theatre, Store and Office—Mandarin Theatre Co., 723 Grant Ave., 3 story, brick and concrete, Grant Ave near Jackson St., to Monson Bros., 251 Kearny St., $150,000. Noted Sept. 6.

Que., Montreal — School — Protestant School Bd. Comrs., Belmont St., 3 story, 23 x 80 ft. school and 2 story, 22 x 25 ft. house for caretaker, both rein.-con., brick and steel, DeBlencourt St., Cote St. Paul, to J. Shearer Co., Shearer St., $225,000. Noted Sept. 6.

Ont., Toronto—Lunch and Office—Bowles Ltd., 11 King St. E., general contract 3 story and basement, 30 x 100 ft. rein.-con. and steel, King St., to W. T. Joy, 86 High Park Ave., total est. $150,000.

Federal Government Work

PROPOSED WORK

D. C., Wash.—Additions—Dept. of Interior, having plans prepared addition to assembly hall, drill and athletic field, at Howard University.

D. C., Wash.—Bungalows—Dept. of Interior having plans prepared 7 bungalows at St. Elizabeth's Hospital.

Ky., Louisville—Derricks—U. S. Engineer, P. O. Box 72, plans to purchase 6 steel derricks 65 ft. boom, bull wheel diam. 16 ft., complete, exclusive of wire rope, f.o.b. Louisville

Ky., Owensboro—Piling—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 500 piles 25 ft. long and 1,000 piles 30 ft. long, not less than 12 in. butt and 8 in. tip, f.o.b. Owensboro, for Dam 46, Ohio River.

Ind., Leavenworth—Steel and Iron Work —U. S. Engineer, P. O. Box 72, Louisville, Ky., takes bids about Sept. 18, for steel and iron work for power house at Lock and Dam 44, Ohio River, here.

H. T. Pearl Harbor—Extension—Spec. 4761—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids extension for battery storage and overhaul, here. Noted July 26.

H. T., Pearl Harbor — Fire Protection System — Spec. 4827 — Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids for fire protection system at Naval Operating Base, here. Noted July 26.

BIDS DESIRED

Mass., Boston—Changes—Sept. 26 by Treas. Dept., Wash., D. C., changes in lighting and ventilating systems in U. S. Post Office and Sub Treasury Bldg., here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Sept. 13.

N. Y., Buffalo—Generator Unit, etc.—Sept. 24, by Superintendent of Lighthouses, oil engine-driven electric generator unit and electric motor-driven air compressor unit, etc.; adv. E. N.-R., Sept. 13.

D. C., Wash.—Recreation Building, etc.—Oct. 4, at U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., recreation building, alteration and addition to garage for attendants quarters at U. S. Veterans Hospital 32, Mt. Alto, here. F. T. Hines, dir.; adv. E. N.-R. Sept. 13.

South Dakota—Road—Sept. 17, by J. W. Johnson, dist. engr., Bureau Pub. Rds., Custom House, Denver, Colo., grading 3.766 mi. Custer Pringle National Forest Rd. Project, Custer Co., 25,576 cu.yd. earth and 8,454 cu.yd. rock excav., 60 cu.yd. Class B concrete, etc.

BIDS RECEIVED

Mass., Chelsea—Reroofing—Spec. 4886—Bureau Yards & Docks, Navy Dept., Wash- D. C., reroofing buildings at Naval Hospital, here, (1) work complete, from Howard Bros., 412 Dorchester St., Boston, (1) $34,890 (120 days) (2) $1,244 (3) $10,727 (4) $11,971 (5) add $8,000 (6) deduct $3,700. Noted Aug. 30.

Conn., Norwalk—Dredging—U. S. Engineer, Providence, R. I., dredging 500,000 cu. yd. in harbor, here, from J. S. Packard Dredging Co., Turks Head Bldg., Providence, R. I., $0.179. Noted July 26.

N. Y., Waterloo—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, from A. M. Lundberg, St. Louis, Mo., $56,500. Noted Aug. 23.

Pa., Phila. — Repairs — U. S. Shipping Board, c/o J. M. Hoffman, Head, Div. of Docks and Wharves, Navy Bldg., Wash., D. C., repairs to substructure and deck on portions of Piers 97, 98 and 99, Greenwich Point, Delaware River, here, from E. Fay & Son, 2 South Mole St., (1) $154,800 (180 days and 240 days) (2) $154,800 (3) $1.35 (4) $250 (5) $250 (6) $250 (7) $35 (8) $60 (9) $60 (10) $75 (11) $75 (12) $75 (13) $175 (14) $1.50. Noted Aug. 9.

Pa., Pittsburgh—Lock—U. S. Engineer, constructing new Lock 7, Monongahela River, from Dravo Contg. Co., Diamond Bldg., $763,591. Noted Aug. 2.

D. C., Wash.—Repairing Roof—Spec. 4902—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairing roof of Naval Hospital, here, from Iron Clad Roofing Co., 1121 5th St., N.W., $3,221 (time as specified). Noted Aug. 30.

Mo., Excelsior Springs—Hospital—Spec. 4887—Bureau Yards & Docks, Navy Dept., Wash., D. C., addition to administration, subsistence and ward buildings, at U. S. Veterans Hospital, here, (1) work complete, from Jones Eng. & Constr. Co., 315 Courtney Bldg., Omaha, Neb., (1) $97,500 (2) $83,675 (3) $2,090 (3a) $1,661 (4) add $100 (6) add $1,936 (6a) add $1,324 (7) add $1,300. Noted Aug. 30.

California—Road—U. S. Bureau Pub Rds., 881 Mills Bldg., San Francisco, surfacing 3 mi. Adin Summit National Forest Highway, from Collins & Seppi, Chico, $64,400.

Calif., Petaluma—Dredging—U. S. Engineer, Custom House, San Francisco, dredging 327,000 cu.yd. in Petaluma Creek, here, from San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, Sect. A. $0.096; from Amer. Dredging Co., 255 California St., San Francisco, Sect. B, $0.32. Noted Aug. 9.

CONTRACTS AWARDED

Ky., Louisville—Clam Shell Buckets—U. S. Engineer, P. O. Box 72, 3 clam shell buckets, 1½ cu.yd. capacity, f.o.b. Owensboro, one to Blaw Knox Co., Freeport Rd., Pittsburgh, Pa.; 2 to G. H. Williams Co., Erie, Pa. Noted Aug. 23.

Calif., San Pedro—Removal—Spec. 4903 —Bureau Yards & Docks, Navy Dept., Wash., D. C., removal and relocation of Russell Hall, here, to Palmer Bros., 228 C St., San Diego, $40,781. Noted Aug. 30.

H. T., Pearl Harbor — Roof — Bureau Yards & Docks, Navy Dept., Wash., D. C., roof for Bldg. 67 at Naval Operating Base, here, to Peerless Roofing and Paint Co., Honolulu, $12,647.

Miscellaneous

PROPOSED WORK

Subway—Buffalo, N. Y.—See "Railways."

Telephone Lines—West Virginia—Chesapeake & Potomac Telephone Co., 418 10th St., Huntington, plans telephone lines connecting Logan and Williamson, Huntington and Barboursville, Beckley and Mount Hope, Beckley and Mullins, Hinton and Glade, Hinton and Rainelle, 6,000 cross arms and 1,400 mi. copper wire. $190,000. S. S. Flannagan, dist. mgr.

Seawall and Yacht Basin—Sarasota, Fla. —H. F. Atkinson and associates, Miami, plan seawall and yacht basin, here. $100,000. Engineer not announced.

Levee—Clarksdale, Miss.—Bd. Levee Comrs. Yazoo—Mississippi Delta, rejected bids enlarging 5 mi. Ward Lake levee containing 10,000 cu. yd. topping, 75,000 cu.yd. barquetta enlargement. W. L. Head, Clarkesdale, engr. Noted Aug. 2.

Wharf and Warehouse—New Orleans, La. —Bd. Port Comrs., New Court Bldg., having plans prepared substructure and superstructure concrete wharf, pile foundation, also 1 story steel and metal warehouse, 400 to 1,600 ft. long, 150 ft. wide. $500,000.

Docks, Dikes, Levee Work, etc.—Shreveport, La.—Having preliminary plans and surveys made for rein.-con. docks, dikes and levee work. $400,000 to $450,000. C. E. Smith, Ry. Exch. Bldg., St. Louis, Mo., engr.

Transmission Line—Kentucky—Kentucky Utilities Co., M. E. Taylor Bldg., Louisville, plans 33,000 volt, 3 wire transmission line crossing Green River near Rockport and extending to Central City, supported on 2 steel towers, 100 ft. high, crossing river. $45,000. G. T. Bogard, ch. engr.

Elimination of Grade Crossings—Akron, O.—City, Baltimore & Ohio R.R., Central Union Depot, Cincinnati, Pennsylvania R.R., Broad St. Sta., Phila., and Erie R.R., 50 Church St., New York City, plan elimination of all grade crossings, rails depressed from south Akron to Union Sta., bridges on East Exchange and East Center Sts., here. $2,000,000.

Fill—Lisbon, O.—See "Streets and Roads."

Power Line — Wisconsin — Wisconsin Power, Light & Heat Co., Gay Bldg., Madison, plans 13 mi. extension from Ripon to Dalton. $25,000. Engineer not selected.

Oil Spreader—Madison, Wis.—City plans to purchase oil spreader. P. Walsh, street supt. Engineer not selected.

Golf Links, etc.—Monroe, Wis.—Monroe Country Club plans 9 hole golf course, clubhouse and swimming pool. $50,000. Engineer and architect not selected.

Steam Heating Plant—Sheboygan, Wis. —Sheboygan Mattress Co., 1214 Michigan Ave., having plans prepared for steam heating plant for store and factory building. $25,000. E. A. Juul, Security Bldg., engr.

Gas Mains, etc.—Corpus Christi, Tex.—City plans to lay gas mains in principal streets. Taking bids on pipe. $200,000. L. B. Griffith, Corpus Christi, engr.

Grain Elevator—Houston, Tex.—Harris Co. Navigation Dist. having plans prepared concrete grain elevator, 900 ft. frontage on ship channel, headhouse, tank storage and grain carriers, initial capacity 1,000,000 bu., ultimately 6,000,000 bu. $1,000,000. E. A. Tucker, Court House, engr. J. Metcalf & Co., 108 South La Salle St., Chicago, consult. engr. Noted Aug. 23.

Miscellaneous (Continued)

Tractor and Sub-Soiler—Oakdale, Calif.—Oakdale Irrigation Dist. plans to purchase tractor and sub-soiler, $7,500.

Harbor Improvements—Santa Ana, Calif.—Orange Co. plans to vote on bonds (to exceed $850,000) for improvements to Newport Harbor.

Grade Separation—Kitchener, Ont.—City retained James, Proctor & Redfern, engrs., 36 Toronto St., Toronto, to prepare report for grade separation, here, incl. 7 subways or overhead crossings over Canadian Natl. Ry. tracks. $1,000,000.

BIDS DESIRED

Asphaltic Cement, etc.—Brooklyn, N. Y.—Sept. 20, by E. Riegelmann, boro pres., Borough Hall, furnishing and delivering 300,000 gal. asphaltic cement, 6,000 cu.yd. binder stone, 50,000 asphalt paving blocks, 50,000 grade 1 granite paving blocks, 50,000 wood paving blocks and 60,400 ft. lumber.

Concrete Mixers, etc.—Buffalo, N. Y.—W. J. Kinekenberg, 279 Niagara St., in market for two 21 ft. concrete mixers and two 2 drum hoisting engines.

Asphaltic Cement, etc.—New York, N. Y.—Sept. 19, by H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., furnishing 400 ton asphaltic cement, 1,000 cu.yd. 1½ in. and 750 cu.yd. ¾ in. broken trap rock stone, and 1,000 cu.yd. broken trap rock stone screenings.

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Sept. 19, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating and temperature regulating apparatus in Annex to P. S. 72, East 104th and East 105th Sts. and Lexington Ave., here.

Transmission Line—Bethel, N. C.—Sept. 20, by Bd. Aldermen, 13½ mi. transmission line from here to Greenville. E. E. Williams, Greenville, engr. J. W. Rook, mayor.

Dock and Yacht Basin—Sanford, Fla.—Sept. 17, by City Comn., dock and yacht basin. $67,000. Former bids rejected. F. T. Williams, Sanford, engr. Noted Aug. 16.

Gravel—Baton Rouge, La.—Oct. 1, by State Hy. Comn., Reymond Bldg. furnishing 23,860 cu.yd. washed gravel for surfacing Project 329, Sects. A and B, Abbeville-Jennings Highway, Vermillion Parish. J. M. Fourmy, ch. engr.

Hoisting Machinery, etc.—Columbus, O.—D. W. McGrath & Sons, 255 East Broad St., taking bids hoisting machinery and probably steam shovel.

Concrete Piling—Milwaukee, Wis.—See "Bridges."

Grade Separation — Milwaukee, Wis. — Sept. 18, by Dept. Pub. Wks., grade separation on Forest Home Ave., et. al. $60,000. J. Schwada, city engr. Noted June 21.

Portland Cement—St. Paul, Minn.—Sept. 18, by H. W. Austin, city purch. agt., 3,513 bbl. portland cement for paving alleys and section of Wheelock Parkway.

Culvert—Marked Tree, Ark.—Sept. 21, by Bd. Directors D. D. 7, Poinsett Co., rein.-con. culvert, Pride & Fairley, Blytheville, dist. engrs. Elliott & Harman Eng. Co., Memphis, Tenn., consult. engrs.; adv. E. N.-R. Sept. 13.

Levee—Ennis, Tex.—Sept. 17, by E. C. Rapheal, chn. Ellis Co. Levee Impvt. Dist. 2, approximately 1 mi. levee, 18 ft. high, clearing, sodding, draining, etc. C. T. Forest, Waxahachie, engr.

Track Materials—California—See "Railways."

Wharf—Harrop, B. C.—Oct. 2, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., floating wharf, here.

BIDS RECEIVED

Enclosures—New York, N. Y.—Transit Comn., 49 Lafayette St., Sept. 10, enclosures for 3rd addition to shops at Lenox Ave. and 148th St. Yard, from McHarg Barton Co., 1328 Bway., $960,000. Noted Aug. 30.

Levee System—Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, for State Farm Levee system, 122,566 cu.yd. excav., etc., from Sternberg Dredging Co., Arcade Bldg., St. Louis, Mo., $23,034. Noted Aug. 30.

Road Material — Woodland, Calif. — Yolo Co., 3,230 tons material for Jefferson Blvd., from A. Teichert & Son, Ochsner Bldg., Sacramento, willite $11.62 per ton, asphaltic concrete $10.94.

CONTRACTS AWARDED

Park Improvement—East Boston (Boston P. O.), Mass.—J. B. Shea, chn. Park Dept., City Hall, Boston, grading, draining and erecting concrete bleachers at World War Memorial Park, here, to J. C. Coleman & Sons, 1620 Tremont St., Boston, $32,310.

Heating and Ventilating Apparatus—Buffalo, N. Y.—See "Buildings."

Foundations—Cleveland, O.—Babies' & Children's Hospital, c/o D. Baldwin, Natl. City Bldg., foundations for two 7 story and basement, 60 x 151 ft., brick and rein.-con. hospitals, 11020 Euclid Ave., to Craig-Curtis Co., 4614 Prospect Ave. Total cost $3,300,000.

Coaling Station — Conneaut, O. — New York, Chicago & St. Louis R.R., Columbia Bldg., Cleveland, rein.-con. coaling station, 500 tons capacity, here, to Roberts & Schaeffer, 400 North Michigan Ave., Chicago.

Gas Main Extensions, etc.—Ft. Worth, Tex.—Ft. Worth Gas Co., 213 West 11th St., will build extensions to gas mains in South Ft. Worth, Riverside and Arlington Heights, $75,000; rebuild old lines $50,000, by day labor. O. K. Shannon, 213 West 11th St., engr.

Traffic Signal System—Ft. Worth, Tex.—Traffic signal system, bells, lights, cable, etc., to Grouse-Hines Co., Detroit, Mich., $24,249. Engrs. est. $25,000. Noted July 5.

Wharves—Houston, Tex.—Harris Co. Navigation Dist., 1,720 ft. wharves, in 3 sections, rein.-con. structure, to Doullut & Williams, Carter Bldg., concrete piling $669,000, timber piling $664,000. Noted Aug. 16.

Underground Conduits—Montreal, Que.—Underground conduits in district bounded by St. Lawrence, Craig, Bleury and Lagauchetiere Sts., to Atlas Constr. Co., Ltd., Belmont St., $78,125. Noted Sept. 6.

Electric Light and Power System—Paris, Ont.—Town will extend electric light and power lines by day labor. $25,00. C. B. Barker, clk.

Breakwater—Toronto, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, 4,440 lin. ft. concrete breakwater on pile foundation, here, to R. Miller & Sons, Lumsden Bldg., $1,030,000. Noted Feb. 8.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Sept. 19.

Lock Construction

Chicago, Ill.

Sealed proposals for the construction of Lockport Lock, also Miter gates and valves of Lockport and Marseilles Locks will be received at the office of the Director of the Department of Public Works and Buildings, Division of Waterways, Room 121, State House, Springfield, Illinois, until Nine o'clock Central Standard Time of the 19th day of September, 1923, and then publicly opened and read.

The contract, if let, will be awarded to the lowest responsible bidder. The work includes about 170,000 cu.yds. rock excavation, 97,000 cu.yds. of concrete and 2,100 tons of steel work.

Copies of the plans, specifications, proposal blank, etc., may be obtained at the office of the Department, Room 1404, 25 East Jackson Boulevard, Chicago, Illinois upon receipt of a check for Five Dollars made payable to the Division of Waterways, which sum will not be returned.

The State reserves the right to reject any or all proposals.

Bids: Sept. 15.

Water System

WATER DISTRICT NO. 1

Grand Island, N. Y.

Sealed bids will be received until September 15 for the furnishing of all materials and necessary work connected with the construction of a water system. Further information will be furnished upon request. Plans may be seen at the office of the commission, Grand Island, N. Y.

The commissioners reserve the right to reject any or all bids.

EUGENE BUCHER,
Chairman, Board of Commissioners.
HEBER ASHLEY, Engineer.

OFFICIAL PROPOSALS

Bids: Oct. 2.

Construction of Mermentau River Bridge

Baton Rouge, La.

Sealed proposals will be received by the Louisiana Highway Commission, at its offices in the Raymond Building, Baton Rouge, La., up to 12 o'clock noon Tuesday, Oct. 2, 1923, at which time and place they will be publicly opened, for the construction of a highway bridge and approaches over the Mermentau River at Mermentau, La., to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

Construction consists of one channel span of 320 ft., riveted through trusses, 20 ft. clear roadway, 20 ft. above high water elevation and resting on concrete piers 54 ft. high on pile foundations. The plans for the approaching bridging have been prepared for two alternate types:

Alternate "A" consists of a series of 39-foot reinforced concrete deck girder spans resting on reinforced concrete open bents and pile foundations, 7 spans on the east end and 10 spans on west end of bridge.

Alternate "B" consists of a series of 19-foot creosoted timber spans on creosoted piling, 16 spans on east end and 27 spans on west end of bridge.

The earth embankment approaches and gravel surfacing, on the same, containing approximately 30,000 cu.yd. earth borrow and 1,200 cu.yd. gravel surfacing, are to be constructed at the same time the bridge is being constructed but under separate contract.

The entire project will be divided into two sections: Section "A" will be earthwork approaches and Section "B" will be bridge proper. Bids may be submitted on either or both sections and on either or both types of approach bridging.

OFFICIAL PROPOSALS

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract, may, on application, be obtained at the office of the Lousiana Highway Commission, Reymond Building, Baton Rouge, La. Plans and specifications may be inspected at the office of the commission in Baton Rouge or will be furnished upon receipt of $5 as payment therefor not to be refunded.

J. M. FOURMY,
State Highway Enginer.
W. T. PETERMAN,
Chairman, Louisiana
Highway Commission.

Bids: Oct. 11.

Filters and Pumping Machinery

Danville, Va.

Sealed proposals will be received by the City of Danville, Virginia, until 4 o'clock p.m., Thursday, October 11th, for furnishing the labor and materials for certain Water Works Improvements.

The work will be under two contracts, namely:

1. For the construction of a coagulating basin, aerator, and reconstruction of filters.
2. For high and low lift centrifugal pumping machinery and electric wiring.

Plans, specifications, form of proposal, bond and contract may be seen at the office of the Engineering Department of the City of Danville, and at the office of Hazen & Whipple, Civil Engineers, 25 West 43rd Street, New York City. Bidders will be furnished with a copy of specifications and blueprints of drawings, upon application and deposit of $10, which will be refunded upon the return of the same in good condition.

The right is reserved to reject any or all bids.

FRANK TALBOTT,
Superintendent Water Department.

CONSTRUCTION NEWS

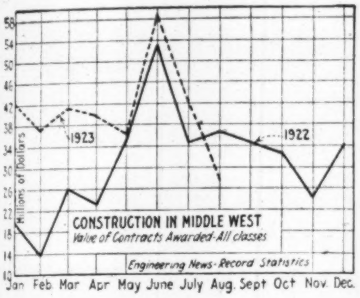
Engineering News-Record, September 20, 1923

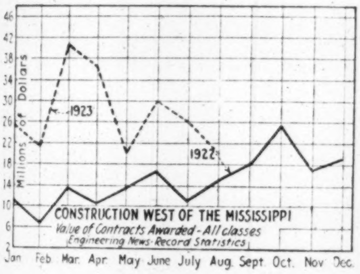
The Construction Barometer

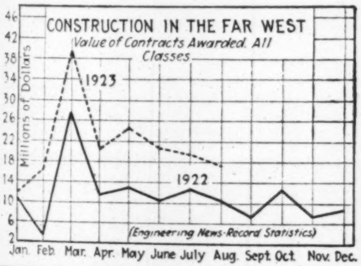
Value of August Contracts Lower Than July—Permits Gain—Prices Stable

Although August contracts fell off from 5 to 33 per cent from the month preceding, in the various sections of the country, the far western group and the states immediately west of the Mississippi showed substantial gains over August, 1922. New England and the Far West, however, were the only sections conforming to the 1922 trend, as shown by the accompanying charts.

Building permits in 252 comparable cities, according to S. W. Straus & Co., totaled $256,722,581 for August; $241,393,803 for July and $233,882,261 for August, 1922. This represents an increase of 10 per cent over August, 1922, and 6 per cent over July of the current year. The gain over July is particularly significant in view of the fact that during the last ten years August permits have shown a decrease from July each year excepting three.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Aug. 30	$12,669,000	$15,178,000	$27,847,000
Sept. 6	28,163,000	17,205,000	45,368,000
Sept. 13	27,304,000	21,935,000	49,239,000
3 Weeks	$68,136,000	$54,318,000	$122,454,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

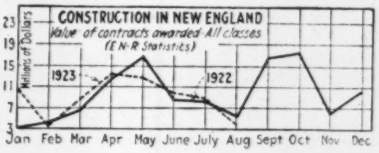
Week Ended	No.	Public Work	No.	Private Work
Aug. 30	8	$1,496,000	25	$12,342,000
Sept. 6	16	9,563,000	16	8,019,000
Sept. 13	9	2,955,000	30	13,607,000
3 Weeks	33	$14,014,000	71	$33,968,000

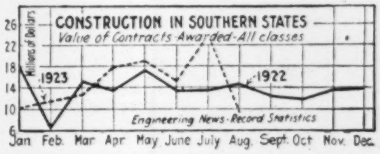
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

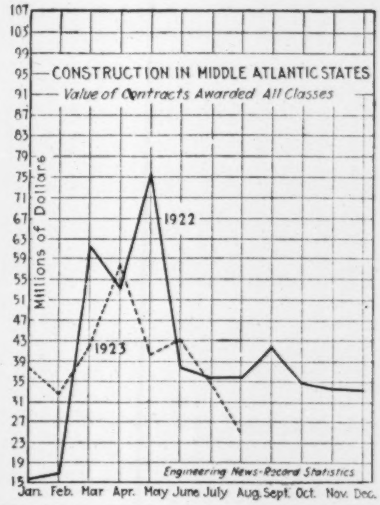
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Aug. 30	28	189	66	33	51
Sept. 6	35	197	83	32	42
Sept. 13	36	178	67	39	36

PRICES OF BASIC MATERIALS FIRM

	Quoted on Sept. 20, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	61.00	63.00	Sept. 6
Fir, San Fran., M.ft.	38.00	41.00	Aug. 30
Common labor	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 21	Trenton, N. J.	Sept. 13
Sept. 24	Lansing, Mich.	Sept. 20
Sept. 25	Ft. Worth, Tex.	Sept. 6
Sept. 25	Marengo, Ill. Adv. Sept. 20.	Sept. 20
Sept. 26	Providence, R. I.	Aug. 30
Sept. 27	Bordentown, N. J.	Sept. 6
Sept. 27	Galveston, Tex.	Sept. 13
Sept. 28	Cyril, Okla.	Sept. 20
Sept. 28	Hawthorne, N. J.	Sept. 20
Sept. 29	Ft. Worth, Tex.	Sept. 20
Oct. 2	Wallington, N. J.	Sept. 13
Oct. 3	Portland, Ore.	Sept. 13
Oct. 4	Stoneham (Boston P. O.), Mass.	Sept. 13
Oct. 5	New Bedford, Mass. Adv. Sept. 20.	Sept. 20
Oct. 8	Milbank, S. D.	Sept. 20
Oct. 9	Toronto, Ont.	Sept. 13
Oct. 9	Kings Mountain, N. C. Adv. Sept. 13 and 20.	Sept. 20
Oct. 10	Lewiston, Idaho Adv. Sept. 20.	Sept. 20
Oct. 11	Danville, Va. Adv. Sept. 13 and 20.	Sept. 13
Oct. 23	Buffalo, N. Y. Adv. Sept. 20.	Sept. 20

SEWERS

Bids Close		See Eng. News-Record
Sept. 24	St. Petersburg, Fla.	Aug. 23
Sept. 24	Leesburg, Fla.	Sept. 6
Sept. 25	Montclair, N. J. Adv. Sept. 13 and 20.	Sept. 20
Sept. 25	Ft. Worth, Tex.	Sept. 20
Sept. 25	Miami, Fla.	Sept. 20
Sept. 26	Berwick, Pa. Adv. Sept. 6 to 20.	Sept. 6
Sept. 26	Baltimore, Md.	Sept. 20
Sept. 27	Cleveland, O.	Sept. 20
Oct. 1	Perth Amboy, N. J. Adv. Sept. 20.	Sept. 20
Oct. 9	Bluefield, W. Va. Adv. Sept. 13 and 20.	Sept. 13
Oct. 9	Roxboro, N. C.	Sept. 20
Nov. 1	Fort Erie, Ont.	Aug. 23

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Sept. 25	Indianapolis, Ind.	Sept. 13

BRIDGES

Bids Close		See Eng. News-Record
Sept. 24	New Jersey	Sept. 6
Sept. 24	York, Pa.	Sept. 13
Sept. 25	Michigan	Sept. 13
Sept. 25	Greenfield, Ia.	Sept. 20
Sept. 26	Minnesota	Sept. 13
Sept. 26	Illinois	Sept. 20

Bids Close		See Eng. News-Record
Sept. 27	Chicago, Ill.	Sept. 6
Sept. 28	Oil City, Pa.	Sept. 6
Oct. 1	Salina, Calif.	Sept. 20
Oct. 2	Mermentau, Mich.	Aug. 30
Oct. 2	Johnstown, Pa.	Sept. 13
	Adv. Sept. 13 and 20.	
Oct. 2	Louisiana	Sept. 13
Oct. 4	Lancaster, S. C.	Sept. 20
Oct. 9	Alabama	Sept. 20
Oct. 10	Wheeler, S. D.	Sept. 20
	Adv. Sept. 20.	
Oct. 11	Louisiana	Sept. 20
Oct. 16	Clearwater, Fla.	Sept. 13
	Adv. Sept. 13 and 20.	
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Bids Close		See Eng. News-Record
Oct. 3	California	Sept. 13
Mar. 18	New Zealand	Sept. 20
	Adv. Sept. 20.	

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Sept. 24	Macdowel, Calif	Sept. 20
Sept. 27	Riverhead, N. Y.	Sept. 13
	Adv. Sept. 13 and 20.	
Sept. 27	Fayette, Ala.	Sept. 20
Sept. 27	Winfield, Ala.	Sept. 20
Oct. 1	Benton, Mo.	Sept. 13
Oct. 1	Edinburgh, Tex.	Sept. 20
Oct. 2	Madison, Wis.	Sept. 20
Oct. 5	Hamilton, Mont.	Sept. 20
	Adv. Sept. 20.	
Oct. 10	Elkhorn, Wis.	Sept. 20

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 22	Norwalk, Conn.	Sept. 13
Sept. 24	Carrollton, Miss.	Aug. 30
Sept. 24	Bronson, Kan.	Sept. 6
Sept. 24	Leesburg, Fla	Sept. 6
Sept 24	Asbury Park, N. J.	Sept. 6
Sept. 24	Sebring, Fla.	Sept. 20
Sept. 24	Ft. Scott, Kan.	Sept. 20
Sept. 25	Independence, Kan.	Sept. 6
Sept. 25	St. Louis, Mo.	Sept. 6
Sept. 25	Louisiana	Sept. 13
Sept. 25	Washington	Sept. 13
Sept. 25	Maryland	Sept. 20
	Adv. Sept. 20.	
Sept. 25	Tahlequah, Okla.	Sept. 20
Sept. 25	Winnetka, Ill.	Sept. 20
Sept. 25	Miami, Fla.	Sept. 20
Sept. 25	Ft. Worth, Tex.	Sept. 20
Sept. 25	New York, N. Y.	Sept. 20
Sept. 25	Long Island City, N. Y.	Sept. 20
Sept. 26	Kentucky	Aug. 23
Sept 26	Kentucky	Aug. 30
Sept. 26	Minnesota	Sept. 6
Sept. 26	Aberdeen, Miss.	Sept. 13
Sept. 26	Kentucky	Sept. 13
Sept. 26	Cleveland, O.	Sept. 20
Sept. 26	Illinois	Sept. 20
Sept. 26	Brooklyn, N. Y.	Sept. 20
Sept. 27	Florida	Sept. 6
Sept. 27	Long Island City, N. Y.	Sept. 20
Sept. 27	Brooklyn, N. Y.	Sept. 20
Sept. 28	Topeka, Kan.	Sept. 13
Sept. 28	Brandon, Miss.	Sept. 20
Sept. 28	Montoursville, Pa.	Sept. 20
Sept. 28	Hillsboro, Tex.	Sept. 20
Oct. 1	Kelso, Wash.	Sept. 6
Oct. 1	Jeffersonville, Ind.	Sept. 20
Oct. 1	St. Paul, Minn.	Sept. 20
Oct. 1	Michigan	Sept. 20
Oct. 1	Water Valley, Miss.	Sept. 20
Oct. 1	Jacksonville, Fla.	Sept. 20
Oct. 2	St. Louis, Mo.	Sept. 6
Oct. 3	Michigan	Sept. 20
Oct. 5	Topeka, Kan.	Sept. 20
Oct. 9	Alabama	Sept. 20
Oct. 9	Barstow, Tex.	Sept. 20
Oct. 10	Belvidere, N. J.	Sept. 20
	Adv. Sept. 20.	
Oct. 11	Louisiana	Sept. 20
Oct. 15	Weston, W. Va.	Sept. 20
Oct. 16	Clearwater, Fla.	Sept. 13
	Adv. Sept. 13 and 20.	

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Sept. 25	Phila., Pa.	Sept. 20
Sept. 28	Litchfield, Minn.	Sept. 20
Oct. 9	Louisville, Ky.	Sept. 20

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 23	Atlantic City, N. J.	Aug. 30
Sept. 24	Iola, Kan.	Sept. 20
Sept. 25	New York, N. Y.	Sept. 13
Sept. 25	Dearborn, Mich.	Sept. 13
Sept. 27	Phila., Pa.	Sept. 20
Sept. 27	Mandan, N. D.	Sept. 20
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9

Bids Close		See Eng. News-Record
Sept. 28	Huntington, W. Va.	Sept. 6
Sept. 28	Duluth, Minn.	Sept. 13
Sept. 28	Salisbury, Md.	Sept. 20
Sept. 28	New York, N. Y.	Sept. 20
Oct. 1	Memphis, Tenn.	Sept. 6
Oct. 2	Upper Flushing (Flushing P. O.), N. Y.	Sept. 20
Oct. 2	Flushing, N. Y.	Sept. 20
Oct. 3	Buffalo, N. Y.	Sept. 20
Oct. 8	Wichita, Kan.	Sept. 6
Oct. 8	Fayetteville, N. C.	Sept. 20
Oct. 8	Syracuse, N. Y.	Sept. 20
Oct. 9	Louisville, Ky.	Sept. 13
Oct. 9	Trenton, N. J.	Sept. 20
Oct. 10	Birmingham, Ala.	Aug. 30
Oct. 10	Virginia, Minn.	Sept. 13
Oct. 15	Cleveland, O.	Sept. 20
Oct. 15	Waseca, Minn.	Sept. 20
Oct. 20	Louisville, Ky.	Sept. 13
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 24	Road Repair—Ft. Riley, Kan.	Sept. 6
Sept. 24	Generator Unit, etc. — Buffalo, N. Y.	Sept. 13
Sept. 24	Steel and Iron Work—Louisville, Ky.	Sept. 20
Sept. 25	Dredging—Galveston, Tex.	Aug. 30
	Adv. Aug. 30 to Sept. 20.	
Sept. 25	Dredging — Providence, R. I.	Aug. 30
	Adv. Aug. 30 to Sept. 20.	
Sept. 26	Changes—Boston, Mass.	Sept. 13
Sept. 28	Breakwater — Milwaukee, Wis.	Aug. 30
	Adv. Aug. 30 to Sept. 20.	
Sept. 28	Mailing Vestibule—Grand Junction, Colo.	Sept. 6
Sept. 29	Outside Service Lines—Dawson Springs, Ky.	Sept. 6
Oct. 1	Repairs to Roof — Phila., Pa.	Sept 20
	Adv. Sept. 6 to 20.	
Oct. 3	Gates, Hoists, etc.—Denver, Colo.	Sept. 6
Oct. 3	Superstructure — Dunkirk, N. Y.	Sept. 6
	Adv. Sept. 6 to 20.	
Oct. 4	Recreation Building, etc. — Wash., D. C.	Sept. 13
	Adv. Sept. 13 and 20.	
Oct. 8	Extension, etc.—Waterloo, Ia.	Sept. 20
Oct. 10	Garage, etc.—Bar Harbor, Me.	Sept. 20
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23
	Adv. Aug. 23 to Sept. 20.	
Oct. 16	Buildings, etc.—North Little Rock, Ark.	Sept. 20
	Adv. Sept. 20.	
Oct. 16	Mechanical Equipment—Carville, La.	Sept. 20
Oct. 16	Buildings—Carville, La.	Sept. 20
	Adv. Sept. 20.	
Oct. 17	Dredging — Bridgeport, Conn.	Sept. 20
	Adv. Sept. 20.	
Oct. 17	Post Office—Dawson, Ga.	Sept. 20
	Adv. Sept. 20.	
Oct. 17	Radio Masts—Puget Sound, Wash.	Sept. 20
Oct. 18	Dwellings — Newburg, Ind.	Sept. 20
	Adv. Sept. 20.	
Oct. 20	Pontoons, etc.—Cincinnati, O.	Sept. 20
	Adv. Sept. 20.	
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
	Adv. Sept. 6 to 20.	
Nov. 1	Catamarans, etc.—Chicago, Ill.	Sept. 20
	Adv. Sept. 20.	
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 24	Grapple Dredge — Phila., Pa.	Sept. 20
Sept. 25	Culvert—St. Louis, Mo.	Aug. 30
Sept. 25	Sea-wall—New York, N. Y.	Sept. 20
Sept. 27	Paving Brick—Cleveland, O.	Sept. 20
Sept. 28	Cement—Jefferson City, Mo.	Aug. 23
Sept. 28	Levee—Portage, Wis.	Sept. 20
Sept. 28	Railroad Duct Line—New York, N. Y.	Sept. 20
Sept. 30	Fill—Salisbury Beach (Newburyport P. O.), Mass.	Sept. 20
	Adv. Sept. 20.	
Oct. 1	Gravel—Baton Rouge, La.	Sept. 13
Oct. 2	Wharf—Harrop, B. C.	Sept. 13
Oct. 2	Subway—Brooklyn, N. Y.	Sept. 20
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. J., Lavallette — Making plans well, pumping plant and equipment, distribution system, 3,600 ft. 2 in. w.i. pipe, 14,150 ft. 4 in., 3,834 ft. 6 in. and 5,400 ft. 8 in. c.i. pipe, etc. $75,000. Sherman & Sleeper, 507 Cooper St., Camden, engrs.

N. J., Park Ridge—Takes bids in January for water supply system. $200,000. H J Harder, 129 Market St., Paterson, engr.

W. Va., Parkersburg—Election soon to vote on $249,990 bonds for mechanical filtration plant, 6 filters 1 m.g. capacity each. J. M. Rice, Jones Law Bldg., Pittsburgh, Pa., engr. Noted Aug. 23.

N. C., Salisbury — Bd. Aldermen authorized issue of $35,000 for additional waterworks facilities.

Fla., Orlando—Defeated $525,000 bonds for extending and improving waterworks and electric light plants. Noted Aug. 30.

La., Bossier—Voted $125,000 bonds for water mains and sewerage system.

La., Crowley — Plans to extend watermains and build 1,500,000 gal. concrete reservoir. $115,000. I. B. Brossard, clk.

O., Salem—Plans waterworks plant and main extensions. $300,000.

Mich., Iron Mountain—Voted $390,000 bonds to purchase present waterworks and build filtration plant, also extend and improve distribution system. W. W. Dalzell, city engr.

Ill., McLeansboro—Voted $24,000 bonds for 400,000 gal. filter, 3,000 ft. 4 in. pipe, engine and generator. Total with cash previously available, $31,500. W. A. Fuller Co., 1917 Ry. Exch. Bldg., St. Louis, Mo., engrs. Noted Jan. 25.

Ill., Shelbyville—Making plans 8-10 mi. 4-12 in. mains, fire hydrants, 150,000 gal. steel tank and tower, 2 motor driven pumps, etc. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Minn., West Concord—Rejected bids for mains. $16,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs. Noted Aug. 30.

Kan., Kansas City—Oct. 23, to vote on $2,000,000 bonds for waterworks improvements. R. L. McAlpine, Kansas City, engr.

Kan., Lenora—City election soon to vote on $40,000 bonds for waterworks system. Ruckel Eng. Co., Interurban Bldg., Kansas City, engrs.

Mo., Holden—Sept. 25, to vote on $68,000 bonds doubling capacity of reservoir, replacing stand pipe with 100,000 gal. tank on 120 ft. tower, new mains, etc. Benham Eng. Co., Gumble Bldg., Kansas City, engrs. Noted June 28.

Mo., New London—Having preliminary plans prepared waterworks and distribution system. $40,000. W. B. Rollins Co., 521 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Mo., Norborne—Election Oct. 2, to vote on $57,179 bonds for water plant, distribution mains and water softener, etc.; $33,428 bonds for lighting plants and lines. R. R. McBride, Kansas City engr.

Tex., Ennis—See "Dams."

Okla., Enid—Having preliminary plans prepared waterworks improvements, incl. obtaining additional 5 m. g. water supply, storage reservoirs, electric motor driven pumping equipment, pipe lines, etc. J. D. Bomford & Co., Masonic Temple, consult. engrs.

Okla., Sayre—Plan election to vote on $85,000 bonds waterworks improvements, sewers and power plants. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ore., Oregon City—Takes bids about Dec. 6 extension of main pipe line and probably new headgates. $25,000. Stevens & Koon, Spalding Bldg., Portland, engrs.

Ont., Port Colborne—Having plans prepared improving and extending waterworks, c.i. pipe, hydrants, reservoir, etc. $30,000. E. H. Darling, Home Bank Bldg., Hamilton, engr.

Ont., Windsor—Voted $150,000 bonds extending waterworks, c.i. mains, hydrants, etc. M. E. Brian, city engr.

BIDS DESIRED

Mass., New Bedford—Oct. 5, by Water Bd., Municipal Bldg., constructing 1,300 ft. 60 in. intake pipe at Little Quittacas Pond.

Waterworks (Continued)

S. H. Taylor, supt. and clk.; adv. E. N.-R. Sept. 20.

N. Y., Buffalo—Oct. 23, by A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., furnishing centrifugal pumps and motors, switchboard and switchboard apparatus for low lift pumping station; meters, rate controllers, gages, chemical feed devices and other filter equipment and appurtenances for filter plant. G. C. Andrews, engr. Filtration Div. Fuller & McClintock, 170 Bway., New York, consult. engrs.; adv. E. N.-R. Sept. 20.

N. J., Hawthorne—Sept. 28 for pumping station, stand pipe and 4,000 ft. 8 in. mains. H. J. Harder, 129 Market St., Paterson, engr. Noted July 12.

N. C., Kings Mountain—Oct. 9, by Bd. Town Comrs., waterworks and sewerage extensions. Ludlow Engineers, Winston-Salem, engrs.; adv. E. N.-R., Sept. 20.

Mich., Lansing—Sept. 24, by Alvord, Burdick & Howson, engrs., 8 South Dearborn St., Chicago, drilling several wells for waterworks, here $40,000. Noted Aug. 30.

Ill., Marengo—Sept. 25, by Bd. Local Impvts., 3,700 ft. ¾ in. lead mains, corporation cocks, curb cocks and service boxes. A. L. Webster, Wheaton, engr.; adv. E. N.-R. Sept. 20.

Ia., Dubuque—Receiving bids for switchboard and transformers complete, and heating system, for Eagle Point Pumping station. Mead & Seastone, Journal Bldg., Madison, Wis., engrs.

S. D., Milbank—Oct. 8, water collection system incl. 9½ mi. mains. $125,000. Dakota Eng. Co., 309 Western Natl. Bank Bldg., Mitchell, engrs.

Tex., Ft. Worth—Sept. 29, four additional filter units, 1 m.g.d. each. D. L. Lewis, city engr. John B. Hawley, Cotton Exch. Bldg., consult. engr.

Tex., Ft. Worth—City Comn. taking bids equipment for Arlington Heights pumping station, two 700 g.p.m. centrifugal pumps, motors, piping, etc. $10,000. D. L. Lewis, city engr. Jno B. Hawley, Cotton Exch. Bldg., consult. engr.

Okla., Cyril—Sept. 28, by M. M. Rowe, clk., waterworks system, incl. deep well, pump and motor, tank, tower and pipe lines, 27,000 ft. 2-6 in. c.i. pipe. $31,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Sept. 13.

Idaho, Lewiston — Oct. 10 (change of date) at office J. R. Turnbull, city controller, improvements to waterworks system. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.; adv. E. N.-R. Sept. 20. Noted Aug. 23.

BIDS RECEIVED

Ind., Evansville — Bd. Water Trustees, Sept. 6, 6 m.g. addition to water filtration plant, from A. Phelps & Sons, Knoxville, Ia., $98,480 for buildings and structures only; filter equipment from International Filter Co., 333 West 25th Pl., Chicago, $57,000. Noted Aug. 23.

Ind., Evansville—Pile foundation for 6 m.g. addition to water filtration plant, from A. Phelps & Sons, Knoxville, Ia., $37,000 (Raymond composite piles). MacArthur Concrete Pile & Foundation Co., Evansville, $34,800; Raymond Concrete Pile Co., 140 Cedar St., New York City, $42,700 (composite pre-cast piles). Noted Sept. 13.

Mich., Lincoln Park (Wyandotte P. O.)—See "Miscellaneous."

CONTRACTS AWARDED

N. J., Pennington — For electrically operated pumping station, 10,550 lin.ft. 4, 6, 8 and 10 in. c.i. pipe, etc., to N. A. K. Bugbee Co., 205 East Hanover St., Trenton, $29,307. Noted Aug. 16.

O., Cleveland—Cuyahoga Co., 37,000 ft. 6-10 in. c.i. mains, Contr. 43, to J. Lewis, Sewer Contractors Exch., $139,000. Noted Sept. 13.

Ill., Joy—For 1,329 ft. 8 in., 2,885 ft. 6 in. and 11,558 ft. 4 in. Class D pipe, 33 fire hydrants, 28 double gate valves, etc., to H. J. Schmidt, Silvis, $21,701. Noted Aug. 2.

Ill., Pittsfield—For earth dam, concrete chamber, conduit spillway, filter and pumping plants, etc., to Nixon & Keeley, Murphy Bldg., East St. Louis Noted Aug. 16.

Mich., Lincoln Park (Wyandotte P. O.)—F. W. Harrison, village clk., R. F. D. 1, Wyandotte, furnishing 37,000 lin.ft. 6 and 8 in. c.i. pipe with hydrants, etc., to T. C. Brooks & Son, Jackson, $80,000.

Wis., Phillips—City will construct concrete reservoir and install water and sewer pipe, by day labor. $35,000. Pipe already purchased. F. Henry, Courthouse, engr. Noted Aug. 30.

Kan., Cassoway—See "Dams."

Tex., McAllen — Filtration plant, pump house and pumps, to E. L. Calhoun, Pharr, $20,000.

Ore., Jennings Lodge—Oak Lodge Water Dist., 27,000 ft. lap weld 8 in. pipe, 11,000 ft. 8 in. and 20,000 ft. 6 in. c.i. pipe, 20,000 ft. 4 in. and 90,000 ft. 2 in. steel pipe, 600,000 gal. concrete reservoir, 40,000 gal. tank on concrete base, 150 g.p.m. electric driven pump, to Parker-Schram Co., Couch Bldg., Portland, $177,000. Noted July 26.

Calif., San Diego—Constructing 1,200,000 gal. steel stand pipe for water distributing system, to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $69,150. Noted Sept. 13.

Sewers

PROPOSED WORK

Pa., Carlisle—Election Nov. 8, to vote on $30,000 bonds for 4,000 ft. 24-54 in. vitr. and segment block storm sewers. H. D. Herbert, city mgr.

N. C., Salisbury — Bd. Aldermen authorized issue of $30,000 bonds for additional sewer facilities.

Fla., Sanford—Election Oct. 9, to vote on $80,000 bonds enlarging and extending sewerage system. F. T. Williams, Sanford, engr.

La., Bossier—See "Waterworks."

Ky., Danville—See "Streets and Roads."

O, Canton—Bd. Control takes bids about Oct. 1, sanitary sewer in Belden Ave. S. E., from Trunk Sewer 1 to 3rd St. S. E. $32,000. W. E. Sarver, city engr.

Ill., Winchester—Making surveys 8-12 in. sanitary sewers, disposal plant, settling tank, etc. $50,000-$60,000. W. A. Fuller Co., 1917 Ry. Exch. Bldg., St. Louis, Mo., engrs.

Kan., Atchison — Making preliminary plans 3 blocks Big White Clay Creek open sewer. $75,000-$100,000.

Kan., Wichita—Making preliminary plans 31,000 ft. storm water sewer No. 20, known as Cleveland Ave. sewer, 12-27 in. vitr. clay pipe, and 30-54 in. segmental block. $200,000. P. L. Brockway, City Hall, engr.

Neb., Howells—Having plans prepared sanitary sewerage system. $25,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

Mo., Greenfield—Sept. 18. to vote on $64,000 bonds for 11,000 ft. storm and sanitary sewers, disposal plant, etc. Engineer not announced.

Mo., New London—Having preliminary plans prepared disposal plant, storm and sanitary sewers. $30,000. W. B. Rollins Co., 521 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Mo., Norborne—Election Oct. 2, to vote on $39,133 bonds for sewers and septic tank. R. R. McBride, Kansas City, engr.

Okla., Sayre—See "Waterworks."

Mo., Unionville—Voted $80,000 bonds for 9,000 ft. sewers. Engineer not announced.

Mo., University (St. Louis, P. O.)—Having preliminary plans prepared Public Sewer 1, 3,100 ft. 36 in. vitr. clay storm and sanitary sewers, $31,000; Pennsylvania Ave. Joint Sewer, 2,400 ft. 12-36 in. vitr. clay and 500 ft. 42 in. segmental block pipe, $18,000; Colby Ave. Joint Sewer, 2,400 ft. 10-54 in. vitr. clay and segmental block pipe, $22,000; Joint Sewer Dist. 26, 1,300 ft. 10-24 in. vitr. clay pipe, $12,000; Sewer Dist. 29, 800 ft. 10-12 in. vitr. clay pipe, $2,000. W. A. Heimbuecher, City Hall, engr.

Tex., Edinburg—See "Excavation, Drainage, Irrigation."

Tex., Lubbock—Election soon to vote on $500,000 bonds for storm sewers and paving various streets. A. Saunders, Lubbock, engr.

Tex., Stamford—Postponed opening bids for Imhoff tanks, etc. Will readvertise. $30,000. Jno. B. Hawley, Cotton Exch. Bldg., Ft. Worth, engr

Calif., San Francisco — City and San Francisco Co. plan. sewers in district bounded by Great Highway, Tarval St., Rivera and Ortega Aves. $35,000. M. M. O'Shaughnessy, city engr.

Calif., San Jose—Oct. 23, to vote on $400,000 bonds for sewers and sewage treatment plant. W. Popp, city engr. Noted June 21.

Que., Outremont—Soon takes bids constructing sewers. $51,259. E. T. Sampson, city clk.

Ont., Birch Cliff—Scarboro Twp. having plans prepared rein.-con. sewage disposal plant. $400,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. J., Montclair — Sept. 25, by Town Comrs., Municipal Bldg. storm sewerage system. H. Trippett, clk.; adv. E. N.-R. Sept. 20.

N. J., Perth Amboy—Oct. 1, by City Council, City hall, for trunk sewers with necessary connections and appurtenances. A. Jennetty, street comr.; adv. E. N.-R. Sept. 20.

Md., Baltimore—Sept. 26, by Bd. Awards. 350 lin.ft. of 9 ft. 6 in. basket handle section concrete storm water drain in neighborhood of Liberty Heights Ave. and Western Maryland R.R. $40,000. B. L. Crozier, highway engr.

N. C., Roxboro—Oct. 9, by Bd. Comrs. and Mayor, 7½ mi. 6-15 in. sanitary sewers with manholes and other appurtenances. Spoon & Lewis, Greensboro, engrs.

Fla., Miami—Sept. 25, by F. H. Wharton, city mgr., storm sewers. $25,000.

N. C., Kings Mountain—See "Waterworks."

O., Cleveland—Sept. 27, sewers in Parkdale and Carrydale Aves. from West 140th to West 143rd Sts., and main sewer district from Ridge Rd. to West 35th St. To exceed $25,000. R. Hoffman, city engr.

Tex., Ft. Worth—Sept. 25, 3,500 ft. of 2-6½ ft. storm sewers, 44 miscellaneous inlets, in Bessie St. $25,000. D. L. Lewis, city engr.

BIDS RECEIVED

Md., Baltimore—Bd. Awards constructing storm sewers in Dist. J-1 localities, 6,000 lin.ft. 15-54 in. pipe, Storm Water Contr. 59, from D. Catalano, Knickerbocker Bldg., $34,815. Noted Sept. 6.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, Sept. 17, temporary sewers (1) Bradley Ave. (2) Hinschliff Ave. from F. J. Cerelli, (1) $11,576; J. Johnson Sons, 455 Bway., West New Brighton, (2) $111,756. Noted Sept. 13.

Mich., Lincoln Park (Wyandotte P. O.)—See "Miscellaneous."

Mich., Springwells—B. P. Esper, village clk., Sept. 11, lateral sewers in Sects. 18, 19 and 22, from S. Fattore, 2201 St. Aubin Ave., Detroit, $10,133, $13,238 and $13,500 respectively; Dist. 20 from Coolsaet Bros., Detroit, $6,648; Dist. 21 from Rennie & Dibble 11331 Colonial Ave., Detroit, $26,572; Sewer Arm 38 from G. Pontarelli, Wolverine Hotel, Detroit, $13,975.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, 200,000 lb. manholes, to Amer. Shoe Brake and Fdry. Co., Fulton Station, $6,980.

O., Akron—Installing 36 in. pipe line to connect at Brittain Rd. with 48 in. feeder from Kent Reservoir, thence down Ottawa St. to Kline St. and Case Ave., to McAlonan Bros., 197 West Buchtel Ave., $26,843. Pipe already purchased by city. $72,000. Engrs. est. $100,000.

O., Euclid—Sewers in Lake Shore Blvd., Sect. 1 to Amato Constr. Co., c/o Sewer Contractors Exch., The Arcade, Cleveland, $73,699; Lake Shore Blvd. Sect. 2, to Graham & Henderson, 1274 West 108th St., Cleveland, $93,027; submerged outfall sewer in Lake Shore Blvd. to Cleveland Eng. & Constr. Co., The Arcade, Cleveland, $67,787. Noted Sept. 13.

Mich., Lincoln Park (Wyandotte P. O.)—To Hammen & Co., 4612 Woodward Ave., Detroit, 7,000 ft. Lateral 11, $16,807, 6,000 ft. Lateral 13 $13,197 9,000 ft. Lateral 18 $27,113; to Western Constr. Co., 1208 Ford Bldg., Detroit, 8,000 ft. Lateral 12, $18,208; to Callahan & Grosse, Lincoln Park, 3,500 ft. Lateral 14, $7,795, 1,000 ft. Lateral 17, $3,349; to Rennie & Dibble, 11331 Colonial Ave., Detroit, 6,000 ft. Lateral 15, $14,071, 9,000 ft. Lateral 19, $16,611, 16,000 ft. Lateral 20, $42,798.

Wis., Rhinelander—Sewerage system, 26,502 ft. vitr. or concrete pipe, to W. D. Lovell, 1415 8th St. S. E., Minneapolis, Minn. $78,981. Noted Sept. 13.

Ia., Sioux City—For 1,730 lin.ft. 14 x 39 ft. storm water conduit, for changing channel and water of Perry Creek, 50,000 cu.yd. excav., etc., to C. F. Lythe Constr. Co., 504 Nebraska St., gravel construction broken stone floor, $314,055. Noted Sept. 13.

Kan., Wichita — For 13,500 ft. storm water sewer No. 24, know as 2nd St. Sewer, to Foster & Skaer, Broadview Hotel. Engrs. est. $92,000.

Tex., Grand Prairie — Sewer mains laterals and disposal plant, to R. J. Estep & Co., Deere Bldg., Dallas, $52,200. Noted Aug. 23.

Wash., Seattle—Bd. Pub. Wks., 5,723 ft. pipe sewer in 9th Ave. N., et al., to Fiorito Bros., 3950 6th Ave., Seattle, clay $32,053. Noted Sept. 13.

Sewers (Continued)

Calif., Long Beach—Concrete pipe sewerage system in Sanitary Sewer Dist. 1, to L. C. Campbell, 350 Merrick St., Los Angeles, $139,225. Noted Sept. 13.

Calif., Pasadena—Constructing 8-16 in. vitr. sewers in Arroyo Blvd., to L. Miletich, 610 West 54th St., Los Angeles, $159,733.

Waste Disposal

CONTRACTS AWARDED

Calif., Sacramento—City Comrs., incinerator, to F. L. De Carrie, Portland, Ore., $195,000. Noted Sept. 13.

Bridges

PROPOSED WORK

North Carolina—State Hy. Dept., Raleigh, rejected bids rein.-con. bridges and culverts on State Project 745, Forsyth Co. $32,000. Will readvertise. C. M. Upham, state highway engr. Noted Sept. 13.

O., Toledo—See "Miscellaneous."

Kan., Topeka—See "Streets and Roads."

Ark., Cody (Hulpert P. O.) — Lee Co. (Mariana) having preliminary plans prepared, steel and concrete bridge, probably 3 spans, here. $250,000. Engineer not selected.

Calif., San Jose—Oct. 23, to vote on $100,000 bonds bridges in various sections of city. W. Popp, city engr.

Ont., Niagara Falls—Queen Victoria Park Comn. having plans prepared for 2 rein-con. arch bridges, 30 and 50 ft. spans, both 30 ft. wide, in Queen Victoria Park. $25,000. C. H. Bond, 4 Wellington St. E., Toronto, engr.

BIDS DESIRED

S. C., Lancaster—Oct. 4, by Comrs. Lancaster Co., 5 rein.-con. bridges on State Route 26, Federal Aid Project 230, 1,034 cu.yd. concrete, 165,740 lb. reinforcing, 1,094 sq.yd. bituminous covering, etc. $49,564.

Fla., Jacksonville — See "Streets and Roads."

Alabama — Oct. 9, by State Hy. Dept., Montgomery, bridges on Ashland-Heflin Rd., Federal Aid Project 136, Clay Co., 1,543 cu. yd. concrete, 245,992 lb. reinforcing, etc. W. S. Keller, state highway engr.

Miss., Brandon—See "Streets and Roads."

Louisiana—Oct. 11, by State Hy. Dept., Reymond Bldg., Baton Rouge, one 70 ft. steel riveted truss span and two 20 ft. rein.-con. deck girder approach spans, all on rein.-con. piers, on State Project 82 C, Arcadia-Shreveport Highway, Bienville Parish, also one 40 ft. span and two 26 ft. approach spans, all rein.-con. deck girders on rein-con. piers, State Project 101 A Ruston-Arcadia Highway, Lincoln Parish. J. M. Fourmy, ch. engr.

Illinois — Sept. 26, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 16 girders, 8 slabs, 4 box culverts and 4 substructures, all foregoing rein.-con., 4 steel superstructures and 1 steel bridge. C. H. Older, ch. highway engr.

Ia., Greenfield — Sept. 25, by Auditor Adair Co., 49 culverts and extensions, one 100 x 20 ft. high truss, one 60 x 20 ft. pony truss and one 40 x 24 ft. I-beam bridge, 1,866 cu.yd. rein.-con., 140,000 lb. steel, etc. Iowa Hy. Comn., Ames, engrs.

S. D., Wheeler—Oct. 10, by State Hy. Dept., Pierre, bridge over Missouri River, 1 mi. from here, Charles Mix and Gregory Counties; adv. this issue.

California—Oct. 1, by State Hy. Comn., Sacramento, bridges over San Lorenz Creek near King City, will have three 60 ft. and two 30 ft. rein.-con. girder spans on piers and bents, etc., approaches to be graded. R. M. Morton, state hy. engr.

BIDS RECEIVED

New Jersey—State Hy. Comn., Trenton, concrete encased steel plate girder bridge, one 89 ft. span, concrete abutments, temporary bridge and rein.-con. slab approaches, removal present bridge over Pequannock River at M. P. 16.1, State Highway Route 8, Sect. 3, Pequannock and Pompton Twps., Morris and Passaic Counties, from Arnolt-Moore Co., 45 Clinton St., Newark, $49,800. Noted Aug. 30.

New Jersey—State Hy. Comn., Trenton, highway bridge with its approaches over Raritan River, between Perth Amboy and South Amboy, (1) work complete (2) less trolley tracks and power conveyors (3) less asphalt pavement and motor beds (4) less trolley tracks and asphalt pavement, from Frederick Snare Corp., 114 Liberty St., New York City, (1) $3,934,000 (2) $3,890,000 (3) $3,872,000 (4) $3,828,000; Stillman, Delehanty, Ferris Co., 1 Exchange Pl., Jersey City, (1) $4,444,696 (2) $4,389,969 (3) $4,384,696 (4) $4,329,696; Patrick McGovern, Inc., 50 East 42nd St., New York City, (1) $4,933,011 (2) $4,848,011 (3) $4,878,011 (4) $4,793,011. Noted July 26.

Missouri—State Hy. Dept., Jefferson City, bridge over 102 River, Buchanan Co., from Koss Constr. Co., 2818 5th St., Des Moines, Ia., $39,756; bridges over Castile Creek, east branch of Castile Creek and west fork of Castile Creek, De Kalk Co., from Cameron & Joyce & Co., Keokuk, Ia., $31,673; over Big St. Francis River, Madison Co., from C. T. Fogle Constr. Co., Jefferson City, $30,890; over Marias Des Cygnes River, Miami River, and Marias Des Cygnes River Drainage Ditch, Bates Co. from Western Bridge Co., Harrisonville, $29,082, $48,608 and $32,155 respectively; over Stream, Newton Co., from C. J. Williams, Monett, $3,235; over Jacks Fork, Texas Co., from Short & Bremes, Monett, $4,175; over Minnow Branch and Stream, Marion Co., from Gaines Bros. Co. and A. P. Munsen Fairland, Okla., $18,227; over Stream, Cass Co., from N. A. Christy, Warsaw, $3,131; over Maple Slough Drainage Ditch, Mississippi Co., from R. L. Williams, Wyatt, $6,772; over Spring Creek, Douglas Co., from Sommerfield & Jones, Billings, $2,017; over Jordon Branch and East Branch Jordon Creek, from O. H. Schmidt, 3108 Jule St., St. Joseph, $19,485; overflow of Grand River, Livingston Co., from Callahan-Walker Constr. Co., 322 Peters Trust Bldg., Omaha, Neb., $40,867; over Cow Branch and Rock Creek, Atchison Co., from W. R. Larson Constr. Co., 518 Secy. Natl. Bank Bldg., Sioux Falls, S. D., $23,554; over Willow Branch, Ray Co., from Cook O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, Mo., $12,936; over Grand River, Cass Co., from Liberty Constr. Co., Kansas City, $8,436; over Stream, Holt Co., from Judson Eng. & Constr. Co., St. Joseph, $7,110; over Roark Creek, Taney Co., from Midland Bridge & Constr. Co., 401 Ry. Exch. Bldg., Kansas City, Mo., $4,731; over Des Peres River, St. Louis Co., one 70 ft. steel truss span, and one 70 ft. rein.-con. arch span from C. M. Berry, Webster Groves, $15,225 and $15,065 respectively; over 3rd fork of Platte River, Buchanan Co., from O. H. Schmidt, 3108 Jule St., St. Joseph, $27,471. Noted Aug. 30.

California—State Hy. Dept., Sacramento, bridge over Cedar Creek, east of Gilroy, and bridge over North Fork Pacheco Creek, Santa Clara Co., from De Waard & Cobham, Granger Bldg., San Diego, $57,699. Noted Aug. 30.

CONTRACT AWARDED

Conn., Bridgeport—East Washington Ave. Bridge Comn., steel bridge, East Washington Ave., to Bridgeport Dredge & Dock Co., 1024 Main St., $326,575. Noted June 28.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 679, Scotland Co., to E. T. Gwathmey, Norfolk, Va., $25,982; State Project 185 C, Pitt Co., to Groves Co., & Shepard, Greenville, $33,190; State Project 592, Rockingham Co., to J. L. Brinkley, Thomasville, $29,017; State Project 495, Warren Co., to J. A. Marrow, Clarksville, Va., $25,166.

Wis., Peshtigo—State Hy. Comn., Madison, Peshtigo Bridge, to Stein Constr. Co., 204 Grand Ave., Milwaukee, additional concrete at no greater depth $40, additional concrete at greater depth $50, less conrete than shown on plans $8, etc. Total $51,300. Noted June 21.

Ont., Prairie Siding—Kent Co., new steel bridge to W. Bermingham & Son, Kingston, $120,000.

Ont., St. Catharine—Welland Co., Court House, several concrete bridges and culverts, 1,800 cu.yd. concrete, to R. H. H. Blackwell, 57 Queen St. W., Toronto, $31,643.

Dams

PROPOSED WORK

Conn., Meriden—Common Council voted additional $40,000 to repair Broad Brook Dam. $65,000 now available. A. Hazen, 25 West 13th St., New York City, engr. Noted July 5.

Minn., Little Falls — See "Industrial Works."

Tex., Ennis — Making plans earth dam, spillway, etc., on Waxahachie Creek, also pipe line. $50,000 bonds voted. H. McCandles, city engr. Noted Aug. 23.

Tex., New Braunfels—Planters & Merchants Mill making plans dam across Guadalupe River, for cotton mill. $25,000. Engineer not announced.

Tex., Three Rivers—Live Oak Co. election this month to vote on $500,000 bonds for irrigation dam across Atascosa River and main canal and laterals for gravity irrigation, 21,000 acres affected. Engineer not selected.

Calif., Merced—Merced Irrigation Dist., revising plans and soon takes bids constructing Exchequer Dam. Noted Aug. 16.

CONTRACTS AWARDED

Kan., Cassoway—Eldorado & Santa Fe Ry., Eldorado, 800 m.g. reservoir on Walnut River, ½ mi. from here, 2,200 ft. rein.-con. dam, 150 ft. wide at bottom and 16 ft. at top, 250 ft. spillway, to Eldorado & Santa Fe Constr. Co., Eldorado.

Railways

PROPOSED WORK

Connecticut—New York, New Haven & Hartford R.R., New Haven, plans relocating entire crossing at New Britain. $50,000. E. Gagel, ch. engr.

Mississippi—Mississippian Ry. Co. organized to build 25 mi. standard gauge railroad from Amory to Fulton, to connect with Frisco System. J. T. Cochrane, 68 St. Francis St., Mobile, Ala., pres.

Texas—Missouri, Kansas & Texas R.R. Denison, had plans prepared dump widening, concrete drains, block system, signals and heavy steel rails on line, from Pottsboro to Whitesboro. E. L. Martin, Missouri, Kansas & Texas Bldg., Dallas, engr.

California—Tehachapi Ry. Co. (recently organized) plans 30 mi. road between Ilom and Bena, Kern Co. E. J. Foulds, 1600 Euclid Ave., Berkeley, a director

BID DESIRED

New Zealand—March 18, by Pub. Wks. Tender Bd., Wellington, 18 mi. railway, etc.; adv. E. N.-R. Sept. 20

BIDS RECEIVED

California—Merced Irrigation Dist., Merced, relocation of Yosemite Valley R.R. (approximately 16 mi.), from Twohy Bros., Sharon Bldg., San Francisco, excluding tracklaying $1,328,796, tracklaying $78,595, total $1,407,391. Noted Aug. 23.

Excavation, Drainage Irrigation

PROPOSED WORK

O. Akron—Plans beautifying shores of Summitt Lake, by dredging and draining the shore lands and building boulevard completely around samê, also constructing lagoon system in wider points. $250,000. E. A. Kemmler, city engr.

Ill., Belleville — Silver Creek D. D. 2, plans straightening and widening 12 mi. Silver Creek, reclamation 8,300 acres in Shiloh Valley, Mascoutah and Freeburg Twps. $134,000. Engineer not selected.

Wis., Humboldt — Brown Co. Drainage Bd., c/o F. Desnoyer, secy., 605 Cherry St., Green Bay, making plans draining approximately 3,500 acres, open ditch work and 6-12-14 in. vitr. drain tile. $25,000. L. M. Schindler, 721 Clark St., Appleton, engr.

Wis., Madison—Marshall D. D, c/o F. W. Lucas, State Bank Bldg., will sell $32,500 bonds Oct. 2, for tile and open ditch drainage system, Dane Co. P. H. Hintze, Court House, engr.

Tex., Three Rivers—See "Dams."

Calif., Redwood City — See "Industrial Works."

BIDS DESIRED

Ala., Fayette—Sept. 27, by Bd. Drainage Comrs., excavating lateral ditches in Fayette and Lamar Co. D. D. 1, 160,000 cu.yd. excav. W. M. Sudduth, chn.

Ala., Winfield—Sept. 27, by Bd. Drainage Comrs., constructing drainage system in Marion Co. D. D. 1, 120,000 cu.yd. excav. W. H. Ward, chn.

Wis., Elkhorn—Oct. 10, by H. H. Tubbs, secy. Walworth Co. Drainage Bd., constructing Farm Drain 2 in Sugar Creek Twp., 132,000 cu.yd. earth excav., bulkhead, catchbasin, reinforcing abutment of bridge, 13,982 lin.ft. 10-15 in. shale tile. Private plans. Noted July 19.

Tex., Edinburg—Oct. 1, by Bd. Directors Hidalgo Co. Water Impvt. Dist. 4, 10 mi. canal reconstruction, bridges, etc. $25,000. W. L. Rockwell, Edinburg, engr.

Mont., Hamilton—Oct. 5, by Bitter Root Irrigation Dist., repairs and reconstruction work on irrigation system, incl. canal excav., concrete work, timber flume and

Excavation, Drainage, Irrigation (Continued)

steel work near here. M. Lundquist, secy. A. E. Walsh, ch. engr.; adv. E. N.-R., Sept. 20. Noted March 16, 1922.

BIDS RECEIVED

Calif., Helm—Stinson Irrigation Dist., irrigation improvements as follows: pumps Item 3, 3-6 deep well turbine pumps, 60 ft. column, 20 ft. suction, lift 35-50 ft. 2-2.5 sec. ft. Item 4, 10-14 deep well turbine pumps, 60 ft. column, 20 ft. suction, 2-3 sec. ft. 35-5 0ft. lift, from Western Well Wks. ,San Jose, Item 4, $938 per pump, Layne & Bowler San Jose 3a $956 3b $794, 3c $731, Byron-Jackson Pump Mfg. Co., 55 New Montgomery St., San Francisco, Item 4 $935 each, Stirling Iron Wks., Stockton, 4a $815, 4b $765, 4c $155, 4d $1,000, Kimball Electric Co., Los Angeles, (6 pumps) 3a $6,234, 3b $4,490, 3c $5,844, 3d $4,110, Peerless Pump Co., Los Angeles, Item 4 $760 each; wells—drilling 3-6 wells, cased with 14 in. double No. 12 gauge casing for 100 ft. then 12 in. double No. 12 casing to total depth 400-900 ft. or 5b using double No. 12 for 1st 100 ft. and 12 in. balance, from Western Wells Wks., San Jose, 5a $7 ft. to 400 ft. $7 ft. to 800 ft. 5b $7 ft. to 400 ft. and $6.25 ft. up to 800 ft., Harp Bros., 5b $8.52 per ft. and $6.75 per ft.; Item 13. 148 cement turnout boxes, Item 17, 41 bridges, Item 18, 20 headgates, 20 checks for laterals, 7 checks in canals, from Adell-Cortwright, Hanford, 13 $11.60 each, $5.75 installing 17-20 ft. spans $190 each, 28 ft. spans $275 each, 18 $55, $45 and $70 each; materials, Item 10, 2-4 carloads cement, f.o.b. Helm or Burrell, Fresno Co., from Pacific Portland Cement Co., Pacific Bldg., San Francisco, $3.62 per bbl., Santa Cruz Portland Cement Co., Pacific Bldg., San Francisco $3.62 per bbl., Old Mission Portland Cement Co., Mills Bldg., San Francisco, $3.62 per bbl., $0.10 for sack returned. $0.05 bbl. discount if paid in 10 days. Item 11, 4-8 carloads gravel and 2-4 carloads sand, Burrell or Helm, from Grant Rock & Gravel Co., Fresno, $1.65 and $1.20 per ton gravel and $1.30 per ton sand, Item 12, 2,000-2,500 ft. 18-36 in. cement pipe, from Adell-Cortwright, Hanford, 18 in. $0.60, 20 in. $0.68, $24 in. $0.98, 30 in. $2.10, 36 in. $2.85; canals, Item 15, 150,000 cu. yd. excav., from W. R. Stevens & Kellar, cost plus 10% not to exceed $0.25 yd.

CONTRACTS AWARDED

La., New Iberia — Iberia Parish, canal from Lake Fausse Pointe to Bayou Teche, 710,000 cu.yd. excav., to Ennis Constr. Co., New Orleans. Engrs. est. $75,000.

La., Shreveport—Caddo Levee Bd., widening Douglas Island ditch, 145,000 cu.yd. excav., to Douglas, Burt & Crow, Shreveport. Shreve Island levee 25,000 cu.yd. excav., to Taylor & White, Woodside; Brown Pl. Reach Levee, 80,000 cu.yd. excav., to Constant & Co., Shreveport. About $75,000.

Tenn., Selmer — McNairy Co. Drainage Comn., 11 mi. drainage canal, 225,000 cu.yd. earth excav., to Tupelo Dredging Co., Tupelo, Miss. $25,000.

Ia., Estherville—Supervs. Emmet Co., constructing D.D. 121, to Clarke Constr. Co., Clinton, 266,612 cu.yd. excav. $0.35; Cement Products Co., Estherville, 33,410 lin.ft. 7-18 in. tile $6,256; J. J. Oston, Allendorf, tile labor $5,990. Noted Aug. 30.

Streets and Roads

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids repaving Astoria Ave., sheet asphalt. Will readvertise. Noted Sept. 6.

N. Y., Penn Yan—Yates Co. having surveys made 3.25 mi. Dundee-Wayne Rd., 16 ft., cement. $135,000.

N. J., Belvidere—Bd. Freeholders Warren Co. making plans concrete paving 5 mi. Washington-Hampton Rd.

N. J., Morristown—Bd. Freeholders Morris Co., rejected bids constructing section Parsippany-Littleton Rd., Hanover Twp., and Long Valley to Hunterton Co. line Rd, Washington Twp. Noted Aug. 16.

Pa., Cresson—Plans prepared paving 3 mi. Park, Powell, Ashcroft, Keystone, Columbus and Cathedral Aves. $100,000. D. W. Dillman, 80-81 Altoona Trust Bldg., Altoona, engrs.

W. Va., Parkersburg—Election soon to vote on $550,010 bonds paving various streets. J. M. Rice, Jones Law Bldg., Pittsburgh, Pa., engr.

North Carolina—State Hy. Dept., Raleigh, rejected bids grading and concrete or asphaltic paving 8.04 mi. State Project 641, Iredell Co., $292,000; grading and concrete paving 4.57 mi. State Project 745, Forsyth Co., $172,000. C. M. Upham, state highway engr. Noted Sept. 13.

N. C., Salisbury — Bd. Aldermen authorized issue of $340,000 bonds for paving various streets.

Fla., Sebring—Highlands Co. Comn., rejected bids grading 15 mi. Lake Annie and Crewsville Rds., 16 ft. $40,000. Peacock & Hood, Sebring, engrs. Noted Aug. 30.

Fla., Sebring—Highlands Co. election Oct. 16, to vote on $25,000 bonds clay surfacing 9 mi. Rds. 6-10 inclusive, 9 ft.; $25,000 bonds 9 mi. Rds. 1-5 inclusive, 9 ft., all in north half Avon Park Twp. Peacock & Hood, Avon Park, engrs.

Fla., Tampa—Having new surveys made paving Campbello Ave., 2½ in. asphalt blocks. $30,000. Former bids returned unopened. R. D. Martin, city engr. Noted Aug. 9.

La., Crowley—Plans to improve streets, 21,000 yd. concrete. $80,000. I. B. Broussard, clk.

Tennessee—State Dept. Hys. and Pub. Wks., Nashville, soon takes bids paving 6½ mi. highway in Sullivan Co., 18 ft., probably bituminous macadam. J. G. Creveling, highway comr.

Tenn., Columbia—Maury Co. plans reconstructing 130 mi. Carters Creek, Bear Creek, Santa Fe, Williamsport, Hampshire, Glendale, Lewisburg, Culleoka, Campbellsville, Lowell Mill and Kedian Pikes, probably limestone and gravel. $2,000 per mile. Plans election to vote on bonds. B. Wilkes, co. engr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading 6.34 mi. Covington-Falmouth Extension Rd., 24 and 28 ft., Kenton Co. J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, having plans prepared grading 7.32 mi. Jackson-Breathitt Co. line Rd., 24 and 28 ft., State Project 4, Breathitt Co. J. S. Boggs, state highway engr.

Kentucky — State Hy. Dept., Frankfort, rejected bids grading 3.996 mi. Hazard-Whitesburg Rd., State Project 4, Sect. C, Perry Co.; 2.646 mi. Hazard-Jackson Rd., State Project 4, Sect. B, Perry Co. Will readvertise. J. S. Boggs, state highway engr. Noted Sept. 6.

Ky., Danville—City Council voted $38,000 bonds constructing various streets and sewers.

Ky., Louisville—Jefferson Co. plans constructing 3½ mi. Bardstown Rd. up to county limits, 18 ft. $35,000. G. McWain, co. engr.

O., Akron—See "Excavation, Drainage, Irrigation."

O., Canton—Plans paving 0.5 mi. 13th St. N. W., 40 ft., $28,500; 1 mi. Cleveland Ave. N. W., East Side, 20 ft., $30,000. W. E. Sarver, city engr.

O., Toledo — Having plans prepared widening and paving 16 streets, vitr. brick, wood block, asphalt, concrete, bituminous concrete and bituminous macadam, also improving railroad crossing, tunnel, etc. $5,815,000.

O., Toledo—Plans regrading, resurfacing and widening Sylvania Ave. from 34 ft. to 54 ft., asphalt. $275,000. A. Jackson, service dir.

O., Tiffin—Seneca Co. plans 1.6 mi. macadam on Green Springs Rd. $59,664.

O., Zanesville—Bd. Control plans improving Greenwood Ave. from Main St. to Cemetery Ave., $45,000; West Main St. from Y Bridge to Corporate limits, $100,000; Lexington Ave. from Ohio St. to Coopernell Rd., $31,000. C. Spencer, city engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading and surfacing 4 mi. State Trunk Line Rd. 13-48, Kent Co., also 5½ mi. Federal Aid Project 89, Sect. D, Jackson Co., asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 5 mi. State Trunk Line Rd. 40-6, Van Buren Co., and 5 mi. State Trunk Line Rd. 10-30, Iosco Co.; grading and surfacing 9 mi. State Trunk Line 27-6, Huron Co., concrete or gravel, 5.977 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co., concrete, bituminous concrete or gravel. F. F. Rogers, state comr.

Wis., Two Rivers—Making plans paving Monroe, Washington, 17th, 18th, 19th, 20th, 21st, 14th, 13th, and 11th Sts., 20-30 ft., vibrolithic concrete and waterbound macadam. $50,000. D. H. Ames, City Hall, engr.

Minn., Glencoe—Comrs. McLeod Co. plan graveling 30 mi. road between Hutchinson, McLeod Co. and Litchfield, Meeker Co. $45,000. T. C. Christlieb, Hutchinson, and G. H. Martz, Litchfield, engrs.

Kan., Emporia—Lyon Co. had plans prepared paving 2.003 mi. road, 18 ft., brick or concrete. W. S. Ruggles, co. engr.

Kan., Oberlin—Decatur Co. soon takes bids 9.62 mi. earth road, 28 ft., Federal Aid Project 165, Sect. A. Kansas Eng. Co., Topeka, engrs.

Kan., Topeka—Shawnee Co. making plans constructing 11¼ mi. concrete road, 18 ft. A. C. Lagerwall, co. engr.

Kan., Topeka—Shawnee Co. had plans prepared constructing 4 mi. roadway, 20 ft., concrete bridge over Indian Creek, two 34 ft. rein.-con. T girder spans. $160,000. A. C. Lagerwall, co. engr.

Kan., Wellington — Plans to readvertise for grading and concrete paving 7,050 sq. yd. A St. from 15th St. to city limits. $25,000.

Kan., Wichita — Plans paving 4 blocks Emporia, Minnesota, Madison and Market Sts., with asphaltic concrete; 1 block 11th St., brick, 13 blocks Chautauqua, Harrison, Dayton, Murdock and Lewellyn Sts. and alley west and north of Douglas St., concrete. $100,000. P. L. Brockway, City Bldg., engr.

Neb., Fairbury—Soon takes bids paving 35 blocks, asphalt or concrete. N. M. Collier, Fairbury, engr.

Mo., Festus—Plans grading, macadamizing, rocking and graveling 2,100 ft. North 2nd St., 20 ft. $20,000-$25,000.

Tex., Alice—Jim Wells Co. making surveys, grading and asphalt surfacing 20 mi. various roads, 18 ft. $600,000 available.

Tex., Beaumont—Jefferson Co. rejected bids grading and surfacing with rein.-con. 7.35 mi. State Highway 40, Voth Rd., 16 ft. $315,000. Noted Aug. 16.

Tex., Cuero—De Witt Co. election soon to vote on $133,000 bonds gravel surfacing 19 mi. from here to Westhoff and Yorktown, Galcier-to-Gulf Highway, 18 ft. S. Kulawik, co. judge.

Tex., Dallas—Making plans widening, paving and extending Ross Ave. and Raitman St. in Lakewood and Belmont additions. Cost to exceed $25,000. E. A. Kingsley, city engr.

Tex., Denison—Making plans permanent paving, curbing and guttering Morgan and Fannin Sts. $25,000. D. C. Lipscomb, Denison, engr.

Tex., Laredo—Webb Co. plans bituminous topping State Highways 2 and 12, 16-17 ft. $500,000. State and Federal Government appropriated $250,000 toward cost. Engineer not selected.

Tex., Liberty—Liberty Co. plans grading and gravel surfacing 4.5 mi. State Highway 35, from Cleveland north to Cleveland Co. line. $40,000. W. C. Youngs, Dayton, co. engr.

Tex., Memphis—Hall Co. plans grading, gravel and crushed rock surfacing 20 mi. State Highway 5 A, 16 ft. $200,000. A. C. Hoffman, co. judge.

Tex., Lubbock—See "Sewers."

Tex., Mineral Wells—Making plans paving 9 blocks North 4th St., 40 ft., probably brick. $25,000. McClendon & Purnell, Mineral Wells, consult. engrs.

Tex., Teague — Freestone Co. election soon to vote on $25,000 bonds, improving roads in Young Precinct. $25,000. F. Roper, Fairfield, co. judge. Engineer not selected.

Tex., Waxahachie—Ellis Co. voted $750,000 bonds constructing various roads. H. A. Spaulding, Waxahachie, engr.

Okla., Claremore—Rogers Co. voted $850,000 bonds hard surfacing various roads. Noted Aug. 30.

Okla., Pawhuska — Plans grading and paving 9 blocks 6th, 7th and Leahy Aves., 30 ft., 12,500 sq.yd. asphalt, etc. $65,000. J. M. Buckley, city engr.

Okla., Sayre—Voted $25,000 bonds grading and paving Cedar, 1st and 2nd Sts., 2,700 sq.yd. concrete, etc. V. V. Long & Co, 1300 Colcord Bldg., Oklahoma City, engrs. Noted July 19.

Wash., Yakima—Comrs. Yakima Co. soon take bids paving ¾ mi. West Yakima Ave. from West to Grandview Aves., either concrete base with asphalt or black top, or all concrete construction. $40,000.

Calif., Eureka—Had plans prepared improving H St., 476,556 sq.ft. grading, 476,556 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, etc.; Fairfield St., 160,990 sq.ft. grading, 160,990 sq.ft. 1½ in. warrenite bitulithic on 2 in. asphaltic concrete, etc. H. H. Hannah, city engr.

Streets and Roads (Continued)

Calif., Los Angeles — Preparing plans grading, curbing, guttering and paving O'Farrell St. and portions 1st, 3rd, 4th and Sepulveda Sts., etc. To exceed $50,000. J. A. Griffin, city engr.

Calif., San Diego—Had plans prepared improving Arizona St., 108,901 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, etc. F. A. Rhodes, city engr.

Calif., San Diego — Had plans prepared improving Robinson and Pennsylvania Aves., 7th and 8th Sts., 150,387 sq.ft. 1½ in. asphaltic concrete on 3 in. bituminous, etc.; 1st, 2nd and 3rd Sts., 31,200 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, 1 in. binder course, 173,086 sq.ft. 1½ in. asphaltic concrete on 3 in. bituminous, 99,451 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Francisco — Had plans prepared improving Market St., 16,516 cu.yd. excav., 11,987 cu.yd. fill, 23,951 sq.ft. artificial stone walks, 85,212 sq.ft. asphaltic concrete, 5,137 sq.ft. concrete, etc. M. M. O'Shaughnessy, city engr.

Calif., San Francisco—Had plans prepared improving Wilde Ave., 7,100 cu.yd. excav., 1,035 cu.yd. fill, 4,388 lin.ft. concrete curb, 19,200 sq.ft. concrete, 71,225 sq.ft. asphaltic concrete, etc. $38,675. M. M. O'Shaughnessy, city engr.

Que., Outremont—Soon takes bids paving streets $38,825, sidewalks $48,489. E. T. Sampson, city clk.

Ont., Agincourt—Toronto & York Highways Comn. plans 11,000 sq.yd. asphalt pavements on Main St. between Kennedy Rd and Canadian Pacific Ry. station. $75,000. E. A. James, 57 Adelaide St. E., Toronto, engr.

Ont., Hamilton—Having plans prepared asphalt pavements on Dunsmore Ave. $3,223, Stinson St. $46,370, Young St. $46,370, concrete sidewalks on Dunsmore Ave. $6,766. A. L. McFaul, city engr.

Ont., Richmond Hill—Having plans prepared and soon takes bids 6,500 sq.yd. pavement on Yonge St., asphalt, bituminous concrete or macadam. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Toronto—Plans asphaltic pavements on Hiawatha Rd. $15,000, concrete curbs on Hiawatha Rd., Hilton, Luttrell, Fairford, Godfrey and Walpole Aves. $5,000, concrete sidewalks on Balliol St., Davisville Ave. and Forsythe Crescent, asphalt on concrete on 12,000 sq.yd. North Pl., Fairford, Godfrey, Gledhill, Glenfern, Hilton and Walpole Aves., $40,000; bitulithic on concrete on 8,000 sq.yd. Wrenson Rd., Jane St., Gillard, Kilben, Luttrell Aves. $30,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Sept. 27 by F. D. Gallatin, pres. Park Bd., Municipal Bldg., New York, improving main roadway Eastern Parkway, here.

N. Y., Brooklyn—Sept. 26 by E. Riegelmann, boro. pres., Borough Hall, grading, curbing, flagging and constructing ramps and steps on Stillwell Ave., West 10th, West 12th, West 19th, West 31st, West 36th, West 15th, West 16th, West 24th, West 27th, West 28th, West 29th, West 35th and West 37th Sts.

N. Y., Long Island City—Sept. 27 by M. E. Connolly, boro pres., Queens Boro, Queens Subway Bldg., grading, curbing, and laying sidewalks on 12th Ave. from Graham to Pierce Aves., constructing receiving basins, and paving with sheet asphalt on concrete 12th Ave. from Bway. to Pierce Ave., paving with sheet asphalt on concrete, constructing receiving basins, etc., Ditmars Ave. (former bids rejected). Noted Sept. 6.

N. Y., Long Island City—Sept. 25 by M. E. Connolly, boro pres., Queens Borough, Queens Bldg., grading and improving Jamaica Bay Blvd., incl. 96 ft. trestle, retaining walls, etc.; repaving with sheet asphalt on concrete and macadam, Jackson Ave.

N. Y., New York—Sept. 25 by G. A. Whalen, comr. Dept. Plant and Structures, Municipal Bldg., reconstructing pavement, curbs, etc., on south clearance roadway alongside Manhattan approach of Williamsburg Bridge.

N. J., Belvidere—Oct. 10, by Bd. Freeholders Warren Co., constructing Sect. 1, Phillipsburg-Belvidere Rd. H. W. Vetter, co. engr.; adv. E. N.-R. Sept. 20.

Pa., Montoursville—Sept. 28, by Boro. Council, brick paving 2,500 ft. Loyalsock Ave., also storm sewers. M. L. Smith, 1st Natl. Bank Bldg., Williamsport, engr.

Maryland—Sept. 25, by State Rds. Comn., Baltimore, paving 2 mi. highway between Libertytown and Oak Orchard, Frederick Co., Contr. F-62. J. N. Mackall, chn.; adv. E. N.-R., Sept. 20.

W. Va., Weston—Oct. 15, by Lewis Co., grading and paving 23½ mi. roads, 18 ft. $500,000.

Fla., Jacksonville—Oct. 1, by F. Brown, clk., Duval Co., clearing Dunns Creek and Baldwin Bryceville Rds., constructing 2 wooden bridges.

Fla., Miami—Sept. 25, by F. H. Wharton, city mgr., sheet asphalt paving, curbing and guttering various streets. $25,000.

Fla., Sebring—Sept. 24, by Highlands Co., grading 13 mi. road from Lake Jackson to Hardee Co. line and road from Lake Annie to Parker Island, 16 ft., 39 acres clearing, 45,000 cu.yd. excav., $29,000; 7 mi. road from Sick Island to Kissimmee River, 16 ft., 36 acres clearing, 75,000 cu.yd. excav., $40,000. Peacock & Hood, Sebring, engr.

Alabama — Oct. 9, by State Hy. Dept., Montgomery, improving 14.293 mi. Ashland-Heflin Rd., Federal Aid Project 136, Clay Co., 64 acres clearing, 93,666 cu.yd. common and 46,146 cu.yd. solid rock excav.; 27,847 sta.yd. overhaul, 50,000 cu.yd. top soil, 15,000 half mi. units additional haul, etc. W. S. Keller, state highway engr.

Miss., Brandon—Sept. 28, by Supervs. Rankin Co. grading, gravel surfacing and bridging 20.322 mi. Federal Aid 163 from Jackson to Meridian, 161,697 cu.yd. earth and 85,530 cu.yd. borrow excav., 1,589 cu.yd. concrete, 122,098 units gravel, etc. H. C. Dietzer, State Hy. Dept., Jackson, engr.

Miss., Brandon—Sept. 28, by Bd. Supervs. Rankin Co., Court House, grading, gravel surfacing and bridging 3.473 mi. Federal Aid 162, between Jackson and Plain, 136,902 cu.yd. borrow excav., 123.9 sq.yd. concrete 27,742 cu.yd. gravel, etc. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Water Valley—Oct. 1, (change of date) by Supervs. Yalobusha Co., grading and gravel surfacing 12.492 mi. Federal Aid Project 161, from Grenada to Holly Springs, 60,628 cu.yd. earth, 72,699 cu.yd. borrow, 73,632 cu.yd. gravel, etc., H. C. Dietzer, c/o State Hy. Dept., Jackson, engr. Noted Sept. 6.

O., Cleveland—Sept. 26, paving Camden, Continental and Crestwood Ave., and repairing pavements in Rockefeller and Wade Parks. To exceed $25,000. R. Hoffman, city engr.

Ind., Jeffersonville—Oct. 1, by Clark Co., constructing Jackson Unit Rd., Carr Twp $25,000. K. P. Barnes, co. engr.

Michigan—Oct. 1, by State Hy. Dept., Lansing, grading and surfacing 3.869 mi. State Trunk Line Rd. 13-48, Kent Co., 17,711 cu.yd. excav., 43,352 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Michigan—Oct. 3, by State Hy. Dept., Lansing, grading and surfacing 5.696 mi. Federal Aid Project 89, Sect. D, Jackson Co., 22,622 cu.yd. excav. and 66,860 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Illinois—Sept. 26, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 76.01 mi. with portland cement concrete, 4 in. monolithic brick, 4 in. bituminous filled brick, bituminous concrete with or without binder course. Cement will be furnished. Grading 63.82 mi. involving 971,747 cu.yd. excav. and 5,850 cu.yd. concrete. C. H. Older, ch. highway engr.

Ill., Winnetka—Sept. 25, by Bd. Local Impvts., 12,000 sq.yd. rein-con. paving, drainage, catchbasins, etc. Windes & Marsh, 598 Birch St., engrs.

Wis., Milwaukee—Sept. 21, by Dept. Pub. Wks., new pavements, etc., on American, Illinois, Indiana, 2nd and 10th Aves., Booth, Clarke, Dakota, 46th and Vliet Sts., also various alleys 21,825 sq.yd. concrete, 6,802 sq.yd. sheet asphalt, 4,024 sq.yd. vibrolithic concrete, asphaltic concrete or plain concrete, 6,357 cu.yd excav. J. Schwada, city engr.

Minn., St. Paul—Oct. 1, by G. J. Ries, aud. Ramsey Co., grading, etc. Project 23-60, Prescott connection between Point Douglas Rd. and Minnesota Trunk Highway 3, 78,453 cu.yd. earth, 1,150 cu.yd. loose and 15,260 cu.yd. solid rock excav., 351,428 cu.yd. overhaul, 20,710 lb. steel, $50,000; Project 23-69, Lake Phalen Blvd. between city limits and Minnesota Trunk Highway 1, 3,910 cu.yd. excav., 19,177 sq.yd. bituminous macadam or asphaltic concrete Class B on crushed stone or asphaltic concrete, 11,566 lin.ft. concrete gutter, etc., $70 000. P. N. Coates, co. surv.

Kan., Ft. Scott—Sept. 24, by B. Boyle, co. engr. Bourbon Co., concrete paving 2 mi. Federal Aid Project 117, 18 ft.

Kan., Topeka—Oct. 5, by Clerk Decatur Co., grading, etc., 9.62 mi. Kansas City-Denver Air Line Rd., Federal Aid Project 165, Sect. A, 28 ft. Kansas Eng. Co., Topeka, engrs.

Tex., Barstow—Oct. 9, by E. W. Suratt, judge Ward Co., grading and gravel surfacing 5.5 mi. State Highway 1, Federal Aid Project 391 A, 18 ft. $45,184. R. E. Booker, Monahans, res. engr.

Tex., Dallas—City Com. taking bids paving, curbing, guttering and widening Marlborough St. from Jefferson to Brooklyn Sts., brick, bitulithic, rock asphalt or other type. $25,000. E. A. Kingsley, city engr.

Tex., Ennis — City Com. taking bids permanent paving, curbing and guttering 2½ mi. East Ave., Mains, Dallas, Baylor, McKinney Sts., et. al., miscellaneous types. $60,000. H. McCandless, Ennis, engr. Noted Sept. 13.

Tex., Ft. Worth—Sept. 25, 9,890 sq.yd. paving, bitulithic rock asphalt, amiesite or 3 in. vertical fibre brick on concrete, 7,000 sq.ft. curb and gutter, 2,900 cu.yd. excav. on West Bway., White and Tremont Sts. $40,000. D. L. Lewis, city engr.

Tex., Hillsboro—Sept. 28, by W. L. Wray, judge Hill Co., grading and gravel surfacing 5.65 mi. State Highway 2 E, Itasca Dist., 16 ft., $66,000, 4.85 mi. State Highway 2 E, Covington Dist., 16 ft., $64,000. Will be surfaced later with bituminous topping. G. R. Johnston, co. engr. Noted Aug. 30.

Okla., Tahlequah—Sept. 25, by E. Covell, city clk., paving Muskogee Ave., 14,200 sq. yd. concrete, etc. $46,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs. Noted Aug. 30.

Calif., Oakland—Receiving bids improving 9th St., 37,500 sq.ft. grading, 2,400 sq. ft. concrete gutter, 35,100 sq.ft. asphaltic concrete, etc.; 6th St., 58,222 sq.ft. grading, 55,706 sq.ft. 3 in. warrenite bitulithic on 4 in. asphaltic concrete, 2,164 lin.ft. concrete curb, etc.; Castro St., 78,405 sq.ft. grading, 2,583 lin.ft. concrete curb, 75,257 sq.ft. 2 in. warrenite bitulithic on 6 in. concrete, etc.; 15th St., 40,177 sq.ft grading, 1,360 sq.ft. concrete gutter, 26,050 sq.ft. 2 in. warrenite bitulithic on 6 in. concrete, etc. W. W. Harmon, city engr.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Sept. 12, repaving with sheet asphalt **(1)** Georgia Ave. **(2)** Prospect Ave. **(3)** Prospect Ave.; repaving with permanent asphalt **(4)** Schenectady Ave. **(5)** Kings Highway **(6)** Forrest St. **(7)** Joralemon St. **(8)** Manhattan Ave. **(9)** 67th St.; repaving with grade 1 granite pavement **(10)** Kent Ave. **(11)** 41st St. **(12)** Forrest St.; grading **(13)** Flatbush Ave. south of Ave. U, from Borough Asphalt Co., 1301 Metropolitan Ave., **(1)** $13,389 **(8)** $146,709; Cleveland Trinidad Paving Co., Flushing, **(4)** $17,705; Cranford Co., 52 9th St., **(6)** $5,706 **(9)** $9,627; Uvalde Asphalt Paving Co., 1 Bway., New York, **(2)** $12,143 **(3)** $39,830; J. Meehan & Son, 74 Cortlandt, New York, **(10)** $45,468; W. H. Geoghegan Realty Co., **(13)** $441,504; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., **(5)** $124,814 **(7)** $9,726; M. J. O'Hara Contg. Co., 717 65th St. **(11)** $19,405; F. J. Gallagher, 490 Park Pl., **(12)** $18,333. Noted Sept. 6.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving with bituminous concrete roadway of Myrtle Ave., from W. P. MacDonald Constr. Co., 342 Madison Ave., New York, $45,760; concrete curbing and guttering, etc., Benziger Ave., from J. Johnson Sons, 455 Bway., West New Brighton, $6,632. Noted Sept. 6.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Borough Hall, Sept. 16, bituminous concrete repaving Grove Ave., from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $60,808; laying concrete curb and gutter 4 ft. wide on south side Lincoln Ave., from F. Leedecke, $4,734. Noted Sept. 13.

Pennsylvania—State Hy. Dept., Harrisburg, Sept. 11, improving roads **(R. means Route and A. means Application)** R. 54, Cherryhill and Rayne Twps., Indiana Co., from Burnside Constr. Co. Inc., Burnside, $309,449; R. 52 and A. 1361 Boswell Boro., Somerset Co., from C. J. Newman & Co., Boswell, $22,010; R. 160 Shoemakersville Boro. and Perry Twp., Berks Co. from Ambler-Davis Co., Harrison Bldg., Phila. $60,643; A. 1467 Harbor Creek Twp., Erie Co., from C. H. Fry Constr. Co., Cherry and 19th Sts., Erie, $110,629; R. 117, Everson Boro., Fayette Co., from J. I. Dick, Scottdale, $37,742; R. 79, Butler, Connoquenessing and Franklin Twps., Butler Co., from Burns Bros., 343 East Washington St., New Castle, $309,121; R. 149, Wyomissing and West Reading Boros., Berks Co., from Ambler-Davis Co., Harrison Bldg., Phila., $71,070; A. 2557, Northampton Boro., Northampton Co., from General Paving Co., B & B Bldg., Allentown, $42,352; R. 138,

Streets and Roads (Continued)

A. 1555 Manheim Boro., Lancaster Co., from Swanger-Fackler Constr. Co. Inc., 2nd and Canal Sts., Lebanon, $43,580; A. 2002, Shrewsbury Twp. and New Freedom Boro., York Cos. from W. C. Guncheon & Co., Masonic Bldg., Harrisburg, $57,602; R. 69, South Buffalo Twp., Armstrong Co., from F. S. Wilson, Kittanning, $89,944; R. 212, Burlington and North Towanda Twps., Bradford Co., from A. W. Hinaman, Canton, O., $267,087; A. 874, Fayette City Boro., Washington Twp., Fayette Co., from P. Derienzio, Box 137 Fayette City, $15,055; R. 131 Middletown Twp., Delaware Co., from Highway Constr. Co., Phila., $100,074; R. 268, Jefferson Boro., Greene Co., from Reed & Moore, Waynesburg, $39,209; R. 120, Irwin Boro., Westmoreland Co., from H. DeAngelis, P. O. B. 814, Irwin, $69,603; R. 116, Smithfield Boro., Georges Twp., Fayette Co., from E. B. Swaney, R. D. 5, Uniontown, $84,130; R. 83, A. 1558, Conneaut Lake Boro., Sadsbury, Summit and Pine Twps., Crawford Co., from H. E. Bunce, Linesville, $252,936. Noted Aug. 30.

Maryland—State Rds. Comn., Baltimore, 1.02 mi. concrete road from New Windsor toward Oak-Orchard, Carroll Co., Contr. Cl-43, from Gosnell, Russell Co., Frederick, $39,867. Noted Sept. 6.

La., Lake Charles—Paving 40,000 sq.yd. various streets, from Stewart & Ritchie, Wichita, Kan., concrete, $115,000, brick, $144,000; Southern Roads Co., American Trust Bldg., Birmingham, Ala., bitulithic, $130,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, Sept. 14, grading, bridging and paving roads as follows: (1) Sect. "F-1," Lima-Spencerville Rd., Allen Co. (2) 3 mi. Sect. "M" Barnesville-Bellaire Rd., Belmont Co. (3) 2.93 mi. Sect. "P-2" Cincinnati-West Union Rd., Brown Co. (4) 6.122 mi. Sect. "Q," Cincinnati-West Union Rd., Brown Co. (5) 0.215 mi. Sect. "E" Coshocton-Mt. Vernon Rd., Coshocton Co. (6) 0.393 mi. Sect. "A" Coshocton-Plainfield-Cambridge Rd., Coshocton Co. (7) 0.912 mi. Sect. "Bloomingburg" Washington-London Rd., Fayette Co. (8) 3.17 mi. Sects. "D-J-L 2" Archbold-Fayette Rd., Fulton Co. (9) 0.626 mi. Sects. "H-G-J-K" Cleveland-Meadville Rd., Geauga Co. (10) 2.367 mi. Sect. "G-1" Cadiz-Carrollton Rd., Harrison Co. (11) 5.287 mi. Sect. "B-1" Toledo-Napoleon Rd., Henry Co. (12) 0.65 mi. Sect. "Napoleon" Toledo-Napoleon Rd., Henry Co. (13) 3.437 mi. Sects. "N-1" and "N-3" Maumee, Toledo-Napoleon Rd., Lucas Co. (14) 3.437 mi. Toledo-Napoleon Rd., Lucas Co. (15) 1.4164 mi. Toledo-Napoleon Rd., Lucas Co. (16) 1.4164 mi. Toledo-Napoleon Rd., Lucts Co. (17) 2508 mi. Sect. "B" Youngstown-East Liverpool Rd., Mahoning Co. (18) 0.734 mi. Sect. "Covington" Piqua-Covington Rd., Miami Co. (19) 0.734 mi. Sect. "Covington" Piqua-Covington Rd., extra width, Miami Co. (20) 2.494 mi. Sect. "A" Germantown-Middletown Rd., Montgomery Co. (21) 2.158 mi. Sect. "I-2" McConnellsville-New Lexington Rd., Morgan Co. (22) 0.75 mi. Sect. "K-2" McConnellsville-Caldwell Rd., Morgan Co. (23) 1.09 mi. Sect. "A" Greenville-New Paris Rd., Preble Co. (24) 1.54 mi. Sect. "A-1" Fremont-Port Clinton Rd., Sandusky Co. (25) 1.712 mi. Sect. "B" Fremont-Republic Rd., Sandusky Co. (26) 2.849 mi. Sect. "B" Portsmouth-Jackson Rd., Scioto Co. (27) 0.681 mi. Sect. "C" Portsmouth-Jackson Rd., Scioto Co. (28) 2.01 mi. Sect. "A" Fremont-Republic Rd., Seneca Co. (29) 1.596 mi. Sect. "P" Cleveland-Massillon Rd., Stark Co. (30) 1.561 mi. Sects. "C" and "D-1" Massillon-Wooster Rd., Stark Co. (31) 1.49 mi. Sect. "I" Cleveland-Massillon Rd., Summit Co. (32) 2.7 mi. Sect. "J" Cleveland-Massillon Rd., Summit Co. (33) 3.44 mi. Sect. "K" Cleveland-Massillon Rd., Summit Co. (34) 1.7 mi. Sect. "L" Cleveland-Massillon Rd., Summit Co. (35) 1.39 mi. Sect. "M" Cleveland-Massillon Rd., Summit Co. (36) 1.203 mi. Sect. "I" Akron-Wooster Rd., Wayne Co. (37) Sects. "E-1" and "E-3" Bowling Green-Findlay Rd., Wood Co. (38) 3.127 mi. Sect. "E" Savannah-Vermillion Rd., Huron Co. (39) grading and constructing drainage structures 3.538 mi. Sect. "A-1" Dennison-National Rd., Tuscarawas Co. (40) 7.343 mi. Sect. "G" Marietta-Athens Rd., Washington Co. (41) 4.368 mi. Sect. "A" Toledo-Grand Rapids Rd., Wood Co. (42) 5.475 mi. Sect. "E" Toledo-Grand Rapids Rd., Wood Co. (43) grading, constructing drainage structures and placing loose limestone 0.208 mi. Sect. "H" Marysville-Marion Rd., Union Co. (44) concrete curbing 1 mi. Sect. "L" Bucyrus-Marion Rd., Crawford Co., (45) grading, bridging and paving 3.249 mi. Sect. "L" New Philadelphia - West Lafayette Rd., Tuscarawas Co. with (a) bituminous macadam asphalt (b) bituminous macadam tar (c) Kentucky rock asphalt (d) waterbound macadam (e) rein.-con. (f) brick (g) concrete and gravel (h) sheet asphalt (i) plain concrete (j) tar macadam (k) asphalt macadam (l) rein.-con. and brick (m) bituminous concrete and brick (n) bituminous concrete (o) bituminous macadam (p) bituminous concrete, from Agerter & Scott, Lima, (1a) $19,501 (1b) $19,867; Frost Constr. Co., Findlay, (1c) $23,188; Andrews Asphalt Paving Co., Hamilton, (1p) $29,560; E. A. Hatcher, Mingo Junction, (2a) $104,916; H. F. Dougherty, Steubenville, (2b) $100,433; Craig & Jordan, Blanchester, (3d) $44,156; Bashford & Day, Peebles, (4d) $181,851; McClery & McGregor, West Lafayette, (5e) $6,185 (6e) $10,666; O. C. Morrow, Crestline, (44) $4,577; M. J. Cooney, Springfield, (7f with macadam base) $40,978 (7f with concrete and macadam base) $40,858; LaBoiteaux & Hoyes, Toledo, (8d) $22,670; J. A. Stein, Niles, (9g) $12,846; Billiter & Oliver Bros., Cincinnati, (10a) $75,240 (10b) $75,240; A. Langenderfer, Toledo, (11a) $94,363 (11b) $94,865 (12e) $20,899; Greager Bros., Liberty Center, (11e) $118,963; Johnson, Van Wagoner & Johnson, Toledo, (13f) $208,304 (13e) $172,969 (14f) $122,974 (14e) $105,598 (15f) $89,444 (16f) $67,841 (16e) $57,243; Dorsey Constr. Co., Findlay, (13h) $179,294 (14h) $109,268 (15h) $77,453 (16h) $59,557; Continental Bitumen Co., Toledo, (13q) $195,716 (14q) $116,840 (15q) $84,101 (16q) $64,153; T. W. Miller Co., 115 West Princeton Ave., Youngstown, (17a) $53,792; G. A. Gialdini, Youngstown, (17b) $48,448; Wapakoneta Cement Block Co., Wapakoneta, (18f) $24,568 (19f) $26,246 (29e) $67,985; J. G. Mercer Sons, Miami, (18i) $12,199; Stocker & Warren, Greenville, (19i) $19,318; Biegier Bros., Middletown, (20e) $60,491; W. D. Winchell Co., 337 Siebert St., Columbus, (20c) $68,968; N. B. Koffroth, Richwood, (21a) $55,349 (21j) $56,286; E. H. Clifton, Eaglesport, (22k) $31,175; Hughes & Wilson, Malta, (22j) $31,499; H. W. Curry, Eaton, (23c) $31,720 (23k) $27,491; Hiatt Constr. Co., New Paris, (23i) $37,338; F. Tejan, 1336 East 3rd St., Dayton, (23j) 26,873; Seneca Constr. Co., Kansas, (24e) $50,097 (25f) $60,877 (25e) $56,135 (28i) $71,189 (28f) $80,873; N. B. Putnam, Van Wert, (25a) $43,919 (25b) $43,838; Mountain & Cloran, Ironton, (26a) $91,453; W. C. Moore, Marysville, (27f) $29,060; J. Herzog, Forrest, (28k) $51,460 and $52,970; W. E. Burk & Sons, Akron, (29f) $77,671; G. F. Druschel, Kenton, (29k) $58,124; Holmes Constr. Co., Wooster, (30f) $59,698 (31m) $71,291 (32n) $103,139 (33n) $144,871 (34n) $64,624 (36f) $50,423; McArthur Constr. Co., Kenton, (31l) $66,625 (32l) $97,610 (33l) $139,745 (34l) $62,059 (35l) $65,987; McCourt Constr. Co., Akron, (45n) $68,017; Leroy Springer Co., New Philadelphia, (45e) $118,651; L. C. Bell Co., West Mansfield, (39) $46,677; C. O. Hurd, Marysville, (43) $19,804; C. A. Baker Co., Columbus, (40) $136,075; Shoyer & Kill Co., Akron, (36e) $42,686; W. G. Reimund, Holgate, (41) $30,595 (42) $35,759; H. P. Streicher Co., 319 Terminal Bldg., Toledo, (37o) $19,710; J. W. McDowell, Ottawa, (37c) $19,486 (38c) $30,655; Public Works Constr. Co., 57 Wiggins Blk., Cincinnati, (38p) $38,862.

O., Cleveland—Paving with asphalt and concrete, East 18th, East 19th and East 24th Sts., from Highway Constr. Co., 903 Lorain County Bank Bldg., Elyria, $29,721, $16,996 and $14,812 respectively; East 131st St., from Gould & Mayback, 16311 Saranac Rd., $17,246; Elbra Court, from A. M. Pejsa Paving Co., 3161 Derbyshire Rd., $3,121. Work involves 20,150 sq.yd. asphalt and 3,925 sq.yd. concrete.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.14 mi. State Trunk Line Rd. 95-1, Presque Isle Co., 25, 401 cu.yd. excav., 48,249 sq.yd. gravel, from L. W. Edison, Charlevoix, $53,470; 4.146 mi. State Trunk Line Rd. 33-3, Sect. B. Oscoda Co., 23,946 cu.yd. excav., 38,851 sq.yd gravel, from Edwards Constr. Co., 1920 Clinton Ave., Saginaw, $36,470; 4.988 mi. State Trunk Line Rd. 18-24 Gladwin Co., 42,127 cu.yd. excav., 46,883 sq.yd. gravel, from B. F. Raymond, Gladwin, $47,828. Noted Aug. 23.

Michigan—State Hy. Dept., Lansing, grading 4.197 mi. Federal Aid Project 50, Sect. B, Monroe Co., from Closser Bros., 8427 Senator Ave., Detroit, $40,492. Noted Sept. 6.

Minn., St. Paul—Ramsey Co., Sept. 10, improving Centerville Rd. between Edgerton St. and North Birch Lake Blvd., 47,500 cu.yd. excav., 194,000 cu.yd. overhaul, 40,700 sq.yd. paving, from Hanlon & Okes, 338 Lumber Exchange, Minneapolis, $2.45 per sq.yd. for one course concrete, Class A, $2.36 for Class B and $2.36 for Class C.; 1.69 per sq.yd. for asphaltic concrete on 6 in. concrete base Class A, $1.62 for Class B and $1.62 for Class C. Noted Aug. 23.

Missouri—State Hy. Dept. Jefferson City, grading roads (**S. P. 1-5 Atchison means State Project, Route 1, Sect. 5, Atchinson Co.) 5 mi. S. P. 1-5 Atchinson**, 88,450 cu.yd. earth and 2,611 cu.yd. borrow excav., etc., from G. W. Condon, 510 Farnam Bldg., Omaha, Neb., $39,084, **0.606 mi. S. P. 70-4 Madison**, from General Constr. Co., Syndicate Trust Bldg., St. Louis, $8,140, **3.723 mi. S. P. 5-91 Douglas**, from Allhands & Davis, 705-6 Frisco Bldg., Joplin, $22,831. **4.789 mi. S. P. 15-62 Miller**, from G. R. Graffeureid, Bagnell, $17,659, **4.606 mi. S. P. 3-4 Mercer**, from M. Haase, Trenton, $19,020, **2.34 mi. S. P. 13-14 Ray**, from L. A. Woods Constr. Co., Smithville, $12,072, **3.817 mi. S. P. 16-9 Newton**, from Kelly & Underwood, Granby, $17,550, **3.37 mi. S. P. 1-107 Newton**, from J. P. Wolfenbarger, Mosho, $9,835, **4.451 mi. S. P. 10-18 Carroll**, from E. C. Johnson, Carrollton, $7,605, **5 mi. S. P. 16-10 Barry**, from Kelly & Underwood, Granby, $6,758, **2.147 mi. S. P. 12-42 Osage**, from Birmingham & Terry, Vienna, $5,381, **4.943 mi. S. P. 35-6 Cass**, from L. A. Woods Constr. Co., Smithville, $16,322, **2.784 mi. S. P. 10-19 Carroll**, from E. C. Johnson, Carrollton, $9,388, **3.136 mi. S. P. 10-17 Carroll**, from A. W. Mosley, Gilliam, $8,675, **2.2 mi. S. P. 16-7 Newton**, from C. I. Williams, Monett, $9,953, **4.943 mi. S. P. 35-7 Cass**, from L. A. Woods Constr. Co., Smithville, $19,590, **3.976 mi. S. P. 5-1 Putnam**, from L. W. Spengler, Mexico, $22,395, **4.919 mi. S. P. 3-3 Mercer**, from M. Hasse, Trenton, $24,220, **1.108 mi. S. P. 12-43 Gasconade**, from A. L. Cook, Ottawa, Kan., $26,553, **4.656 mi. S. P. 35-8 Cass**, 41,637 cu.yd. earth, 3,721 cu.yd. solid rock, and 13,455 cu.yd. borrow excav., 14,580 cu.yd. overhaul, etc., from L. A. Woods Constr. Co., Smithville, $32,574, **4.171 mi. S. P. 8-70 Marion**, 65,782 cu.yd. earth and 14,473 cu.yd. loose rock excav., 50,875 cu.yd. overhaul, etc., from Cameron & Joyce, Keokuk, Ia., $63,717, **5 mi. S. P. 31-2 De Kalb**, 28,676 cu.yd. earth and 3,716 cu.yd. borrow excav., etc., from L. W. Spengler, Mexico, $26,174, **4.98 mi. S. P. 13-15 Ray**, 25,379 cu.yd. earth and 40,596 cu.yd. borrow excav., etc., from L. A. Woods Constr. Co., Smithville, $24,946, **4.242 mi. S. P. 29-1 Worth**, from A. L. Cook, Ottawa, Kansas, $23,224; surfacing **4 mi. S. P. 2-2 Jackson**, 22,431 cu.yd. earth and 3,507 cu.yd. loose rock excav., 39,972 sq.yd. rein. con., etc., from Highway Constr. Co., Webb City, $123,781, **1.462 mi. S. P. 14-85 St. Louis**, 5,532 cu.yd. earth excav., 44,033 sq.yd. sledge stone base, 178,508 sq.yd. rock asphalt, etc., from E. C. Johnson, Carrollton, $35,350, **4.318 mi. S. P. 5-37 Howard**, 40,895 sq.yd. chats, etc., from Highway Constr. Co., Webb City, $60,001, **3.432 mi. S. P. 55 A-2 Mississippi**, 7,920 cu.yd. earth and 3,874 cu.yd. borrow excav., 19,727 sq.yd. concrete, 12,796 sq.yd. gravel surfacing, etc., from R. L. Williams, Wyatt, $73,372; grading roads (**F. P. 205 B Buchanan means Federal Project 205 B, Buchanan Co.), 4.202 mi. F. P. 205 B Buchanan**, from J. Stanton & Son, 5th and Kiowa Sts., Leavenworth, Kan., $20,500, **2.258 mi. F. P. 205 C Buchanan**, 28,770 cu.yd. earth and 61,571 cu.yd. borrow excav., 27,600 cu.yd. overhaul, etc., from C. H. Schmidt, 3108 Jule St., St. Joseph, $43,663, **F. P. 234 A De Kalb**, 47,933 cu.yd. earth and 20,316 cu.yd. borrow excav., etc., and **4.948 mi. F. P. 234 B De Kalb**, 18,874 cu.yd. earth and 9,390 cu.yd. borrow excav., 18,727 cu.yd. overhaul, etc., from Land Constr. Co., Ballinger Bldg., St. Joseph, $33,533 and $30,546 respectively, **3.593 mi. F. P. 167 F Bates**, 79,022 cu.yd. borrow, etc., from Kelly & Underwood, Granby, $32,759; grading and concrete paving **2.258 mi. F. P. 205 C. Buchanan**, 28,770 cu.yd. earth and 61,571 cu.yd. borrow excav., 27,600 cu.yd. overhaul, 23,354 sq.yd. concrete, etc., and **4.202 mi. F. P. 205 B Buchanan**, 20,515 cu.yd. earth and 3,322 cu.yd. borrow excav., 25,260 cu.yd. overhaul, 44,369 sq.yd. concrete, etc., from J. Stanton & Son, 5th and Kiowa Sts., Leavenworth, Kan., $106,358 and $147,173 respectively, concrete paving **2.258 mi. F. P. 205 C Buchanan**, 23,354 sq.yd. concrete, from J. Stanton & Son, 5th and Kiowa Sts., Leavenworth, Kan., $64,156; grading and paving roads (**F and S P. 205 A, Buchanan, means Federal and State Project 205 A, Buchanan Co.) 2.599 mi. F and S. P. 205 A Buchanan**, 98,034 cu.yd. borrow, 26,526 sq.yd. concrete, etc., grading **2.599 mi. F. and S. P. 205 A, Buchanan**, 98,034 cu.yd. borrow and 4,331 cu.yd. earth excav., etc., concrete paving **2.599 mi. F. and S. P. 205 A Buchanan**, 26,526 sq.yd. concrete and **4.202 mi. F. and S. P. 205 B Buchanan**, 44,369 sq.yd. concrete, etc., from J. Stanton & Sons, 5th and Kiowa Sts., Leavenworth, Kan., $120,367, $44,933, $78,174 and $131,113 respectively. Noted Aug. 30.

Mo., St. Louis—From Granite Bituminous Paving Co., Ry. Exch. Bldg., grading and surfacing with bitulithic on concrete 6,945 sq.yd. Dickson St., $422,702, 6,950 sq.yd.

Streets and Roads (Continued) -

Thomas St., $41,003, 7,810 sq.yd. Dayton St., $46,017, 8,775 sq.yd. California St., $47,273; from Brighton Constr. Co., 4115 McRee St., removing old brick and paving with refined asphalt 9,225 sq.yd. Hamilton St., $35,986; from W. Haffner, 715 South Vandeventer St., grading and paving with granite blocks, 4,410 sq.yd. Madison St., $37,512. Noted Aug. 23.

Tex., Austin—Travis Co. grading and bridging 7.92 mi. State Highway 20 A, between Oak Hill and Co. line, 24 ft., from H. J. Evans, 500 West 15th St., $39,619. Engs. est. $38,473 incl. 10 per cent for engineering and contingencies. Noted Aug 23.

Tex., Brenham—Washington Co., grading and bridging 17.3 mi. State Highway 36, Federal Aid Project 358, 24 ft., from Womack Constr. Co., Sherman, $123,976. Engrs. est. $165,000, incl. engineering and contingencies. Noted Aug. 16.

Tex., Houston—Asphalt paving Waugh Dr., from Smith Bros., Sumpter Bldg., Dallas, $100,087. Noted Sept. 6.

Tex., Pittsburg—Camp Co. grading, surfacing with crushed iron ore rock base, bituminous topping and bridging 6.19 mi. State Highway 11, 18 ft., from Womack Constr. Co., Sherman, $147,336. Engrs. est. $159,475 incl. engineering and contingencies. Noted Aug. 9.

Colorado—State Hy. Dept., Denver, concrete paving 2.998 mi. Pueblo-Trinidad Rd., Federal Aid Project 2 R, Las Animas Co., from Strange-Mackey Constr. Co., Colorado Springs, plain cement $95,614, coarse aggregate specifications $112,345, Topeka pavement specifications $112,345, warrenite bitulithic pavement $110,850; 3 mi. State Project 806, El Paso Co., from R. P. Morrison, Golden, $17,097; mountain grading 5.621 mi. Federal Aid Project 224, Park Co., from M. J. Kenney, Bank Blk., Denver, $54,347; paving 2.463 mi. Federal Aid Project 252, Larimer Co., from F. C. Dreher Constr. Co., Cooper Bldg., Denver, $84,677; gravel surfacing and bridging 0.377 mi. Federal Aid Project 241, Delta Co., from Winterburn & Lumsden, Grand Junction, $99,310; gravel surfacing 5.372 mi. Federal Aid Project 240, Eagle Co., from A. L. Hackett, Gypsum, $66,178; grading and gravel surfacing 4.545 mi. Federal Aid Project 245, Bent Co., from W. A. Colt & Son, Las Animas, $42,786.

California—State Hy. Dept., Sacramento, grading and graveling 3 mi. road between point 1/5 mi. south of San Benito River and Pajaro River Bridge, San Benito Co., from Granite Constr. Co., Watsonville, $76,947.

Calif., Eureka—Improving H St., 476,556 sq.ft. grading, 476,556 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, etc., and Fairfield St., 160,990 sq.ft. grading, 160,990 sq.ft. 1½ in. warrenite bitulithic on 2 in. asphaltic concrete, etc., from Mercer-Fraser Co., Eureka, $142,376 and $35,251 respectively. Noted Sept. 20.

Calif., Ft. Bragg—Improving Laurel and Redwood Sts., etc., 264,290 sq.ft. grading, 206,507 ft. 3½ in. asphaltic concrete, 57,720 sq.ft. 4½ in. asphaltic concrete, etc., from J. A. Costello, 1083 Shotwell St., San Francisco, $64,050. Noted Sept. 6.

Calif., Fresno—Fresno Co. improving 9.7 mi. roads, from Thompson Bros., G and Divisadero Sts., 14,729 cu.yd. excav. at $0.85 per cu.yd., 822,755 sq.ft. 4 in. asphaltic concrete $0.16, etc., total $144,160. Noted Sept. 6.

Calif., Los Angeles — Improving Vernon Ave., from W. Liddington, 420 East 60th St., total for grading $4,995, 166,477 sq.ft. concrete at $0.23 1/3 per sq.ft., 18,410 sq. ft. walks $0.19, etc., total $51,700. Noted Sept. 13.

Calif., Martinez—Contra Costa Co improving Rd. Dist. 1, from California Constr. Co., 58 2nd St., San Francisco, 650,000 sq. ft. grading at $0.02 per sq.ft., 440,000 ft. 1½ in. warrenite bitulithic on 3 in. asphaltic concrete $0.24, etc., total $125,049. Noted Aug. 30

Calif., Martinez—Contra Costa Co. improving Div. 36, county highway system, 3,800 cu.yd. embankment, 2,090 cu.yd. concrete, from Galbraith & Janes, Yuba City, $34,065. Noted Aug. 23.

Calif., San Diego—Common Council, improving Beech St., from Griffith Co., 25 14th St., 141,234 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous $0.174, 6,799 sq. ft concrete sidewalk $0.23, etc., Elm and 31st Sts., from J. Engebretsen, McNeece Bldg., 11,161 cu.yd. excav. $1.70, 22,699 sq.ft. concrete sidewalk $0.30, 160 ft. timber trestle bridge on concrete footings $5,500, etc. Noted Aug. 23.

Calif., Stockton—San Joaquin Co., improving Lower Sacramento Rd., 1,000 cu.yd. grading, 300 tons gravel, 2,700 tons asphaltic concrete, etc., from Clark & Henery Constr. Co., 38 South Sutter St., $24,270. Noted Aug. 23.

CONTRACTS AWARDED

Vermont — Dept. Highways, Montpelier, paving 2.35 mi. Williamstown, Mass., and Bennington Vt. Rd., in Pownal, 18 ft., 4,881 cu.yd. rein.-con., 15,686 cu.yd. earth excav., to D. S. McGrath, Inc., Adams, Mass., $105,564. Noted Aug. 30.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Galco Constr. Co., 745 Dean St., Brooklyn, block asphalt resurfacing Delamere Pl. $7,003, Ave. N $7,540, Gravesend Neck Rd. $15,118; to Cranford Co., 52 9th St., repaving with asphalt on concrete 79th St. $30,187; to Hastings Paving Co., 25 Broad St., New York, repaving with asphalt on concrete 41st St. $9,934; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., repaving asphalt on concrete, Bergen St. $8,730, and 60th St. $11,978; Borough Asphalt Co., 1301 Metropolitan Ave., repaving with asphalt on concrete Division Ave. $10,424; Greico Bros., 172 Russell St., repaving roadways of Flushing Ave. $35,267, Furman St. $5,642 asphalt on concrete, and Prospect Ave., grade 1 granite $81,470. Noted Sept. 6.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on Beach 92nd St., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $31,830. Noted Sept. 13.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to C. Curth, grading, curbing, laying sidewalks, etc., on Graham Ave., $11,878, regrading sidewalk space and paving sidewalks in 16th Ave., $2,031; to Welsh Bros. Contg. Co., Inc., 32 Queens St., Astoria, grading, curbing, laying sidewalks, etc., in Woodside Ave. $52,071, grading Queens Blvd. $52,845; to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, grading, curbing, laying sidewalks, etc. in Weirfield St. $6,030. Noted Sept. 6.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., to Interboro Asphalt Co., 2306 Creston Ave., repaving with sheet asphalt West 149th St., $36,889; to J. E. Gaffney, 438 East 91st St., West 150th and West 153rd Sts., $19,479 and $19,327 respectively; to W. J. Fitzgerald, 547 West 45th St., East 79th, East 77th, and East 74th Sts., $12,159, $9,239 and $9,983 respectively. Noted Sept. 13.

N. Y., New York—Park Bd., Municipal Bldg., sheet asphalt repaving roadway of West Dr. north of 102nd St., in Central Park, to Cleveland Trinidad Paving Co., Flushing, $42,180. Noted Sept. 13.

Pa., Bessemer — Grading, paving and curbing East Poland, West Poland and Main Sts., 5,367 lin.ft. brick on concrete, 3,240 lin.ft. concrete, to Freshwater Constr. Co., Chagrin Falls, O., $84,000.

Pa., Cresson—Paving 2nd St. incl. 5,600 sq.yd. paving, 3,500 lin.ft. cement curb, and 1,400 cu.yd. excav., to F. Murphy, 2623 West Chestnut Ave., Altoona, $30,086.

Pa., Pittsburgh—Paving Mansfield Ave., 19,500 sq.yd. asphaltic concrete, 1,800 tons binder, etc., to T. Cronin Co., South 18th St., $181,336.

Md., Baltimore—Paving streets listed in Contr. 242-NA, 14,000 sq.yd. asphalt, to American Paving Co., Montebello, $64,367. Noted Sept. 6.

W. Va., Clarksburg—Harrison Co., grading 4 mi. Laura Lee-Sardis Dist. Rd., 18 ft., to W. F. Allen, Clarksburg, $52,673; grading and concrete resurfacing 1½ mi. Mudlick Run-Adamsville Rd., 18 ft., to Ferguson & Holbert, Clarksburg, $37,573; grading and concrete paving 1 mi. Bridgeport-Boothsville Rd., 18 ft., to M. J. Fahey, Clarksburg, $37,235.

North Carolina—State Hy. Comn., Raleigh, grading and concrete paving 8.22 mi. State Project 592, Rockingham Co. and 4.03 mi. State Project 507, Alamance Co., to Ziegler & Dalton Constr. Co., Junction City, Kan., $252,889 and $110,879 respectively, 14.35 mi. State Project 185 C, Pitt Co., to Groves Co. and Shepard, Greenville. $404,938, 5.94 mi. State Project 611, Anson Co. and 9.5 mi. State Project 697 A, Union Co., to J. O. Heyworth, 606 South Michigan Ave., Chicago, $176,547 and $279,258 respectively, 4.95 mi. State Project 902, Buncombe Co., to Wilson Constr. Co., Rutherfordton. $195,957; grading and topsoiling 781 mi. State Project 495, Warren Co. and grading and concrete bridges and culverts on 8.23 mi. State Project 421, Franklin Co., to J. A. Marrow, Clarksville, Va., $38,408 and $55,510. Noted Sept. 13.

Florida — State Rd. Dept., Tallahassee, surfacing 7.121 mi. road between Wabasso and Sebastian River, Project 35 B, St. Lucie Co., 79,578 sq.yd. bituminous macadam, to C. F. Lytle, Jacksonville, $252,357; road from Pasco Co. line to Brooksville, Project 545, Hernando Co., 89,336 sq. yd. sheet asphalt, to Broadbent & Groeting, Ocala, $295,152. Noted Sept. 13.

Alabama—State Hy. Comn., Montgomery, grading and graveling 8 mi. Russellville-Phil Campbell Rd., Franklin Co., to S. C. Taylor, Wilsonville, $81,991, 20 mi. Haleyville-Double Springs Rd., Winston Co., to W. C. McCoy, La Fayette, $166,532, 10.21 mi. from Etowah Co. line to Center, Cherokee Co., to Stanley & Singer, La Fayette, $99,192; grading and asphalt paving 1.3 mi. Bee Line Highway near Hartselle, Morgan Co., to Texas Rd. Co., Great Southwestern Life Bldg., Dallas, Tex., $44,132; asphalt paving 2 mi. Attala-Gadsden Rd., Etowah Co., to Leslie Bros., Chattanooga, Tenn., $38,336; 12½ mi. Camden-Greenville Rd., Wilcox Co., to J. W. Gwin, 506 Hamilton St., Birmingham, $105,851. Noted Aug. 23.

Miss., Greenwood — Grading and paving various down-town streets, 44,382 sq.yd. 3 in. vertical fibre brick on concrete, asphalt filler, to E. A. Finch, Hattiesburg, $2.12 per sq.yd. Total $95,000.

Tenn., Cookeville—Putman Co. will construct 5 mi. highway between here and Overton Co. line, 16 ft., limestone, by day labor under supervision of State Dept. Hys. and Pub. Wks., Nashville.

Kentucky—State Hy. Dept., Frankfort, reconstructing Williamson Rd. to Falmouth Rd., State Projects 62 C and 21 C, Pendleton Co., 8,000 tons crushed stone, to Broaddus & Forbes, Richmond, $14,960; surfacing with waterbound macadam 5.407 mi. Hodgensville-Buffalo Rd., 18 ft., State Project 41, Sect. A, Larue Co., to McClellan & Gambell, Bowling Green, $113,704. Noted Sept. 6.

O., Akron—Bd. Control, asphalt paving 0.75 mi. Auldfarm Rd., to T. E. McShaffrey Constr. Co., 173 South Forge St., $53,260. Engrs. est. $60,000.

O., Cleveland—Grading and asphalt paving 7,620 sq.yd. Florian Ave., 4,750 ft. stone curbing and 4 in. tile drain, 2,580 cu.yd. earth excav., to Baldwin Bros., 4500 Euclid Ave., $44,151. Noted Sept. 13.

O., Cleveland — Paving West 17th St., Laflin and Searsdale Aves., to Roehl Bros. Paving and Constr. Co., West 25th St. and Clark Ave., $1,946, $4,099 and $17,802 respectively; East 117th St., to Garland Bros., 5806 Franklin Ave., $17,656; Sellern Ave. to H. G. Herring, Pavers Exchange, $4,706; East 111th St to Baldwin Bros., 4500 Euclid Ave., $9,244

O., Columbus — Franklin Co., grading, bridging and paving 1.93 mi. Rose Hill Rd., 16 ft., in Truro and Jefferson Twps., waterbound macadam, to Burns-Williams Co., 316 Stoneman Bldg., $37,223. Noted Sept. 13.

O., Cuyahoga Heights (Cleveland P. O.) —Paving 49th St., to Enterprise Paving & Constr. Co., 8444 Bway., Cleveland, $34,544. Noted Sept. 13.

Michigan—State Hy. Dept., Lansing, grading and surfacing 4.448 mi. State Trunk Line Rd. 15-12, Sect. B, Menominee Co., to Menominee Co. Rd. Comn., Menominee, $53,108; grading 4.152 mi. Federal Aid Project 82, Sect. A, Wayne Co., to Donaldson & Hull, Dryden, $28,866. Noted Aug. 23.

Ill., Granite City—To Sternberg & Powell, 37 West Van Buren St., Chicago, paving 7,500 ft. Madison St., brick on concrete, $70,000, grading and paving 3,000 ft. State St., brick on concrete, $28,000.

Kan., Caldwell—Paving various streets, 12,300 sq.yd. 3 in. vertical fibre brick, 7,370 lin.ft. 6 in. curb and gutter, 3,700 cu.yd. earth excav., to A. L. Cooke Constr. Co., Ottawa, $50,028. Engrs. est. $60,000. Noted Aug. 30.

N. D., Hillsboro—For 15,098 sq.yd. vibrolithic concrete, Federal Aid Project 61-D, to Northern Constr. Co., Grand Forks, $57,438.

Ark., Camden—Grading, curfacing, etc. 5,600 ft.in. Paving Dist. 5, to J. P. McNulty, Pine Bluff, $42,380. Noted Sept. 13.

Tex., Dallas—Paving with 2 in. bitulithic on concrete Knox and Medill Sts., to Central Bitulithic Co., Praetorian Bldg., $3.25 per sq.yd.

Tex., Bonham—Fannin Co. grading and surfacing with rein.-con. 7.35 mi. State Highway 5, Federal Aid Project 344, to J. C. Feild & Co., Denison, $243, 524. Engrs. est. $292,228. Noted Sept. 13.

Tex., Ft. Worth—Paving, curbing and guttering Green Ave., Illinois, Lee and Irma Sts., bitulithic, to West Texas Constr.

Streets and Roads (Continued)

Co. Cotton Exch. Bldg., $3.18. Noted Sept. 13.

Tex., Houston—Paving 45,000 sq.yd. Polk Ave. from Hutchins to Dumble Sts., 2 in. warrenite bitulithic on 6 in. concrete, to Gulf Bitulithic Co., Bankers Mortgage Bldg., $152,942.

Tex., Mckinney—Collin Co. grading and gravel surfacing 22.56 mi. Blue Ridge, Farmersville, Celina, and Frisco Rds., all in Dist. 4, 18 ft., to Purvis & Son, W. T. Waggoner Bldg., Ft. Worth, $72,337. County to furnish gravel and stone.

Ariz., Phoenix—Paving sections of 7th and 9th Aves., Roosevelt, Portland, Latham, West Moreland, Culver, Willetta and Lynwood Sts., 4 and 5 in. asphaltic concrete, to Kisseburg, Schmidt & Hitchcock, Central Ave. and Apache St., $173,848. Noted Sept. 6.

Wash., Tacoma—Paving East 11th St. from Bridge to Canal Sts., asphaltic concrete, to Albertson, Cornell Bros. & Walsh, South 12th and Pacific Sts., $51,700.

Calif., Compton—To G. H. Oswald, 366 East 58th St., Los Angeles, improving Cedar and Spruce Sts., etc., 271,061 sq.ft. grading $0.03, 271,061 sq.ft. 5 in. concrete $0.215, 5,396 ft. house sewers $1.50, etc.; Poplar St., etc., 88,043 sq.ft. grading $0.03, 88,043 sq.ft. 5 in. concrete $0.215, 1,052 ft. house sewers $1.50, etc.

Calif., East San Diego (branch of San Diego)—Improving various streets, to California Constr. Co., Union Bldg., San Diego, 2,361,607 sq.ft. 1½ in. willite on 2½ in. concrete at $0.215 per sq.ft., 1,950 sq.ft. concrete sidewalk $0.26, etc., total $507,745.

Calif., Los Angeles—Los Angeles Co. improving 1.7 mi. Washington Blvd. between Culver and Los Angeles, to Griffith Co., Los Angeles Ry. Bldg., excav. $0.70 sq.ft., subbase $0.45 sq.yd., concrete base $2.20 sq. yd., asphalt wearing surface $0.54 sq.yd., walks $0.25 sq.ft., curb $0.75 lin.ft., gutter $0.30 sq.ft., total $249,050. Noted Aug. 23.

Calif., San Diego—Common Council, improving Ash St., to Griffith Co., 25 14th St., 145,042 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous at $0.169 per sq.ft., etc., total $27,725. Noted Sept. 13.

Industrial Works

PROPOSED WORK

N. H., Newington—Atlantic Dyestuffs Co. plans three 1 story, brick and timber additions to plant. $60,000. Architect not announced.

R. I., Providence—Davol Rubber Co., 69 Point St., having plans prepared by F. P. Sheldon & Sons, engrs. and archts., R. I. Hospital Trust Bldg., 3 story, brick and steel plant, plain foundation, Point and Eddy Sts. $75,000.

Conn., Hartford—Belamose Corp., 303 Broadway, New York City, plans 1 story, 140 x 560 ft., brick and steel plant, here. Architect not announced.

N. Y., Niagara Falls—International Paper Co., Buffalo Ave., plans boiler house. $200,000. Private plans.

N. Y., Niagara Falls—Union Carbide Co., Union St., plans 75 x 160 ft. addition to present plant. $125,000. Private plans.

Pa., Clearfield—W. B. Holmesk, Jr., plans 2 story, 50 x 100 ft. brick garage, Merrill and Williams Sts. $40,000. Private plans.

Pa., McKeesport — Peters Packing Co., 922 Rose St., having plans prepared by C. Stattler, engr., Weehawken, N. J., 6 story and basement, 25 x 70 ft. addition to plant and garage, Rose St. $175,000.

Pa., Meyersdale—Savage Fire Brick Co., plans 1 story, 80 x 300 ft. plant, about 1 mi. from here. $50,000. F. W. Minch, Johnstown, secy. treas.

Pa., Pittsburgh—See "Buildings."

Pa., Pittsburgh—Caplan Grocery Co., 2106 Penn Ave., plans 4 story, brick warehouse. $45,000.

Tenn., Knoxville—University of Tennessee plans 60 x 70 ft. heating and power plant, two 350 hp. boilers.

Ky., Benton—Paducah Hosiery Mills, Paducah, plans 2 story, 100 x 120 ft. hosiery plant. Puryear St., here. $40,000.

Ky., Louisville—Ford Motor Co., Detroit, Mich., plans brick and steel assembly plant on 22 acre site, Western Parkway, here, 300 cars a day capacity. $1,000,000. Engineer and architect not selected.

Ky., Owensboro—I. H. and H. N. Robertson plan 1 story, 200 x 260 ft., warehouse, 9th St. $40,000.

O., Canton—Canton Hardware Co., 201 Market Ave. soon lets contract 4 story, 165 x 200 ft., brick warehouse and sales room, 3rd St. N. E. $165,000. Noted Feb. 1.

O., Cleveland—Gabriel Mfg. Co., c/o C. Foster, mgr., 1407 East 40th St., had plans prepared by H. E. Shimmin, 2031 Euclid Ave., 2 story and basement, 80 x 150 ft., brick, steel and timber factory. $60,000.

O., Cleveland—Ohio Carpet Cleaning Co., c/o H. Luscher, 5610 Cobleigh Court, having plans prepared by A. Sogg, 319 Hippodrome Bldg., 2 story, 30 x 100 ft., brick and timber factory, 7291 Quincy Ave. $40,000.

O., Dayton—F. A. Daudistel, 124 Illinois Ave., plans 2 story and basement, 80 x 110 ft., automotive engineering building, brick and steel, plain foundation, Wyoming and Highland Sts. About $75,000. Architect not selected.

Ind., Lafayette—J. F. Horner Automobile Co., 19th and Columbia Sts., plans 1 story, 40 x 130 ft. garage. $40,000.

Ind., Pendleton — Indiana Reformatory plans 1 story foundry. $40,000.

Mich., Marquette—Plans election in December to vote on $100,000 bonds for electric power plant on Dead River. Orbison & Orbison, 812 College Ave., Appleton, Wis., engrs.

Ill., Chicago—Blue Valley Creamery Co., 700 South Clinton St., plans 3 story, 81 x 179 ft. factory, fireproof, 1137-43 West Jackson St. $175,000. S. S. Joy, 2001 Pershing Rd., archt.

Wis., Berlin—Berlin Tanning & Mfg. Co. will rebuild tannery, 3 story, brick and concrete or mill construction, plain foundation. $50,000. Engineer and architect not selected.

Wis., Hartford—Bear Brand Hosiery Co. plans 2 story, brick and timber factory, plain foundation. $40,000. Engineer and architect not selected.

Wis., Mondovi—W. Hardy will soon take bids 2 story, 40 x 100 ft., brick, tile and concrete garage, plain foundation, $40,000. Private plans. Former bids rejected.

Wis., Plymouth—Plymouth Phonograph Co. plans 2 story and basement, 60 x 160 ft., brick and rein.-con. factory, plain foundation. $60,000. Engineer and architect not selected.

Wis., Poskin—D. & H. Sure Grip Brake Co. plans 2 story, 60 x 90 ft., brick, rein.-con. and steel factory, plain foundation. $50,000. Engineer and architect not selected.

Wis., Prairie du Chien—Parkinson & Dockendorff, archts., Linker Bldg., La Crosse, making preliminary plans 2 story, 72 x 132 ft., warehouse, brick and timber, plain foundation, here, for General Cigar Co., Portage. $50,000.

Wis., Wisconsin Rapids—Nekoosa-Edwards Paper Co., Port Edwards, plans addition to hydro-electric plant, increasing capacity from 2,800 to 5,800 hp. E. P. Gleason, c/o owner, engr.

Minn., Little Falls—Pike Rapids Power Co. plans hydro-electric plant at Pike Rapids, 5 mi. below here, incl. 45 ft. dam. $100,000.

Kan., Arkansas City — Ranney-Davis Mercantile Co. having revised plans prepared by W. L. McAtel, Johnson Bldg., 2 story and basement, 100 x 132 ft., rein.-con., brick and stone warehouse, 1st St. and 5th Ave. $100,000. Noted May 31.

Kan., Kansas City—Oct. 23, to vote on $2,000,000 bonds improvements to electric light plant. R. L. McAlpine, Kansas City, engr.

Mo., Kansas City—Kansas City Light & Power Co., completed plans 1 story, 160 x 180 ft., brick and rein.-con. garage, 19th and Charollette Sts. $90,000. Private plans.

Mo., Norborne—See "Waterworks."

Ark., Jonesboro—H. Bosler, mayor, C. B. Gregg, et. al., plan to construct cotton mill, will be known as Jonesboro Cotton Mills Inc. $600,000.

Tex., Houston—Houston Transfer Co., 800 Washington St., plans concrete warehouse. $150,000. Architect and engineer not announced.

Tex., Houston—Schoots Bakery, Washington Ave., having plans prepared by R. D. Steele, engr. and archt., 1st Natl. Bank Bldg., bakery and warehouse. $50,000.

Okla., Sayre—See "Waterworks."

Wash., Everett — Weyerhaeuser Timber Co., Bayside, plans lumber mill. $250,000.

Calif., Los Angeles—See "Buildings."

Calif., San Francisco—Western Vacuum Ice Co., 235 Montgomery St., having plans prepared by H. H. Meyers, Kohl Bldg., 1 story, 65 x 110 ft. ice plant, 40 ft. high, and 1 story, 35 x 75 ft. warehouse, 30 ft. high, both rein.-con., vicinity of Brannan and 8th Sts.

Calif., Redwood City — Pacific Portland Cement Co., Pacific Bldg., San Francisco, making plans cement plant, incl. railroad, wagon roads and dredging work. First unit will have 1,200 bbl. per day capacity. Private plans.

Que., Windsor — Messrs. Kilgour Bros. plan 2 story, 90 x 130 ft. brick factory. $250,000.

Ont., Meaford—Hydro Electric Power Comn., 110 University Ave., Toronto, plans plant here. $500,000. F. A. Gaby, ch. engr.

Ont., St. Catharines—Garden City Paper Co., Merritton, plans plant, here. $400,000. W. J. Trimble, 54 University Ave., Toronto, engr.

Ont., Toronto—Boake Mfg. Co., Dartnell Ave., plans brick factory, Ranleigh Ave. $150,000. Engineer and architect not announced.

BIDS DESIRED

Pa., Ambridge—Standard Seamless Tube Co. taking bids 1 story, 80 x 500 ft. and 20 x 80 ft. steel addition to plant. Private plans.

Pa., Oil City—Reimann Co., 5 East Front St., will build 2 story, 136 x 198 ft. brick, steel and tile garage, Front St., $65,000. Work will be done by separate contracts. Private plans.

Pa., Phila.—Sept. 21, by Vice President of Amer. Ice Co., 121 North Broad St., 3 story, 57 x 150 ft. addition to plant, 17th and Washington Sts. $80,000. C. L. Weir, 41 East 42nd St., New York City, archt.

Pa., Phila.—Sept. 25, by Ballinger Co., engrs., 12th and Chestnut Sts., 2 story, 50 x 266 ft. rein.-con., brick and steel plant, plain foundation, Marshall St. between Oakdale and Harold Aves., for Hardwick & Magee Co., 1220 Market St. $150,000.

Pa., Pittsburgh—J. E. Dwyer, archt., Forbes Murray Bldg., will build and award separate contracts for 1 story, 60 x 180 ft. garage, Forbes St., for A. J. Diebold, 5621 Aylesboro Ave. $40,000.

Ky., Louisville—Oct. 9, by D. X. Murphy & Bro., archts., Louisville Trust Bldg., 1 story, 80 x 80 ft. brick laundry, Eastern Parkway, for St. Josephs Infirmary, 4th St. $60,000. Noted June 14.

Mich., Detroit—A. Kahn, archt., 1000 Marquette Bldg., taking bids 1 story, 193 x 208 ft. rein.-con., brick and steel foundry and warehouse, plain foundation, Russell St., for Great Western Smelting & Refining Co., Russell St.

Wis., Fond du Lac—Schmidt, Garden & Martin, archts. and engrs., 104 South Michigan Ave., Chicago, taking bids 1 and 2 story, 62 x 120 ft., brick and concrete power house, plain foundation, for St. Agnes Hospital, 390 East Division St. Noted June 7.

Wis., Milwaukee — Voelz & Siebert, archts., 86 Michigan St., taking bids 1 story, 47 x 120 ft., brick and concrete garage, plain foundation, 8th Ave. near Mitchell St. $40,000. Owner's name withheld.

Wis., North Milwaukee—North Milwaukee Fdry. Co., Commerce Ave., taking bids 1 story, 65 x 100 ft., brick and timber addition, plain foundation. $40,000. Private plans.

Minn., Litchfield—Sept. 28, by M. Mortenson, village recdr., power plant and waterworks system (1) new power house (2) rein.-con. chimney, 72 x 150 ft. (3) 500 kva. steam-engine driven generating unit, switchboard, etc. (4) boiler plant and piping incl. 250 hp. water tube boiler and stoker (5) water softening plant for boiler feed, 24,000 gal. daily capacity (6) wells and piping. Alternate bids on partial or complete power house, and on different types of chimney construction. $90,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, and E. D. Jackson, 403 Endicott Bldg., St. Paul, engrs. Noted June 21.

Tex., Houston—Bender Bros., Prince Theatre Bldg., taking bids 3 story, light manufacturing and storage plant, brick and concrete, Congress and Caroline Sts. $80,000. C. D. Hill & Co., Larendon Bldg., archts.

Calif., Los Angeles — Morgan, Walls & Morgan, archts., Van Nuys Bldg., receiving bids 2 story, 100 x 200 ft. milk plant, rein.-con., 1 story, 80 x 80 ft. boiler plant and 2 story, 93 x 200 ft. ice cream plant, Slauson Ave., for Crescent Creamery Co., 237 Winston Ave. Noted July 26.

BIDS RECEIVED

N. Y., Oswego—See "Miscellaneous."

Calif., San Francisco—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., 2 story and basement, concrete laun-

Industrial Works (Continued)

dry, Van Ness and Filbert Sts., general contract from Fennell & Chisholm, 180 Jessie St. Noted Sept. 13.

CONTRACTS AWARDED

Mass., Bridgewater—C. A. Lapworth, South and Crescent Sts., will build 1 story, 64 x 150 ft., webbing mill, brick and timber, plain foundation, by day labor. $50,000.

Mass., Fall River—Union Cotton Mfg. Co., 1 story, 28 x 300 ft., stone and brick shed, plain foundation, to Beattie & Cornell, North Quarry St.

Mass, Willimansett (branch of Holyoke)—B. F. Perkins & Son, 1 Crescent St., Holyoke, 2 story mill, brick and steel, Chicopee **St., here, to Casper Ranger** Constr. Co., 20 Bond St., Holyoke, $50,000.

Mass., Worcester—Hope Machine Co., 13 Hope Ave., 2 story, 72 x 100 ft., brick and timber addition to factory, plain foundation, to E. J. Cross Co., 82 Foster St., Worcester.

R. I., Woonsocket—Jules Desurmont Worsted Co., Fairmont St., 4 story and basement, 110 x 130 ft., rein.-con. and brick mill, plain foundation, Water St., to National Eng. Corp., 27 School St., Boston. Archts. est. $175,000.

N. Y., Brooklyn—Eighty-third St. Constr. Co., c/o H. A. Weinstein, archt. and engr., 375 Fulton St., 1 story garage, rein.-con., brick, steel and concrete, Cedar Pl., by day labor. $50,000.

N. Y., New York—Dykman Heights Realty Co. c/o Shampan & Shampan, archts. and engrs., 188 Montague St., Brooklyn, will build rein.-con., brick and steel garage, 213th St., here, by day labor. $100,000.

N. J., Camden—MacAndrews & Forbes, 3rd and Jefferson Sts., 1 story and basement, 69 x 180 ft. shop, rein.-con., brick and steel, to Barclay White Co., 1713 Sansom St., Phila., Pa., $100,000.

N. J., Montclair—Montclair Ice Co., 1 story plant, rein.-con., brick and steel, to J. S. Carlson Co., Inc., Walnut St. Archts. est. $100,000.

Pa., Pittsburgh—Pittsburgh Malleable Iron Co., 34th and Smallman Sts., 1 story, 95 x 260 ft. brick, steel and corrugated iron plant, 34th and Smallman Sts., to Conley & DeMey, 127 North Highland Ave. Engrs. est. $50,000. Noted Aug. 23.

Ky., Hopkinsville—Dark Tobacco Growers Co-operative Assn., 1 story, 130 x 585 ft. warehouse, to E. H. Hester, Hopkinsville. Archts. est. $45,000. Noted June 7.

Ky., Mayfield—Dark Tobacco Growers Co-operative Assn., Hopkinsville, 1 story, 130 x 352 ft. warehouse, here, to T. Cole, Paducah, Ky. Est. cost $40,000.

O., Cleveland—I. G. Kohn, 640 Guardian Bldg., 1 and 2 story, 60 x 126 ft., brick, steel and wood, garage and commercial building, 2027 East 105th St., to Gometz & Neshkes, 2233 East 89th St. $50,000. Noted Sept. 13.

Mich., Detroit—Texas Co., 17 Battery Pl., New York City, 1 story, 38 x 122 ft. warehouse and office and 32 x 100 ft. garage and power plant both concrete and brick, one 20 x 20 x 20 and one 25 x 28 x 28 steel tanks, four 10 x 10 x 38 tanks, Ferndale Ave., to McKelvey Constr. Co., 426 Hammond Bldg. Archts. est. $100,000.

Ill., Chicago—J. S. Hoffman, 219 North Franklin St., 4 story, 95 x 100 ft., warehouse, fireproof, 312-30 West Illinois St., to Broline-Nolan Co., 5 North La Salle St. Archts. est. $200,000.

Ill., Edwardsville—See "Buildings."

Wis., Centuria—Inderrieden Canning Co., 516 West Erie St., Chicago, will build 1 and 2 story, brick and timber cannery, plain foundation, here, by day labor. $65,000. Noted Aug. 2.

Wis., Chippewa Falls—C. R. Bigler, 14 East Central St., 1 story and basement, 68 x 124 ft., brick, tile and concrete warehouse and garage, plain foundation, to Schafer & Olson, 222 Bay St., Chippewa Falls. Archts. est. $40,000. Private plans.

Wis., Monticello—Bd. Educ., 1 story, 50 x 95 ft., boiler house for high school, brick and rein.-con., plain foundation, to Kallem & Steinman, Monticello, $40,000.

Wis., Prentice—Northern Publishing Co. will build 2 story, 60 x 82 ft., brick and concrete printing plant, plain foundation, by day labor. $40,000.

Wis., Racine—Racine Investment Co., 401 Lake Ave., 2 story and basement, 80 x 120 ft., brick and concrete garage, plain foundation, Lake St., to C. O. Johnson, 224 South La Fayette Ave. Archts. est. $50,000. Noted Sept. 13.

Mo., Kansas City—Kansas City Power & Light Co., 1330 Grand Ave., will build 1 story, 80 x 140 ft., brick power plant, 6th St., by day labor. $60,000.

Mo., St. Louis—P. H. Fuchs, 3126 Locust St., 1 story, 89 x 117 ft., brick and rein.-con. garage, Bway., to W. M. Rideout, Tower Bldg. Archts. est. $40,000.

Mo., St. Louis—Heine Boiler Co., 5319 Marcus Ave., 1 story, 80 x 139 ft. boiler factory, brick and concrete, Marcus St., to Fruin-Colnon Constr. Co., Merchants Laclede Bldg. Archts. est. $50,000.

Mo., St. Louis—F. Medart Mfg. Co., 2nd and Potomac Sts., 1 story, 129 x 260 ft., wood working plant, brick and concrete, De Kalb St., to Woermann Constr. Co., Syndicate Trust Bldg. Archts. est. $100,000.

Mo., St. Louis—Tate Motor Car Co., 3111 Locust St., 3 story and basement, 135 x 165 ft., auto sales and service building, rein.-con., brick and stone, Washington St., to Widmer Eng. Co., Laclede Gas Bldg. Archts. est. $250,000. Noted June 21.

Tex., Dallas—See "Buildings" under office, etc.

Calif., Los Angeles—Los Angeles Rubber Stamp Co., 131 South Spring St., 4 story and basement, warehouse and loft, rein.-con. and brick, Los Angeles and 15th Sts., to R. E. Milsap, Marsh-Strong Bldg., $128,500. Noted May 17.

Buildings

PROPOSED WORK

Mass., Northampton—School—City having plans prepared by K. S. Putnam, archt., 78 Main St., 2 story and basement, on Hawley School grounds. $175,000.

Mass., Westfield—Library—Westfield Atheneum Com. having plans prepared by Coolidge & Carlson, 89 State St., Boston, and M. B. Harding, Westfield, new buildings, Elm and Court Sts. $150,000.

R. I., Providence—School—St. Raymonds Parish, North Main St., having plans prepared by A. J. Murphy, archt., 146 Westminster St., 2 story, brick and steel, North Main and Matilda Sts. $150,000.

Conn., Hartford—Apartment—J. Howard, Lancaster Rd., having plans prepared by Benson & Moses, archts., 30 Allyn St., 3 story, 50 x 110 ft., brick and stone, plain foundation, Capitol St. $50,000.

Conn., Hartford—Apartment and Store—W. Toubman, 260 Windsor Ave., plans 3 story, brick and steel, plain foundation, Windsor Ave. $150,000. Architect not selected.

Conn., Hartford—Office—F. D'Esopo Real Estate Corp., 484-492 Main St., plans remodelling 4 story, brick, plain foundation, Main St. $150,000. R. D'Avino, 647 Main St., archt.

Conn., Hartford—Office—G. F. Heublein, Inc., 45 High St., plans 10 story, 60 x 165 ft., rein.-con., brick and steel, plain foundation, Pratt and Trumbull Sts. $500,000. Architect not selected.

Conn., Hartford—Store—J. Fox & Co. Inc., 960-980 Main St., plans 6 story, rein.-con., brick and steel, plain foundation, Main and Talcot Sts. $500,000. Architect not selected.

Conn., Hartford—Theater—G. F. Heublein, Inc., 45 High St., plans 3 story, 134 x 150 ft., rein.-con., brick and steel, plain foundation, Church St. $500,000. Architect not selected.

Conn., Terryville—Hospital—Plymouth Memorial Hospital plans 2 story, rein.-con. and brick, plain foundation. $150,000. Colonial Trust Co., executors. Architect not selected.

N. Y., Brooklyn—Bank—Bank of Manhattan Co., 40 Wall St., New York City, having plans prepared 1 story, 50 x 100 ft., brick, steel and stone, St. Johns Pl., near Van Nostrand Ave. here. $150,000. Private plans.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, Flatbush Ave. extension and Concord St., for James Madison High School, brick, steel and stone, Bedford Ave., here. $3,140,000.

N. Y., College Point—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, for P. S. 27, brick, steel and stone, 13th St., here. $321,000.

N. Y., Corona—Schools—Bd. Educ., 500 Park Ave., New York, having sketches made by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St. Brooklyn, brick, steel and stone addition to P. S. 14, Fairview Ave., here, $674,000; plans brick, steel and stone school on Christie and Bronson Sts., here, $727,000.

N. Y., Elmhurst—School—Bd. Educ., 500 Park Ave., New York, plans brick, steel and stone school, 47th St., East Elmhurst. $997,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Forest Hills—School—Bd. Educ., 500 Park Ave., New York, plans brick, steel and stone school, Russell Pl., here. $727,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Long Island City—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone addition to P. S. 83, Vernon Ave., here. $376,000.

N. Y., Maspeth—School—Bd. Educ., 500 Park Ave., New York, plans school, here. $727,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon takes bids alterations and rear addition, brick, steel and stone, 117 East 167th St. $800,000. McKenzie, Voorhees & Gmelin, 342 Madison Ave., archts. and engrs. Noted Sept. 13.

N. Y., North Tonawanda—High School—Bd. Educ. plans high school. To exceed $150,000. Architect not selected.

N. Y., Woodhaven—School—Bd. Educ., 500 Park Ave., New York, having sketches made by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, for school, here. $727,000.

N. J., Asbury Park—High School—S. Malkind, archt. and engr., 16 Court St., Brooklyn, preparing plans brick, stone and steel high school, here. $250,000. Owner's name withheld.

N. J., Montclair—School—Bd. Educ. having plans prepared by Starrett & Van Vleck, 8 West 40th St., New York City, brick, steel and stone. $150,000.

N. J., Newark—Apartment—J. Feldman, c/o R. Botelli, archt. and engr., 207 Market St., soon takes bids 4 story, brick, steel and stone. $150,000.

N. J., Newark—Schools—Bd. Educ. plans school in Weequahic Sect., $350,000; and bungalow type school for crippled children $168,000.

N. J., Trenton—Y. M. C. A., c/o F. S. Katzenback, chn. building com., Amer. Mechanics Bldg., having plans prepared by O. E. Goldschmidt, engr., 116 West 39th St., New York City, for brick, steel and stone building, Academy St., here. $400,000.

Pa., Altoona—Business—M. Lenson, 1007 14th St., and S. Brett, 902 Green Ave., plan 3 story and basement, 100 x 120 ft. concrete, brick and steel, 11th Ave. $150,000.

Pa., Altoona—Store and Office—J. J. Burns Jr., Commerce Bldg., plans 3 story and basement, 70 x 100 ft. rein.-con., brick and steel, 13th Ave. $150,000.

Pa., Clairton—School—Bd. Educ. having plans prepared by C. W. Bates, Jr., 77 12th St., Wheeling, W. Va., 3 story and basement, 180 x 280 ft., 3rd St., here. $350,000.

Pa., Clearfield—Hospital—Clearfield Hospital having plans prepared by Howard & Hatcher, Dubois, 2 story and basement, 42 x 90 ft. brick, steel and tile addition to hospital. $250,000.

Pa., Pittsburgh—Apartment—Terrace Court Apartments, c/o T. Hannah, archt., Publication Bldg., having plans prepared three 4 story and basement 32 x 104 ft. buildings, and 1 story 63 x 136 ft. garage, Shady and Douglas Sts. $250,000.

Pa., St. Marys—High School—St. Marys Roman Catholic Church having plans prepared by J. P. Brenot, Opera House, Oil City, 2 story and basement, 80 x 140 ft., brick, steel and tile. $150,000.

Tenn., Knoxville—Auditorium, etc.—City election Sept. 29, to vote on $75,000 bonds for construction of auditorium and market house.

Ky., Harlan—Office, etc.—Wallins Creek Collieries Co. plans rebuilding office and commissary, recently destroyed by fire. $150,000.

Ky., Lyndon—Home—Kentucky Childrens Home Society, 1086 Baxter St., Louisville, having plans prepared by Nevin, Wischmeyer & Morgan, Starks Bldg., Louisville, hospital building, boiler house and detention wards, brick, here. $150,000.

O., Canton—Hospital—Stark Co. plans 2 story hospital, brick, near Navarre St. $250,000-$300,000. Thayer & Johnson, New Castle, Pa., archts.

O., Cleveland—Apartment—G & R Realty Co., c/o A. Garber, 1105 Hippodrome Bldg.,

Buildings (Continued)

having preliminary plans prepared by Braverman & Havermaet, Ulmer Bldg., 4 story and basement, brick, Strathmore Ave. $300,000.

O., Cleveland — Court House — Comrs. Cuyahoga Co. plan court house, probably 17 story, Public Sq. $2,000,000. J. H. Graham & Co., 8201 Cedar Ave., archts.

O., Dayton—Apartment—Lincoln Apartment Hotel Co. plans 14 story, 79 x 132 ft., rein.-con. and brick, plain foundation, 4th and Perry Sts. $2,000,000. H. F. Kumler, Reibold Bldg., pres. Architect not selected.

O., East Youngstown — High School — Plans to vote on $350,000 bonds for high school. W. Coursen, supt.

O., Lakewood—Store and Office—W. F. Thompson & Son Co., 5103 Euclid Ave., Cleveland, plans 3 story, 100 x 145 ft., brick, Detroit and Lakewood Aves. $150,000. Private plans.

O., New Philadelphia—Hotel—L. G. Wallick, Hotel Deshler, Columbus, plans hotel, about 5 story, fireproof, here. $150,000. Engineer and architect not selected. Noted Apr. 19.

O., Steubenville—Temple—Scottish Rite Masons having preliminary plans prepared by Peterson & Clark, Steubenville, 4 story and basement, 80 x 130 ft., stone, 4th St. $500,000.

O., Toledo—School—St. Thomas Aquinas Roman Catholic Church having revised plans prepared by Comes, Perry & McMullen, Renshaw Bldg., Pittsburgh, Pa., 2 story and basement, 65 x 104 ft., brick and steel. $150,000. Former bids rejected.

O., Warren—Court House—Trumbull Co. plans 4 story, on present jail site. $350,000.

Mich., Detroit—Mercantile—A. E. Harley, archt., 2631 Woodward Ave., preparing plans 3 story and basement, 80 x 160 ft. rein.-con., brick and steel, plain foundation, Howard St. $150,000. Owner's name withheld.

Mich., Flint—School—Bd. Educ. having plans prepared by Malcomson & Higginbotham, Industrial Bank Bldg., Detroit, 3 story and basement, 200 x 369 ft., rein.-con., brick and steel, plain foundation, $1,000,000.

Mich., South Haven—Hotel—Edgemere Hotel Corp., c/o Leichenko & Esser, archts., 38 South Dearborn St., Chicago, plans 3 and 6 story, 130 x 275 ft., North Shore Dr. $750,000.

Ill., Chicago—Apartment—J. J. Jensen, archt., 4815 North Lawndale Ave., preparing plans 3 story, 90 x 120 ft., rein.-con., brick and steel, Rosecoe St. near Crawford St. $150,000. Owner's name withheld.

Ill., Duquoin—Church—First Baptist Church rejected bids 2 story, 97 x 118 ft., brick, stone and concrete, $150,000. Will probably readvertise in spring. Noted Aug. 16.

Wis., Madison—Business, etc.—W. J. Taylor, 456 West Doty St., having plans prepared by E. A. Tough, Washington Bldg., 3 story, 150 x 200 ft., brick, rein.-con. and steel, plain foundation, State St. $150,000. Noted Aug. 31.

Wis., Milwaukee—Hotel—Hotel Wisconsin Realty Co., 172-80 3rd St., having revised plans prepared by Holabird & Roche, 104 South Michigan Ave., Chicago, and soon takes bids 12 and 15 story, 50 x 70 x 150 ft., brick and concrete, plain, concrete or wood pile foundation. $1,300,000. Noted July 5.

Kan., Junction City—Memorial Hall—City having preliminary plans prepared 2 or 3 story, brick and stone, plain foundation. $250,000. Engineer and architect not selected.

Neb., Falls City—Hotel—Falls City Hotel Co. had plans prepared by J. H. Croddock & Co., 315 South 15th St., Omaha, 4 story and basement, 92 x 130 ft., rein.-con., brick and stone. $150,000.

Mo., Kirksville—Store—Shryack Grocery Co., plans rebuilding 4 story and basement, rein.-con. and brick, recently destroyed by fire. $150,000. Engineer and architect not selected.

Tex., Ft. Worth—Municipal—Election in December to vote on $1,000,000-$1,500,000 bonds for municipal building on Throckmorton St. Engineer and architect not announced.

Okla., Okmulgee — Hotel — Creek Hotel Co. having plans prepared by Smith & Senter, Okmulgee, 7 story, 125 x 200 ft., rein.-con. and steel, Cherokee St. $600,000. W. B. Pine, pres. Noted Mar. 8.

Okla., West Tulsa (Tulsa P. O.)—Hotel—Moss Bros. having plans prepared by C. P. Nieder, Empire Bldg., Oklahoma City, 4 story and basement, 48 x 140 ft., rein.-con., Main St. $155,000.

Colo., Denver — Apartment — Norman Apartments, Inc., 915 Central Savings Bank Bldg., having plans prepared by W. N. Bowman, Central Savings Bank Bldg., 6 story, 150 x 150 ft., rein.-con. and brick, Downing and Bayaud Sts. $500,000.

Nev., Reno—Hotel—Reno Hotel Co., c/o F. H. Whitton, constr. mgr., 369 Pine St., San Francisco, Calif., preparing preliminary plans 4 story, brick, here. $400,000-$500,000.

Calif., Fillmore—High School—Fillmore Senior High School Dist. having plans prepared by N. F. Marsh, Bway. Central Bldg., Los Angeles, 2 story, concrete or hollow tile. To exceed $150,000.

Calif., Los Angeles—Hospital—St. Vincents Hospital, 1151 Sunset Blvd., having plans prepared by J. C. Austin, Detwiler Bldg., for hospital, boiler and laundry plant, steel frame, Sunset Blvd. and Beaudry St. To exceed $750,000.

Calif., Los Angeles — Store and Loft — Robbins & Co., 3115 Maple St., having plans prepared by Norton & Wallis, archts., 716 South Spring St., 12 story, 42 x 165 ft., rein.-con., South Bway. $600,000.

Calif., Los Angeles—Store and Office—Pacific Southwest Trust & Savings Bank, 565 South Spring St., plans 75 x 100 ft. fireproof, 8th and Olive Sts. To exceed $750,000.

Calif., San Diego—Hospital—See "Contracts Awarded."

Calif., San Francisco—Office, etc.—Pacific Telephone & Telegraph Co., 333 Grant Ave., having preliminary plans prepared by E. V. Cobby, engr., 333 Grant Ave., office and exchange, steel frame, Bush St. between Grant Ave. and Kearny St. $1,000,000 or more.

Calif., San Jose—Store and Office—L. S. Moore, 470 South 3rd St., is head of syndicate which plans store and office building, probably 4 story, rein-con. $150,000. Architect not announced.

Calif., Santa Clara — School Annex — Roman Catholic Archbishop, 1100 Franklin St., San Francisco, having plans prepared by J. J. Donovan, 1916 Bway., Oakland, fireproof parochial school, here. $150,000.

Calif., Woodland—Lodge and Store—B. P. O. E., Woodland Lodge, had plans prepared by W. H. Weeks, archt., 369 Pine St., San Francisco, 2 story, rein.-con., Bush and College Sts. $150,000.

BIDS DESIRED

R. I., Exeter—Administration, etc.—State School Bd., Providence, taking bids 3 story, 70 x 200 ft., brick and concrete addition, plain foundation, at State School, here. $200,000. Noted Aug. 9.

N. Y., Buffalo—School—Oct. 3, by Bd. Educ., 1401 Telephone Bldg., altering and building 2 story and basement, rein.-con. and brick addition to P. S. 42, Grant St. $500,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Flushing—Dormitory, etc.—Oct. 2 by W. H. Gompert, archt., Flatbush Ave. Extension and Concord St., Brooklyn, general construction masters house, dormitory buildings, infirmary and coal bin for power house, for Parental School, 1,700 ft. south North Hempstead Turnpike, here, for Bd. Educ., 500 Park Ave., New York City.

N. Y., New York—Sept. 28 by B. S. Coler, comr. Dept. Pub. Welfare, Municipal Bldg., repairing and altering west wing and west toilet tower, main building, at Metropolitan Hospital, Welfare Island, contr. (1) general construction and electrical work (2) plumbing and gas fitting (3) heating and refrigerating work.

N. Y., Syracuse—School—Oct. 8 by Bd. Contr. and Supply, improving 2 and 3 story, rein.-con., brick and steel school, Seymour St. Work consists of partly new building to be erected around old school, using some of present structure. $650,000. J. A. Randall, S A & K Bldg., archt.

N. Y., Upper Flushing (Flushing P. O.)—School—Oct. 2 by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, general construction P. S. 107, southerly side Franconia Ave. from 27th to 28th Sts., here, for Bd. Educ., 500 Park Ave., New York City.

N. J., Trenton—Oct. 9 by J. O. Hunt, archt., 219 East Hanover St., 4 story, brick and steel for Y. W. C. A., 141 East Hanover St. $600,000. W. F. Thompson, 342 Madison Ave., New York City, engr. Noted Mar. 29.

Pa., Phila.—Church and Sunday School—Sept. 27, by H. W. Castor, archt., St. Girard Bldg., 1 story and basement, 73 x 166 ft. limestone, brick and terra cotta, Oxford Ave. and Dyre St. for Frankford Methodist Episcopal Church, $275,000.

Md., Salisbury—High School—Sept. 28, by Eastern Shore State Normal School, 3 story and basement, 188 x 343 ft., rein.-con. and brick, sheet piling foundation. $300,000. Smith & May, Calvert Bldg., Baltimore, archts.

N. C., Fayetteville—Hotel—Oct. 8, by Directors Fayetteville Hotel Co., 8 story and basement, fireproof. S. S. Dixon, Fayetteville, and W. G. Rogers, Trust Bldg., Charlotte, archts. Noted Aug. 9.

O., Cleveland—Apartment—I. B. Rabb, Ulmer Bldg., taking bids and opens same about Sept. 26, 3 story and basement, 165 x 175 ft., brick and timber, East 77th St. near Hough Ave. $300,000. Braverman & Havermaet, Ulmer Bldg., archts. Noted Aug. 23.

O., Cleveland—Apartments—I. Shur, 203 Ulmer Bldg., taking bids and opens same about Sept. 26, three 2 story and basement, 64 x 103 ft., brick and timber, East 140th St. near Lake Shore Blvd. $175,000. Braverman & Havermaet, Ulmer Bldg., engrs. Noted July 19.

O., Cleveland—Bank and Office—Oct. 15, by Knox & Elliot, archts., 906 Engineers Bldg., 20 story, 132 x 168 ft., rein.-con., brick and steel, Ontario St. and St. Clair Ave., for Brotherhood of Locomotive Engineers, Engineers Bldg. $5,000,000. C. M. Clark, Engineers Bldg., engr. Noted May 21.

Ill., Chicago — Apartment — Huszagh & Hill, archts., 105 North Clark St., receiving bids 3 story apartment, Rogers Ave. and East Lake Terrace. $500,000. Owners name withheld.

Ill., Chicago—Apartment—A. H. Quitsow, archt., 11 South La Salle St., receiving bids 3 story and basement, 64 x 150 ft., fireproof, Winthrop near Greenlake Ave., for L. R. Stewart, c/o architect. $150,000.

Ill., Evanston—Apartment—D. J. Wallace, archt., 22 West Monroe St., Chicago, receiving bids 3 story, 185 x 300 ft., rein.-con., brick and steel, Central St., here, for J. N. Lott, c/o architect. $250,000.

Minn., Waseca—High School—Oct. 15, by Bd. Educ., 2 story and basement, brick and rein.-con., plain foundation. $350,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt. and engr.

Kan., Iola—High School—Sept. 24, (change of date) by T. W. Williamson & Co., archts., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 95 x 141 ft., rein.-con. and brick, for Bd. Educ. $150,000. Noted Aug. 31.

N. D., Mandan—High School—Sept. 27 (change of date) by Bd. Educ., 2 story and basement, 65 x 136 ft. rein.-con., brick, stone and tile. $150,000. G. R. Horton, Jamestown, archt. Noted Sept. 13.

Mo., Sedalia—Court House—Oct. 4, by W. E. Hulse & Co., archts, Hoke Bldg., Hutchinson, Kan., 3 story and basement, 97 x 135 ft., rein.-con., brick and stone, for Pettis Co. $350,000. Noted June 14.

Calif., San Francisco—Apartment—C. A. Meussdorffer, archt., Humboldt Bank Bldg., receiving bids 10 story, basement and subbasement, rein.-con., Washington St. near Gough St., for Two Thousand and Six Washington St. Inc. $500,000. Noted June 21.

BIDS RECEIVED

O., Geneva—High School—Bd. Educ., 2 story and basement, 78 x 159 ft., rein.-con. and brick, from C. E. Heyser, Cleveland, $201,300. Noted Aug. 23.

Calif., San Diego—Army and Navy Y. M. C. A., concrete and steel building, from Campbell Building Co., Security Bank Bldg., $557,500. Noted Aug. 16.

CONTRACTS AWARDED

Mass., Ware—High School—School Bd., 2 story, brick and steel, to Provencal Co., Main St., $150,000. Engrs. est. $160,000. Noted July 12.

N. Y., Brooklyn—Apartment—B. Feller, c/o M. A. Cantor, archt. and engr., 373 Fulton St., 4 story, 75 x 100 ft., brick, steel and stone, 77th St., by day labor. $150,000.

N. Y. Brooklyn—Apartment—Kraslow Building Co., Inc., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., 14 story, 125 x 215 ft., brick, steel and stone, Ocean Ave. by day labor. $1,500,000.

N. Y., Brooklyn—Apartment—Nieblum Constr. Co., c/o Kieswetter & Hamburger, archts. and engrs., 186 Remsen St., will build 4 story, brick, steel and stone, Crown St. and Nostrand Ave., by day labor. $200,000.

N. Y., New York—Apartment—Brant Building Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., 6 story, 100 x 150 ft., brick, steel and stone, West 175th St. and Bway., by day labor. $300,000.

N. Y., New York—Apartment—Brown Constr. Co., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., 15 story, 82 x 83 ft., brick, steel and stone, 165 West 79th St., by day labor. $600,000.

Buildings (Continued)

N. Y., New York—Apartment—G. Graman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, 100 x 160 ft., brick, steel and stone, Grand Concourse and 161st St., by day labor. $250,000.

N. J., Atlantic City—Hotel—F. B. Off, Hotel Brighton, 5 story and basement, rein.-con., brick, steel, granite, limestone, terra cotta and granite addition to Hotel Brighton, Illinois Ave., to H. Baton Co., 1713 Sansom St., Phila., Pa. To exceed $300,000. Noted Aug. 30.

Pa., Phila.—Office—General Accident Life & Fire Insurance Co., 4th and Walnut Sts., 11 story, basement and sub-basement, 84 x 99 ft. and 3 story, 22 x 60 ft. rein.-con., brick and steel, 404-414 Chestnut St., to H. J. Homan & Co., 1703 Chestnut St., $460,000.

Pa., Phila.—School—J. D. Cassell, supt. buildings of Bd. Educ., 19th and Chestnut Sts., altering and building 3 story and basement, 2 wings, 36 x 110 ft. and 37 x 131 ft. rein.-con., brick and steel addition to David Landreth School, 23rd and Federal Sts., to McCloskey & Co., 1620 Thompson Ave., $277,429. Noted Aug. 31.

Pa., Villanova—Dormitory—Cardinal D. J. Dougherty, 1723 Race St., Phila., 3 story and basement, 70 x 208 ft., here, for Villanova College, to R. C. Ballinger Co., 925 Chestnut St., Phila., $230,000.

Md., Salisbury—Hotel—Wicomico Hotel Co., 4 story, to Consolidated Eng. Co., Calvert Bldg., Baltimore, $200,000. Noted Aug. 9.

W. Va., Wheeling—Cathedral—Catholic Diocese, 1 and 2 story, rein.-con. and brick, 13th and Eoff Sts., to R. R. Kitchen Co., Natl. Bank of W. Va. Bldg., $372,000. Noted Jan. 25.

Miss., Biloxi—Hotel—Buena Vista Hotel Co. 4 story, 164 x 240 ft., rein.-con., stucco and tile, pile foundation, to Underwood Contg. Co. Inc., Louisiana Bldg., New Orleans, La. Noted Aug. 9.

La., Baton Rouge — Theatre — Elks Theatre Co., 4 story, rein.-con. and steel, 3rd and Florida Aves., to Stewart-McGhee Constr. Co., Florida Ave. $182,000.

Tenn., Memphis—Office—Cotton Exch., 12 story, Exch. Bldg., South Front and Union Sts., to Kaucher-Hodges Co., Archts. est. $600,000. Noted May 3.

Ky., Louisville—Temple—Kosairs Assn., 7 story, temple, incl. 155 room hotel, auditorium, stage, etc., Bway., general contract to C. A. Koerner & Co., 318 East Burnett St., $700,000. Noted Sept. 13.

O., Columbus—Store and office—C. H. and A. D. Rowlands Co., 3rd and Broad Sts., 8 story and basement, 62 x 67 ft., rein.-con. and brick, High and Long Sts., to J. W. Heckart, Comstock Bldg., $400,000.

O., Wapakoneta—High School—Bd. Educ., 3 story and basement, 125 x 151 ft., rein.-con. and brick, to H. R. Blagg Co., 1229 East 3rd St., Dayton, $110,980. Engrs. est. $150,000. Noted Aug. 23.

Mich., Detroit—Office—See "Industrial Works."

Ill., Chicago—Apartment—M. Shugar, 4839 North Avers Ave., 3 story, 107 x 150 ft., rein.-con., brick and steel, 4415-27 North Whipple St., to H. Entin, 2116 Alice Pl. Archts. est. $150,000. Noted July 26.

Ill., Chicago—Apartment—M. Shugar, 4839 North Avers Ave., 3 story, 110 x 125 ft., fireproof, 4301-11 North Troy Ave., to H. Entin, 2116 Alice Pl. Archts. est. $150,000.

Ill., Chicago—Bank—Inlan State Bank, 4021 Milwaukee Ave., 2 story, 48 x 140 ft., rein.-con., brick and steel, 3973-85 Milwaukee Ave., to R. Sollitt & Son, 5 North La Salle St. Archts. est $150,000.

Ill., Chicago—Hotel—Realty Building & Constr. Co., 177 North State St., 3 story, 50 x 140 ft., rein.-con., brick and steel, 5047-49 Kenmore Ave., to A. T. Herlin, 6117 Evans Ave. Archts. est. $150,000. Noted Apr. 26.

Ill., Edwardsville — High School — Bd. Educ., 2 story and basement, rein.-con. and brick, incl. boiler house, general contract to J. E. Schweger, Edwardsville, $133,845; heating and ventilating to Elliott & Barry Eng. Co., 1426 Olive St., St. Louis, Mo., $26,218. Noted Aug. 9.

Ill., Evanston—Apartment—W. Legerlof and C. Magnuson, 204 West Washington St., 3 story, 100 x 140 ft., Center St. near Eastwood St., to R. Lundberg & Co., 5538 Glenwood Ave., Chicago. Archts. est. $150,000.

Ill., Springfield—Theatre—G. C. Hickox, Reisch Bldg., remodeling Chatterton Theatre 2 story, 37 x 57 ft., general contract to Alzina Constr. Co., Unity Bldg. Archts. est. $200,000.

Wis., Green Bay—Hospital, etc.—St. Josephs Orphanage, Route 6, 2 and 3 story, 42 x 150 ft., hospital, laundry and boiler house, brick and concrete, plain foundation, to Pinchard Bros., 605 St. George St. $150,000.

Wis., Madison—Hotel—Piper Bros. Co., 31 North Pinckney St., 10 story, 44 x 120 ft., brick, rein.-con. and steel, plain foundation, to Bailey-Kasson Co., 139 North Clark St., Chicago. Archts. est. $300,000. Noted Aug. 31.

Wis., Milwaukee — Apartment — G. F. O'Neil, 297 East Water St., 3 story and basement, 90 x 107 ft., brick, tile and concrete, plain foundation, Prospect Ave., to W. T. Buchholz Co., 840½ 36th St. and J. L. Stamage, 3216 Vliet St. Archts. est. $200,000. Noted Aug. 30.

Wis., Milwaukee—Business and Apartment—Statzer Granite Co., 723 Grand Ave., 3 story and basement, brick and concrete, plain foundation, Wells St., to Coddington Eng. Co., 290 3rd St. Archts. est. $150,000. Noted May 31.

Wis., Wauwatosa—Home—Evangelical Lutheran Kinderheim, East Milwaukee Ave., 3 story and basement, 80 x 167 ft., brick and concrete, plain foundation, West Main St., to Dahlman Constr. Co., 456 Bway., Milwaukee. Archts. est. $150,000. Noted Aug. 9.

Minn., Duluth—Apartment Hotel—Cascade Apartment Co. (Carlsted Bros.), 542 Builders' Exchange, Minneapolis, having plans prepared by Holstead & Sullivan, 410 Palladio Bldg., and will build by day labor, 3 story and basement, 95 x 135 ft., brick and tile, 1st Ave. W. and 3rd St., here. $225,000. This corrects report in Sept. 13 issue.

Mo., St. Louis—School—Bd. Educ., 911 Locust St., 3 story, brick and concrete, 23rd and Walnut Sts., general contract to Murch Bros., Ry. Exch. Bldg., $191,000. Noted Aug 30.

Ark., El Dorado—Hotel—G. W. James will build 4 story and basement, 100 x 125 ft., brick and rein.-con., plain foundation, by day labor. $300,000. Private plans.

Tex., Dallas—Office, etc.—Terminal Bldg. Corp., Southwestern Life Bldg., 19 story, 135 x 200 ft. office, 8-10 story, 16 x 200 ft. and 150 x 177 ft. warehouse units, concrete, steel, terra cotta and brick, 5 track subway for freight accomodations into warehouse, etc., to Watson Co., 1927 South Akard St., $5,000,000. Noted June 21, under Industrial Work.

Tex., Denton—High School—Bd. Educ. 2 story and basement, 85 x 125 ft., brick and stone, to J. T. Taylor Constr. Co., Burkburnett Bldg., Ft. Worth, $137,000. Engrs. est. $150,000. Noted July 19.

Colo., Denver—Office—Capitol Life Insurance Co., Colorado Theatre Bldg., general contract one wing of 2 story and basement 160 x 250 ft., rein.-con. and marble, to F. J. Kirchof Constr. Co., 718 Lawrence St., $130,000. Noted Aug. 23.

Calif., Los Angeles—Office—Standard Oil Co., Standard Oil Bldg., 8 story, fireproof, 10th and Hope Sts., to Foundation Co., Higgins Bldg., and 58 Sutter St., San Francisco, percentage basis. About $1,500,000. Noted May 17.

Calif., Monterey—Hotel—R. Jacks, c/o O'Brien Bros., Inc., archts., 315 Montgomery St., San Francisco, 3 and 4 story, rein.-con. and hollow tile, to J. L. Hansen, 251 Kearny St., San Francisco, $500,000. Noted July 12.

Calif., San Diego—Hospital—St. Josephs Hospital, 7 story, fireproof, to W. E. Kier Constr. Co., 1st Natl. Bank Bldg., $564,000. Ultimate plans include 125 ft. wing addition, costing $400,000. Noted July 5.

Calif., Santa Monica—Hotel and Apartment—Miramar Hotel Co., 4 story and basement, brick, concrete and tile, to Gutleben Bros., I. W. Hellman Bldg., Los Angeles, to exceed $200,000.

Calif., Stockton—Home—San Joaquin Co., 2 story, concrete, to F. Tucker, 321 North Sierra St., $154,879. Noted Aug. 23.

Federal Government Work

PROPOSED WORK

Mass., Hingham—Repairs to Seawall—Spec. 4908—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to seawall of slip; here.

N. J., Lakehurst—Remodeling, etc.—Spec. 4906—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans remodeling quarters and building boathouse, here.

Va., Dahlgren—Well and Pump House—Spec. 4904—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans well and pump house, here.

N. C., Poyners Hill—Boathouse, etc.—Spec. 4907—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans boathouse, cistern and remodeling quarters, here.

Tenn., Memphis—Sub-Post Office—Treas. Dept., Wash., D. C., rejected bids sub-Post Office, here. Plans will be revised and work readvertised. Noted Aug. 30.

Calif., Livermore — Hospital — U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., had revised plans prepared for U. S. Veterans Hospital, here. F. Hines, dir. Noted Apr. 19.

H. T., Pearl Harbor—Piers and Wharf—Spec. 4799—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids rein.-con. piers and wharf at Submarine Base, here. Noted Aug. 23.

H. T., Pearl Harbor—Storehouse—Spec. 4859—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon receives bids 1 story, 120 x 480 ft. storehouse, steel and frame, at Naval Operating Base, here. Noted June 14.

Porto Rico, San Juan—Quarters—Spec. 4909—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans double quarters, here.

BIDS DESIRED

Me., Bar Harbor — Garage, etc. — Spec. 4900—Oct. 10, by Buread Yards & Docks, Navy Dept., Wash., D. C., garage and repairs to administration building at Radio Station, here. Noted Aug. 30.

Conn., Bridgeport—Dredging—Oct. 17 at office U. S. Engineer, Providence, R. I., dredging in harbor, here; adv. E. N.-R. Sept. 20.

Pa., Phila.—Repairs to Roof—Oct. 1, by Treas. Dept., Wash., D. C., repairs to roof, etc., U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.

Ga., Dawson—Post Office—Oct. 17, by Treas. Dept., Wash. D. C., construction of U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Sept. 20.

Fla., Jacksonville—Oct. 1, by F. Brown, clk. Duval Co., clearing Dunns Creek and Baldwin Bryceville Rds., constructing 2 wooden bridges.

La., Carville — Buildings — Oct. 16, by Treas. Dept., Wash., D. C., construction, except mechanical equipment of additional buildings, incl. patients cottages, infirmary, recreation building, kitchen and mess hall, all terra cotta and stucco, storehouse and officers quarters, timber construction, at National Home for Lepers, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Sept. 20.

La., Carville—Mechanical Equipment, etc.—Oct. 16, by Treas. Dept., Wash., D. C., mechanical equipment for additional buildings, incl. infirmary, patients cottages, recreation building, kitchen, mess hall, store house, and officers quarters; extension and remodeling outside services incl. heating, electric, water supply, sewage disposal refrigeration, etc., and constructing power house complete incl. mechanical equipment, National Home for Lepers, here. J. A. Wetmore, acting superv. archt.

Ky., Louisville—Steel and Iron Work—Sept. 24, at office U. S. Engineer, P. O. Box 72, steel and iron work for power house, Lock and Dam 44, Ohio River.

O., Cincinnati—Pontoons, etc.—Oct. 20, at office U. S. Engineer, Cincinnati, steel pontoons and riveted steel pipe; adv. E. N.-R. Sept. 20.

Ind., Newburg—Dwellings—Oct. 18, at office U. S. Engineer, P. O Box 72, Louisville, Ky., lockkeepers dwellings at Dam 47, Ohio River, here; adv. E. N.-R. Sept. 20.

Ill., Chicago—Catamarans, etc.—Nov. 1, at office U. S. Engineer, 537 South Dearborn St., catamarans and pipe for 15 in. hydraulic pipe line dredge; adv. E. N.-R. Sept. 20.

Ia., Waterloo—Extension, etc.—Oct. 8, by Treas. Dept., Wash., D. C., 1 story, 41 x 53 ft., brick extension, 19 x 28 ft. concrete mailing platform and extension to concrete driveway U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt.

Ark., North Little Rock—Building, etc.—Oct. 16 by F. Hines, dir. U. S. Veterans Hospital, at office Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for disturbed patients building, 2 continued treatment buildings, recreation building, tuberculosis cottage, male attendants quarters, additions to nurses quarters, kitchen and mess, all rein.-con. brick and tile; together with road, water, sewer and electric lines serving same, at U. S. Veterans Hospital 78, here. Adv. E. N.-R. Sept. 20.

Wash., Puget Sound—Radio Masts—Spec. 4897—Oct. 17, by Bureau Yards & Docks, Navy Dept., Wash., D. C., three 200 ft. radio masts, here. Noted Aug. 16.

H. T., Pearl Harbor—Extension—Spec. 4910—Nov. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extension for battery storage and overhaul, Submarine Base, here. Noted Sept. 13 under Spec. 4761.

Federal Government Work (Continued)

BIDS RECEIVED

Mass., Boston—Flooring—Treas. Dept., Wash., D. C., flooring, mechanical equipment, renovating and remodeling, in U. S. Post Office and Sub-Treasury Bldg., here, (1) work in connection with 3rd floor (2) work in connection with 4th floor from F. J. Low, 14 Everett Ave., Chelsea, (1) $79,000 (2) $39,000. Noted Aug. 23.

Ill., Rock Island—Lumber—U. S. Engineer, furnishing 237,000 ft. Douglas fir for use at Le Claire Canal Lock, etc., from G. T. Mickle Lumber Co., 30 North La Salle St., Chicago, $5,037. Noted Aug. 30.

Arizona — Road — E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, constructing 15.583 mi. Prescott-White Spar Forest Highway, Prescott National Forest, Yavapai Co., from Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex. (Condition "A" alternate). $462,907. Noted Aug 30.

Calif., Oakland—Dredging—U. S. Engineer, Custom House, San Francisco, dredging Areas A, 475,000 cu.yd., B, 150,000 cu.yd. and C, 150,000 cu.yd. in Harbor, here, from Amer. Dredging Co., 255 California St., San Francisco, $0.232 per cu.yd. Noted Aug. 16.

CONTRACTS AWARDED

Conn., Norwalk—Dredging—U. S. Engineer, Providence, R. I., dredging 500,000 cu. yd. in Harbor, here, to J. S. Packard Dredging Co., Turks Head Bldg., Providence, R. I., $89,321. Noted Sept. 13.

N. Y., New York—Dredging, etc.—U. S. Engineer, 616 Army Bldg., dredging and rock removal Area 2, New York and New Jersey Channels, to E. Breyman, 17 Battery Pl., $577,343. Noted Aug. 23.

D. C., Wash. — Repairing Roof — Spec. 4902—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairing roof of Naval Hospital, to Ironclad Roofing Co., 1416 F St. N.W. $3,221 (45 days). Noted Sept. 13.

La., New Orleans—Earthwork—U. S. Engineer, earthwork, to Union & Grau, New Orleans, Lake Borgne Levee, $2,900; to H. A. Schoenberger, Triumph; Lake Borgne Levee, $3,920, to Lower Coast Constr. Co., 122 Chartres St., Atchafalaya Dist., $75,320.

Mich., Ludington—Superstructure—U. S. Engineer, Milwaukee, Wis., removing timber superstructure and constructing concrete superstructure, here, to S. M. Siesel Co., 160 Ogden Ave., Milwaukee, Wis., $149,690. Noted Sept. 6.

Mich., Saulte Ste. Marie—Dredging—U. S. Engineer, 337 Federal Bldg., Detroit, dredging in St. Marys River, at Vidal Shoals, above the Locks, to Great Lakes Dredge & Dock Co., 129 West Congress St., Detroit, 4,500 cu.yd. submarine rock excav. $8.87. Noted Sept. 6.

Ill. Chicago—Cement—U. S. Engineer, 537 South Dearborn St., 2,000 bbl. portland cement, to Universal Portland Cement Co., 210 South La Salle St., $2.50.

Wyoming—Road—W. J. Johnson, dist. engr., U. S. Bureau Pub. Rds., 301 Custom House, Denver, Colo., grading 4.6 mi. Dayton-Steamboat National Forest Rd., Sheridan Co., here, 9,592 cu.yd. rock and 43,328 cu.yd. common excav., etc., to J. E. Johnson, Sheridan, $47,919. Noted July 26.

Mo., Excelsior Springs—Hospital—Spec. 4887—Bureau Yards & Docks, Navy Dept., Wash., D. C., addition to administration, subsistence and ward buildings, at U. S. Veterans Hospital, here, to Jones Eng. and Constr. Co., Inc., 315 Courtenay Bldg., Omaha, Neb., $99,590. Noted Sept. 13.

Wash., Port Townsend—Water Tank, etc. —Treas. Dept., Wash., D. C., water tank, underground water system and salt water system for fire protection, U. S. Quarantine Station, here, to J. T. Lillis Co., 130 Taylor St., $23,900.

Wash., Seattle—Dredging—U. S. Engineer, Burke Bldg., removal of 399,000 cu. yd. earth along north side Lake Washington Canal from Locks to Puget Sound, overdepth 63,000 cu.yd., and removal 978,000 cu. yd. from canal from Locks out to Puget Sound, to Puget Sound Bridge and Dredging Co., Central Bldg., $278,779. Noted Aug. 23.

California — Road — U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, clearing and grading Big Bear Valley Rd. extension, San Bernardino Co., 50,900 cu yd. excav., 1,100 lin.ft. 18 in. corrugated pipe, etc., to H. M. Henning, Eagle Rock, $61,882. Noted Sept. 6.

Calif., San Diego—Roads and Walks—Spec. 4901—Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks at Marine Barracks, Naval Operating Base, here, to H. H. Peterson, 356 Spreckles Bldg., $11,531 (90 days). Noted Aug. 30.

Calif., San Diego—Storehouse—Spec 4809—Bureau Yards & Docks, Navy Dept., Wash., D. C., paint and oil storehouse, here, to Wright Bros., 4581 Edgeware Rd., $7,116 (90 days). Noted Aug. 23.

H. T., Pearl Harbor—Bins and Trestle—Spec. 4772—Bureau Yards & Docks, Navy Dept., Wash., D. C., 12 storage bins and 1 trestle at Naval Operating Base, here, to R. E. Wooley, 305 James Campbell Bldg., Honolulu, $49,202. Noted Aug. 2.

Miscellaneous

PROPOSED WORK

Elimination of Grade Crossing—Niagara Falls, N. Y.—City making plans eliminating grade crossing on New York Central and Hudson River and Grand Trunk Railroads, North Main St. $650,000. W. McCulloh, Gluck Bldg., engr.

Subway—Rochester, N. Y.—Plans subway under north side Main St. at Clinton St., for pedestrian traffic. $80,000.

Stadium—Pittsburgh, Pa.—University of Pittsburgh, Bigelow Blvd. and Parkman Ave, having plans prepared rein.-con. and steel athletic stadium, 65,000 seating capacity $1,500,000. F. W. Hindman, Columbus, O., engr.

Underpass—Columbia, Tenn. — Louisville & Nashville R.R. Co., Louisville, Ky., making plans underpass for elimination of grade crossing on Hampshire Pike, near here. W. H. Courtenay, ch. engr.

Observatory—Alliance, O.—Mt. Union College plans astronomical observatory. $35,000.

Elimination of Grade Crossings—Toledo, O.—City plans elimination of 14 grade crossings by overhead plan. Election in November to vote on $3,000,000 bonds. W. D. Hudson, Toledo, engr.

Tunnel—Toledo, O.—See "Streets and Roads."

Golf Course—Appleton, Wis.—Appleton Golf Club Assn. making plans 9 or 18 hole golf course, club house, tennis courts, etc. $50,000. W. C. Jackson, 174 East Pearson St., Chicago, engr.

Transmission Line—Hustisford, Wis.—Wisconsin Power & Light Co., Gay Bldg., Madison, plans 9 mi. transmission line from here to Horicon, 13,000 volt, 3 phase. $25,000. Engineer not selected.

Gas Container—Sheboygan, Wis.—Wisconsin Pub. Serv. Corp., having plans prepared gas container and holder of 1,000,000 or more cubic feet. R. B. Brown, 182 Wisconsin St., Milwaukee, engr. Noted Sept. 6.

Transmission Lines—Missouri—Arkansas-Missouri Power Co., Carruthersville, soon lets contract transmission lines from Blytheville, Ark., to Carruthersville, Hayti, Kennett and Rector, Mo.; new distribution lines in Carruthersville, Blytheville and Kennett; 600 kw. diesel unit in Carruthersville plant. $308,400. Private plans.

Streets Lighting—St. Joseph, Mo.—City making preliminary plans changing 731 arc street lights to incandescent lights and adding 500 incandescent lights and 262 white way standards and necessary wiring, etc. $90,000.

Flood Prevention—San Antonio, Tex.—Plans election in November to vote on $2,850,000 bonds for flood prevention, incl. retention dams or straightening river winding through city or both on modified basis. D. D. Harrigan, city engr.

Dredge—Portland, Ore.—Port of Portland, Spalding Bldg., having plans prepared for dredge to be equipped with four 750 hp. Diesel engines and 30 in. suction and discharge pipe. J. H. Polhemus, gen. mgr. G. B. Hegardt, Stark St. Dock, engr.

Elimination of Grade Crossing—San Jose, Calif.—Oct. 23, to vote on $100,000 bonds constructing necessary structures for separation of grades at intersection of West Santa Clara St. and Southern Pacific right of way. W. Popp, city engr.

Piers and Sheds—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., having plans prepared three 386 x 600 ft. piers and sheds, wood piles with concrete covering, China Basin, to be known as Piers 48, 50 and 52. $1,000,000 each. F. G. White, ch. engr.

Underground Conduits—Outremont, Que.—Soon takes bids underground conduits, $45,544. E. T. Sampson, city, clk.

Power Lines—Bayfield, Ont.—Ontario Hydro Comn., London, plans 15 mi. line from here to Clinton, $35,000.

Arena, Grand Stand, etc.—London, Ont.—Western Fair Bd., Dominion Savings Bldg., plans arena, $200,000, extensions to grand stand and alterations to horticultural and art buildings, $100,000.

BIDS DESIRED

Fill—Salisbury Beach (Newburyport P. O.), **Mass.**—Sept. 30, at office of Salisbury Beach Associates, filling about 20 acres of marsh. J. P. Titcomb, 111 Friend St., Amesbury, engr.; adv. E. N.-R. Sept. 20.

Sand and Gravel—Albany, N. Y.—See "Waterworks."

Subway—Brooklyn, N. Y.—Oct. 2, by Transit Comn., 49 Lafayette St., New York, subsurface railroad extending along and under 4th Ave. from 86th to 95th Sts., here. Former contract withdrawn. Noted Dec. 28.

Railroad Duct Line—New York, N. Y.—Sept. 28 by G. McAneny, chn. Transit Comn., 49 Lafayette St., railroad duct line at 239th St. yard, White Plains Rd. Rapid Transit R. R., Route 18, Agreement "CS".

Sea-Wall—New York, N. Y.—Sept. 25 by B. S. Coler, comr. Dept. Pub. Welfare, Municipal Bldg., sea-wall on east shore Welfare Island, New York City Dist.

Crane—Newark, N. J.—Riverside Steel Casting Co., Plank Rd. and Passaic River, in market for one 10 ton, 40 ft. span electric traveling crane.

Grapple Dredge—Phila., Pa.—Sept. 24, by G. F. Sproule, dir. Dept. Wharves & Ferries, steel hull grapple dredge. $120,000 to $200,000. Private plans.

Mixer, Loader, etc.—Wash., D. C.—Dist. Comrs., 509 Dist. Bldg., receiving bids for 1 mixer, 1 loader and 1 power grader for roadwork.

Ditch—Digging Machine—Hickman, Ky.—C. T. Bondurant, in market ditch-digging machine. $10,000.

Paving Brick—Cleveland, O.—Sept. 27, by city, 400,000 paving brick.

Foundation—Milwaukee, Wis.—Riesch & Hess, archts., 128 Wisconsin St., taking bids and opens same about Oct. 1, foundation for 1 and 2 story, 120 x 136 ft., brick and concrete church, 11th and Clarke Sts., for St. Boniface Congregation, c/o H. Stemper, pastor, 1118 Clarke St. $150,000 total. Noted Aug. 2, under "Buildings."

Levee—Portage, Wis.—Sept. 28, by Wisconsin State Levee Comn, enlarging, strengthening and protecting portions of Levee system, 12,000 cu.yd. earth fill, 5,000 cu.yd. stone rip rap, 6,000 cu.yd. brush mattress shore protection. H. V. Tennant, Portage, engr.

Concrete Mixer—Wichita, Kan.—L. L. Simpson, 1157 New York Ave., taking bids power concrete mixer.

Cement, etc.—Dallas, Tex.—A. Hawkins, P. O. Box 1002, receiving bids 50,000 cu.yd. concrete, 1,000,000 sq.ft. monolithic floor finish, 500,000 common brick backing, 1,400,000 face brick, 90,000 4 in. tile partitions, 100,000 6 in. tile partitions, 100,000 8 in. tile backing, 25,000 12 in. tile backing, for warehouse and office building. Bids on whole or part considered.

Gas System—Fairfax, Okla.—Sept. 24, by J. N. Fly, city clk., 7 mi. gas distribution system, 37,500 ft. 2-6 in. pipe, etc. $36,000. Former bids rejected. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Sept. 13.

Steel Rails, etc.—California—See "Railways."

Steel Rails and Splice Bars—Eureka, Calif.—J. Griffith, city supt. pub. wks., receiving bids furnishing steel rails and splice bars, alternate bids for 23,385 ft. 70 lb. T rails and 14,100 ft. same weight rails.

Motor Street Flusher—San Francisco, Calif.—L. S. Leavy, city purch. agt., receiving bids furnishing and delivering motor street flusher, for city and San Francisco Co.

Transmission Line—Timmins, Ont.—Hollinger Consolidate Gold Mines taking bids 80 mi. transmission line, 88,000 or 110,000 volt, from here to power house at Island Portage on Abitibi River. $1,000,000. Kerry & Chace, Ltd., 550 Confederation Life Bldg., Toronto, engrs.

BIDS RECEIVED

Fire Alarm System—New York—T. J. Drennan, fire comr., Municipal Bldg., New York City, Sept. 11, extension to fire alarm system, Boro of Queens, from J. Sudgen & Co., 100 5th Ave., New York City, $41,622. Noted Sept. 6.

Grain Elevator—Oswego, N. Y.—E. S. Walsh, supt. Pub. Wks., Albany, Sept. 11, constructing and equipping grain elevator and machine shop, here, Contr. 82, from James Stewart Co., Inc., 30 Church St., New York, $1,119,986. Noted Aug. 16.

Heating and Ventilating Equipment—Louisville, Ky.—Kosairs Assn., furnishing and installing heating and ventilating equipment for temple, Bway., from A. J. Anderson, 338 West Main St., $51,000.

Miscellaneous (Continued)

Grade Separation—Lincoln Park (Wyandotte P. O.), **Mich.**—Wayne Co. Rd. Comn., 1103 Real Estate Exch. Bldg., Detroit, excavating, filling, sodding, etc. for grade separation on St. Cosme Rd., incl. sewers, pumphouse and well, from Closser Bros., 3917 Lawton Ave., Detroit, $39,182.

Tunnel—Colorado—Moffat Tunnel Dist., 1731 Arapahoe St., Denver, Moffat Tunnel under James Peak, Gilpin and Grand Counties, from Uhlen & Co., 120 Bway., New York City, construction and maintenance camps $407,690, 30,000 cu.yd. earth excav. $1.75, 15,000 cu.yd. rock excav. $3, 175,500 cu.yd rock excav. main heading $16,365,000 cu.yd. rock excav. in railroad tunnel $7, Oregon fir permanent timber lining in railroad tunnel $155,000, ridgepole pine permanent timber lining in railroad tunnel $125,000, 5,000 cu.ft. concrete masonry in tunnel $16, 8,000 bbl. cement $5, 15,800 cu.yd. ballast in tunnel $2.50, etc., total $6,075,000. Noted Aug 9.

CONTRACTS AWARDED

Enclosures—New York, N. Y.—Transit Comn, 49 Lafayette St., enclosures for 3rd addition to shops at Lenox Ave. and 148th St. Yard, to D. C. Serber, 451 West 16th St., $948,773. Noted Sept. 13.

Creosoted Piling, etc.—Mayersville, Miss.—First & Second Rd. Dist., 2,650 lin.ft. creosoted piling, 6,120 ft. creosoted lumber and 50,000 ft. untreated lumber delivered at Flanton Station, to Creosote Materials Co., Q and C Bldg., New Orleans, La. Noted Aug. 2.

Retaining Walls, etc.—Ohio—State Hy. Dept., Columbus, will repair concrete and stone walls, and build new retaining walls at Buckeye Lake in Fairfield and Licking Counties. $40,000. Work will be done by day labor. P. R. Murray, dir. Noted Aug. 30.

Cement—Newburg, Ind.—Natl. Contract Co., Citizens Natl. Bank Bldg., Evansville, furnishing and delivering 5,000 bbl. portland cement for Dam 47 Ohio River, here, to Lehigh Portland Cement Co., Conway Bldg., Chicago, Ill. Engrs. est $15,000. Noted Aug. 23.

Revetment—Illinois—Cleveland, Cincinnati, Chicago & St. Louis Ry., Union Central Bldg., Cincinnati, 2 mi. revetment along bank of Ohio River and railroad tracks between Cairo and Mound City, to Wood Bros. Constr. Co., Lincoln, Neb. Engrs. est. $25,000. Noted Sept. 6.

Generators and Street Lighting System—Kewanee, Ill.—To Midwest Engine Co., Anderson, Ind., one 1,300 kw. and one 1,500 kw. turbo generator, $36,376; to Merkle Mchy. and Contg. Co., 1733 Walnut St., Kansas City, Mo., miscellaneous machinery and street lighting system, $73,900. Noted May 24 under "Industrial Work."

Portland Cement—St. Paul, Minn.—For 20,000 bbl. portland cement for Mississippi River conduit, 5,000 bbl. each to Corning Donohue Brick Co., 614 Ryan Bldg. and St. Paul Builders Materials Co., 605 Ryan Bldg., 10,000 bbl. to Speakes Co., Griggs and Fuller Sts., all $2.80 per bbl. net, delivered. Noted Aug. 30, under "Waterworks."

Grain Elevator—Pittsburgh, Kan.—C. Hotz & Son, first unit grain elevator, 170,000 bu. (capacity will be doubled at later date), to Southwest Eng. Co., Woodruff Bldg., Springfield, Mo. $35,000.

Marine Cables—St. Louis, Mo.—Union Electric Light and Power Co., 12th and Locust Sts., laying 12 marine cables on Mississippi River bed carrying 12,000 kw. of power connecting Cahokia, Ill. power plant with St. Louis, Mo., station, to Fruin-Colnon Constr. Co., Merchants Laclede Bldg. Engrs. est. $156,000.

Cement—Merced, Calif.—Merced Irrigation Dist., 6,000 bbl. cement, to H. Cowell Lime & Cement Co., 2 Market St., San Francisco, $3.79 per bbl. Noted Aug. 23.

Subway—Sacramento, Calif.—Pedestrial subway through 12th St., to Frederickson & Shannon, Cory Bldg., Fresno, $22,750. Noted Mar. 22.

Subway—Sacramento, Calif.—City Comrs., portion of subway through levee at 16th and B Sts., to Davison & Nicholsen, 324 West Lafayette St., Stockton, $82,000. Southern Pacific R.R. Co., will bear portion of cost, and handle remaining portion of work. Noted Aug. 30.

Road Material—Woodland, Calif.—Yolo Co., 3,230 tons willite for Jefferson Blvd., to A. Teichert & Son, Ochsner Bldg., Sacramento, $11.62 per ton. Noted Sept. 13.

Generators — Timmins, Ont. — Hollinger Consolidated Gold Mines, Ltd., two 12,500 kva. electrical generators in connection with power development on Island Portage, to Canadian General Electric Co., 212 King St. W., Toronto, $250,000.

OFFICIAL PROPOSALS

Bids: Sept. 27.

Excavating Channel

Albany, N. Y., September 6, 1923.

Sealed proposals will be received by the Salt Water Bays Commission at the office of the State Engineer and Surveyor in the Telephone Building in Albany, N. Y. until 12 o'clock noon (daylight saving time) on Thursday, September 27, 1923, at which place and hour they will be publicly opened and read for excavating a channel connecting Moriches, Quantuck, Shinnecock and Peconic Bays, County of Suffolk, Long Island, N. Y., pursuant to the provisions of Chapter 686, Laws of 1923.

For excavating a channel connecting Moriches, Quantuck, Shinnecock and Peconic Bays, County of **Suffolk, Long Island**, N. Y.

Contract plans Sheets 1 to 6 inclusive.

Plans may be seen and detailed specifications, Engineer's estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the offices of the State Engineer and Surveyor in the Telephone Building, Albany, N. Y. and at Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the State Engineer for five per centum (5 per cent) of the amount of the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the State Engineer and Surveyor.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Salt Water Bays Commission, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Salt Water Bays Commission, care of State Engineer and Surveyor, Telephone Building-Albany, N. Y.; and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Salt Water Bays Commission of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

SALT WATER BAYS COMMISSION
By Dwight B. LaDu, Chairman.

Bids: Oct. 10.

Reinforced Concrete Pavement

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Warren for the Construction of Section No. 1 of the Phillipsburg-Belvidere Road in the County of Warren with a Reinforced Concrete pavement. The estimated amount of pavement required is 42,357 square yards.

Bids will be opened and read in public at the office of the said Board at the Court House, Belvidere, N. J., on Wednesday, October 10, 1923, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work prepared by H. W. Vetter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the blue prints of the drawings by the engineer on proper notice and a deposit of $10.00 which will be refunded upon return of same in good condition. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidders and name of road on the outside, addressed to the Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a statement from a surety company authorized to do business in New Jersey, stating that it will furnish the contractor with a satisfactory bond in the full amount of the contract in case he is found to be the lowest responsible bidder and is subsequently awarded the contract and a certified check for not less than 10 per cent of the amount bid provided said check shall not be less than $500.00 nor more than $20,000.00, made payable to H. O. Carhart, County Treasurer, and be delivered at the place and on the hour above named. The standard proposal form will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Warren.

MORRIS S. FAUST.
Clerk.

Bids: Oct. 11.

Filters and Pumping Machinery

Danville, Va.

Sealed proposals will be received by the City of Danville, Virginia, until 4 o'clock p.m., Thursday, October 11th, for furnishing the labor and materials for certain Water Works Improvements.

The work will be under two contracts, namely:

1. For the construction of a coagulating basin, aerator, and reconstruction of filters.
2. For high and low lift centrifugal pumping machinery and electric wiring.

Plans, specifications, form of proposal, bond and contract may be seen at the office of the Engineering Department of the City of Danville, and at the office of Hazen & Whipple, Civil Engineers, 25 West 43rd Street, New York City. Bidders will be furnished with a copy of specifications and blueprints of drawings, upon application and deposit of $10, which will be refunded upon the return of the same in good condition.

The right is reserved to reject any or all bids.

FRANK TALBOTT.
Superintendent Water Department.

Bids: March 18, 1924.

18-Mile Railway Construction Tenders

DOMINION OF NEW ZEALAND

Wellington, New Zealand.

Tenders close with the Public Works Tenders Board, Wellington, New Zealand, at noon on 18th March, 1924, for construction of 18 miles of railway including bridges station buildings, earthworks, approach road metalling, etc. Plans and specification may be inspected at the New York office of Engineering-News Record.

CONSTRUCTION NEWS

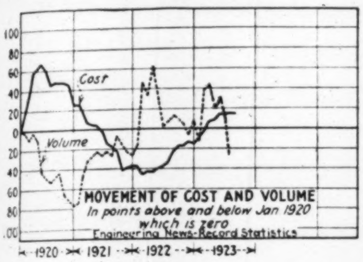
Engineering News-Record, September 27, 1923

The Construction Barometer

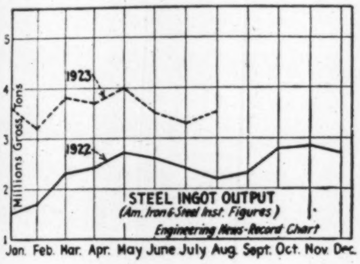
Drop in Unfilled Tonnage—Fewer Bank Debits—Buyers Cautious

THAT conditions in the basic industries are not uniform is evinced by conflicting production trends in several of the principal commodities. Increases are noted in the output of steel ingots, cement, automobiles and footwear. Decreases occurred in pig iron and cotton textiles.

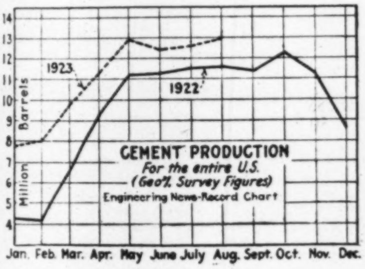
Falling off in debits to individual accounts (Federal Reserve figures) together with a drop in unfilled steel tonnage (U. S. Steel Corporation) and a decided decrease in volume of construction (*E. N-R.* Index), despite stable cost indicate caution among buyers as well as seasonal declines.



MOVEMENT OF COST AND VOLUME
In points above and below Jan 1920 which is zero
Engineering News-Record Statistics



STEEL INGOT OUTPUT
(Am. Iron & Steel Inst. Figures)
Engineering News-Record Chart



CEMENT PRODUCTION
For the entire U.S.
(Geo'l. Survey Figures)
Engineering News-Record Chart

Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Sept. 6	$28,163,000	$17,205,000	$45,368,000
Sept. 13	27,304,000	21,935,000	49,239,000
Sept. 20	13,016,000	19,333,000	32,349,000
3 Weeks	$68,483,000	$58,473,000	$126,956,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

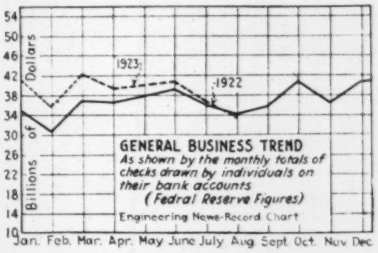
Week Ended	No.	Public Work	No.	Private Work
Sept. 6	16	$9,563,000	16	$8,019,000
Sept. 13	9	2,955,000	30	13,607,000
Sept. 20	7	1,181,000	35	16,913,000
3 Weeks	32	$13,699,000	81	$38,539,000

NUMBER OF LARGE JOBS NOW OUT FOR BIDS

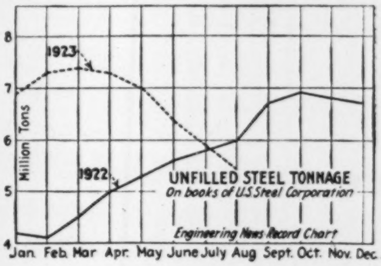
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Sept. 6	35	197	83	32	42
Sept. 13	36	178	67	39	36
Sept. 20	35	179	51	35	37

FIR TIMBERS HIGHER—OTHER BASIC MATERIALS UNCHANGED

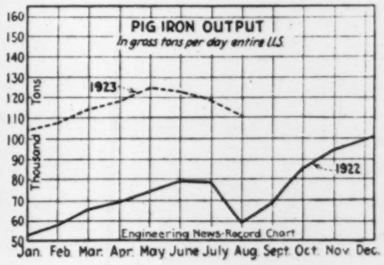
	Quoted on Sept. 27, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	61.00	63.00	Sept. 6
Fir, San Fran., M. ft.	42.00	38.00	Sept. 20
Common labor	.54	.53	June 28



GENERAL BUSINESS TREND
As shown by the monthly totals of checks drawn by individuals on their bank accounts
(Fedral Reserve Figures)
Engineering News-Record Chart



UNFILLED STEEL TONNAGE
On books of U.S. Steel Corporation
Engineering News-Record Chart



PIG IRON OUTPUT
In gross tons per day entire U.S.
Engineering News-Record Chart

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 1	Montreal, Que.	Sept. 27
Oct. 2	Wallington, N. J.	Sept. 13
Oct. 2	Leland, Miss.	Sept. 27
Oct. 2	Bayonne, N. J. Adv. Sept. 27.	Sept. 27
Oct. 2	Los Angeles, Calif.	Sept. 27
Oct. 2	Keansburg, N. J. Adv. Sept. 27.	Sept. 27
Oct. 3	Portland, Ore.	Sept. 13
Oct. 4	Stoneham (Boston P. O.), Mass.	Sept. 13
Oct. 5	New Bedford, Mass. Adv. Sept. 20 and 27.	Sept. 20
Oct. 5	Ellenville, N. Y.	Sept. 27
Oct. 8	Milbank, S. D.	Sept. 20
Oct. 9	Toronto, Ont.	Sept. 13
Oct. 9	Kings Mountain, N. C. Adv. Sept. 13 to 27.	Sept. 20
Oct. 10	Lewiston, Idaho	Sept. 20
Oct. 10	Elyria, O. Adv. Sept. 27.	Sept. 27
Oct. 11	Danville, Va. Adv. Sept. 13 to 27.	Sept. 13
Oct. 23	Buffalo, N. Y. Adv. Sept. 20 and 27.	Sept. 20
Oct. 26	Tulsa, Okla. Adv. Sept. 27.	Sept. 27

SEWERS

Bids Close		See Eng. News-Record
Oct. 1	Perth Amboy, N. J. Adv. Sept. 20 and 27.	Sept. 20
Oct. 1	Euclid, O	Sept. 27
Oct. 1	Crystal Springs, Miss.	Sept. 27
Oct. 2	Leland, Miss.	Sept. 27
Oct. 2	Asbury Park, N. J.	Sept. 27
Oct. 3	Baltimore, Md.	Sept. 27
Oct. 8	Brighton, N. Y. Adv. Sept. 27.	Sept. 27
Oct. 9	Bluefield, W. Va.	Sept. 13
Oct. 9	Roxboro, N. C.	Sept. 20
Nov. 1	Fort Erie, Ont.	Aug. 23

BRIDGES

Bids Close		See Eng. News-Record
Oct. 1	Salina, Calif.	Sept. 20
Oct. 2	Mermentau, Mich.	Aug. 30
Oct. 2	Johnstown, Pa.	Sept. 13
Oct. 2	Louisiana	Sept. 13
Oct. 3	West Palm Beach, Fla.	Sept. 27
Oct. 4	Lancaster, S. C.	Sept. 20
Oct. 8	Portland, Ore.	Sept. 27
Oct. 8	Okemos, Mich.	Sept. 27
Oct. 9	Alabama	Sept. 20
Oct. 9	Indianola, Ia.	Sept. 27
Oct. 10	Wheeler, S. D. Adv. Sept. 20 and 27.	Sept. 20
Oct. 10	North Carolina	Sept. 27
Oct. 11	Louisiana	Sept. 20
Oct. 11	Germfask, Mich.	Sept. 27

Bids Close		See Eng. News-Record
Oct. 11	Wilkes Barre, Pa. Adv. Sept. 27.	Sept. 27
Oct. 12	Wilkes Barre, Pa. Adv. Sept. 27.	Sept. 27
Oct. 16	Clearwater, Fla.	Sept. 13
Oct. 16	Fishkill, N. Y. Adv. Sept. 27.	Sept. 27
Oct. 16	Williamson, W. Va. Adv. Sept. 27.	Sept. 27
Oct. 22	Portland, Ore. Adv. Sept. 27.	Sept. 27
Oct. 23	Mobridge, S. D. Adv. Sept. 27.	Sept. 27
Oct. 26	Centerville, Tex.	Sept. 27
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

Oct. 3	California	Sept. 13
Mar. 18	New Zealand Adv. Sept. 20 and 27.	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Oct. 2	Madison, Wis.	Sept. 20
Oct. 2	Corydon, Ia.	Sept. 27
Oct. 5	Hamilton, Mont. Adv. Sept. 20 and 27.	Sept. 20
Oct. 8	Mason City, Ia.	Sept. 27
Oct. 9	Clarksdale, Miss.	Sept. 27
Oct. 10	Elkhorn, Wis.	Sept. 20
Oct. 12	Mason City, Ia.	Sept. 27
Oct. 15	Toronto, Ont.	Sept. 27

STREETS AND ROADS

Oct. 1	Water Valley, Miss.	Sept. 20
Oct. 1	Jacksonville, Fla.	Sept. 20
Oct. 1	Michigan	Sept. 27
Oct. 1	Clayton, Mo.	Sept. 27
Oct 2	St. Louis, Mo.	Sept. 6
Oct. 2	Cherokee, Ia.	Sept. 27
Oct. 2	Columbus, O.	Sept. 27
Oct. 2	Oilton, Okla.	Sept. 27
Oct. 2	Phila., Pa.	Sept. 27
Oct. 2	Avon Park, Tex.	Sept. 27
Oct. 2	Massachusetts	Sept. 27
Oct. 3	Michigan	Sept. 20
Oct. 3	West Palm Beach, Fla.	Sept. 27
Oct. 4	Vermont Adv. Sept. 27.	Sept. 27
Oct. 4	New Hampshire	Sept. 27
Oct. 5	Topeka, Kan.	Sept. 20
Oct. 5	New York Adv. Sept. 27.	Sept. 27
Oct. 5	Lexington, Miss.	Sept. 27
Oct. 5	Oberlin, Kan.	Sept. 27
Oct. 5	Atlanta, Ga.	Sept. 27
Oct. 8	Michigan	Sept. 27
Oct. 8	San Diego, Calif.	Sept. 27
Oct. 8	South Pasadena (Pasadena P. O.), Calif.	Sept. 27
Oct. 9	Alabama	Sept. 20
Oct. 9	Barstow, Tex.	Sept. 20
Oct. 10	Belvidere, N. J. Adv. Sept. 20 and 27.	Sept. 20
Oct. 10	North Carolina Adv. Sept. 27.	Sept. 27
Oct. 11	Louisiana	Sept. 20
Oct. 11	Little Rock, Ark.	Sept. 27
Oct. 11	Virginia Adv. Sept. 27.	Sept. 27
Oct. 12	Michigan	Sept. 27
Oct. 15	Weston, W. Va.	Sept. 20
Oct. 15	Michigan	Sept. 27
Oct. 15	Lexington, Miss.	Sept. 27
Oct. 16	Clearwater, Fla.	Sept. 13
Oct. 17	Meadville, Miss.	Sept. 27
Oct. 18	Houston, Tex.	Sept. 27
Oct. 18	Hemphill, Tex.	Sept. 27
Oct. 19	Marion, Kan.	Sept. 27
Oct. 19	Paris, Tex.	Sept. 27
Oct. 22	Norton, Kan.	Sept. 27
Oct. 23	Kentucky	Sept. 27

INDUSTRIAL WORK

Oct. 6	Baltimore, Md.	Sept. 27
Oct. 9	Louisville, Ky.	Sept. 20
Oct. 10	Wilmington, N. C.	Sept. 27
Oct. 10	Quebec, Que.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 1	Memphis, Tenn.	Sept. 6
Oct. 1	Jackson, Miss.	Sept. 27
Oct. 1	Flint, Mich.	Sept. 27
Oct. 1	Cleveland, O.	Sept. 27
Oct. 1	Providence, R. I.	Sept. 27
Oct. 2	Upper Flushing (Flushing P. O.), N. Y.	Sept. 20
Oct. 2	Flushing, N. Y.	Sept. 20
Oct. 2	Waukesha, Wis.	Sept. 27
Oct. 3	Buffalo, N. Y.	Sept. 20
Oct. 4	Duluth, Minn.	Sept. 27
Oct. 4	Winchester, Ky.	Sept. 27
Oct. 4	Woodbury, N. J.	Sept. 27
Oct. 6	Hot Springs, Ark.	Sept. 27
Oct. 8	Wichita, Kan.	Sept. 6
Oct. 8	Fayetteville, N. C.	Sept. 20
Oct. 8	Syracuse, N. Y.	Sept. 20
Oct. 9	Louisville, Ky.	Sept. 13
Oct. 9	Trenton, N. J.	Sept. 20
Oct. 9	Bowling Green, O.	Sept. 27
Oct. 10	Birmingham, Ala.	Aug. 30
Oct. 10	Virginia, Minn.	Sept. 13
Oct. 15	Cleveland, O.	Sept. 20
Oct. 15	Waseca, Minn.	Sept. 20
Oct. 15	Bakersfield, Calif.	Sept. 27
Oct. 16	Bridgeport, Conn.	Sept. 27
Oct. 20	Louisville, Ky.	Sept. 13
Oct. 24	Marion, Ia.	Sept. 27
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Oct. 1	Repairs to Roof — Phila., Pa.	Sept. 20
Oct. 3	Gates, Hoists, etc.—Denver, Colo.	Sept. 6
Oct. 3	Superstructure — Dunkirk, N. Y. Adv. Sept. 6 to 27.	Sept. 6
Oct. 3	Extension—Niagara Falls, N. Y.	Sept. 27
Oct. 4	Recreation Building, etc. — Wash., D. C. Adv. Sept. 13 to 27.	Sept. 13
Oct. 4	Road—Wyoming	Sept. 27
Oct. 8	Extension, etc.—Waterloo, Ia.	Sept. 20
Oct. 10	Garage, etc.—Bar Harbor, Me.	Sept. 20
Oct. 15	Breakwater—Hilo, H. T. Adv. Aug. 23 to Sept. 27.	Aug. 23
Oct. 15	Dredging—Los Angeles, Calif.	Sept. 27
Oct. 16	Buildings, etc.—North Little Rock, Ark. Adv. Sept. 20 and 27.	Sept. 20
Oct. 16	Mechanical Equipment—Carville, La.	Sept. 20
Oct. 16	Buildings—Carville, La. Adv. Sept. 20 and 27.	Sept. 20
Oct. 17	Dredging — Bridgeport, Conn. Adv. Sept. 20 and 27.	Sept. 20
Oct. 17	Post Office—Dawson, Ga. Adv. Sept. 20 and 27.	Sept. 20
Oct. 17	Radio Masts—Puget Sound, Wash.	Sept. 20
Oct. 17	Discharge Ponton—Rock Island, Ill. Adv. Sept. 27.	Sept. 27
Oct. 18	Dwellings — Newburg, Ind. Adv. Sept. 20 and 27.	Sept. 20
Oct. 18	Road—Florida	Sept. 27
Oct. 20	Pontoons, etc.—Cincinnati, O. Adv. Sept. 20 and 27.	Sept. 20
Oct. 26	Dredging, etc.—Port Chester, N. Y. Adv. Sept. 27.	Sept. 27
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
Nov. 1	Catamarans, etc.—Chicago, Ill. Adv. Sept. 20 and 27.	Sept. 20
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 30	Dam—Quebradillas, P. R. Adv. Sept. 27.	Sept. 27

MISCELLANEOUS

Sept. 28	Railroad Duct Line—New York, N. Y.	Sept. 20
Sept. 30	Fill—Salisbury Beach (Newburyport P. O.), Mass. Adv. Sept. 20 and 27.	Sept. 20
Oct. 1	Gravel—Baton Rouge, La.	Sept. 13
Oct. 1	Tunnel—Hood River, Ore.	Sept. 27
Oct. 2	Wharf—Harrop, B. C.	Sept. 13
Oct. 2	Subway—Brooklyn, N. Y.	Sept. 20
Oct. 3	Steel Castings—St. Louis, Mo.	Sept. 27
Oct. 4	Locomotive and Car Bolsters, etc.—St. Louis, Mo.	Sept. 27
Oct. 4	Mud Shell—Houston, Tex.	Sept. 27
Oct. 4	Transmission Line—St. Paul, Kan.	Sept. 27
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Oct. 9	Ornamental Lighting System —Bexley (Columbus P. O.), O.	Sept. 27
Oct. 15	Gravel—Kountze, Tex.	Sept. 27
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Connecticut — South Manchester Water Co. plans laying 10 mi. c.i. pipe (various sizes), from dam in Buckingham to South Manchester and Manchester. Cost to exceed $100,000.

N. Y., Silver Creek—Plans new reservoir. $30,000. Engineer not selected.

N. C., Goldsboro—City Council authorized $60,000 bond issue enlarging waterworks by 1 m.g. capacity, will also include several miles water and sewer lines, etc.

Tenn., Gallatin—Election soon to vote on $35,000 bonds for filtration plant.

O., Columbus—See "Streets and Roads."

Ill., Metropolis—Having preliminary plans prepared for water works plant, equipment and distribution mains; modernization of electric light plant and transmission system. $100,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Wis., Green Bay—Making plans replacing present steam boiler equipment in Municipal pumping station with gas engine and electric motor equipment, incl. new pumps, etc. $75,000. A. E. Kringle, City Hall, engr.

Ia., Albia—Making plans and will let contract early in October for impounding dam, storage reservoir, pumping station and filtration plant. $80,000. Bonds voted for project. Brown & Cook, Uttumwa, engrs.

Ia., Washington—Voted $80,000 bonds for waterworks improvements, incl. 200,000 gal. elevated steel tank, complete new pumping station, motor driven pumps, wells, etc. A. L. Mullergren, Gates Bldg., Kansas City, Mo., engrs. Noted Aug. 30.

Kan., Goff — Voted $25,000 bonds for waterworks. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, Mo., engrs. Noted Aug. 16.

Kan., Wichita—Plans addition to water plant. City appropriated $10,000 to be used for engineering fee. E. S. Worrell, city clk. Engineer not selected.

S. D., Watertown—Municipal Utilities Comn. rejected bids Aug. 29, waterworks improvements, filter, pump and pipe equipment for pumping station and filter house. Noted July 26.

Neb., Snyder—Voted $25,000 bonds for water system. W. Reese, city clk.

Mo., Greenfield — Voted $64,000 bonds waterworks plant and distribution mains, also 11,000 ft. sanitary sewers and disposal plant. Engineer not announced. Noted July 26.

Mo., Ironton—Having preliminary plans prepared pumping plant, reservoir, distribution mains, etc. Election soon to vote on $40,000 bonds. J. D. Davis, Jefferson City, engr.

Mo., Odessa—Voted $15,000 bonds 3,500 ft. 8-12 in. distributing mains. Noted Sept. 6.

Mo, Ridgway — Voted $45,000 bonds pumping plant, reservoir, distribution mains, etc. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noted Sept. 6.

Mo., Thayer—Oct. 2, to vote on bonds for distribution system, pumping plant, reservoir, etc. $55,000. R B. Alexander, 535 Benton St., Kansas City, engr. Noted Aug. 9.

Tex., Kerrville—Plans new pumping unit and well. $15,000.

Okla., Cheyenne—Election soon to vote on $25,000 bonds for waterworks system incl. well, mains, pumps, etc. E. W. Baker, First Natl. Bank Bldg., Oklahoma City, engr.

Okla., Lawton—Oct. 3, to vote on $15,000 bonds for 8,000 ft. of 10 in. c.i. pipe around industrial section of city. E. M. Montain, city engr.

Okla., Owasso—Election soon to vote on $25,000 bonds for waterworks system. Holway Eng. Co., 5050 Wright Bldg., Tulsa, engrs. Noted Aug. 23.

Okla., Sulphur—Takes bids about Oct. 1, waterworks extension. $50,000. E. T. Archer & Co., 609 New England Natl. Bank Bldg., Kansas City, Mo., engrs. Noted Aug. 30.

Okla., Terlton—Sept. 25, to vote on $20,000 bonds waterworks system, tower, well

Waterworks (Continued)

and pump. F. B. King, 409 West 11th St., Oklahoma City, engr.

Ont., Ford—Essex Border Utilities Comn. having plans prepared and takes bids about Nov. 1, filtration plant. $150,000. J. C. Keith, 300 Ouellette Ave., Windsor, engr.

Que., Montreal—Plans 15,216 ft. 8 and 10 in. c.i. mains in Bernard, Crevier, Delanaudiere, Des Encores, Milton, Poupart, Valois and Sackville Sts., $61,048, also 3,424 ft. 2 x 3 brick sewers in Hopper, Bocage, Woodland, Rochland and Springland Sts., $21,154. E. Gauthier, asst. city clk.

BIDS DESIRED

N. Y., Ellenville — Oct. 5, by Village Trustees at office of C. G. Fischer, clk., new outlet for Maratanza Lake, incl. open channels, tunnels, manholes, pipe and fittings, and 8 in. supply piping for waterworks system. H. W. Taylor, 149 Bway., New York, engr.

N. J., Bayonne—Oct. 2 by Bd. Comrs., furnishing c.i. B. & S. pipe and fittings for Water Dept. W. Lee, clk.; adv. E. N.-R., Sept. 27.

N. J., Keansburg—Oct. 2, by H. E. Cowley, boro clk., small section of proposed new water supply system, and paving Palmer Ave. Alexander Potter, 50 Church St., New York City, consult. engr.; adv. E. N.-R. Sept. 27.

Miss., Leland—Oct. 2, by J. T. Mathis, mayor and Bd. Alderman, furnishing 13,640 ft. 6-12 in. standard hub and spigot, Class B c.i. or c.i. pipe manufactured by Centrifugal process or other c.i. pipe of equal quality and strength, etc., f.o.b. Leland. F. A. Phillips, supt. water and light system.

O., Columbus—See "Streets and Roads."

O., Elyria — Oct. 10, by Director Pub. Serv., excavation, hauling and laying 5,000 lin.ft., and excavation, hauling, furnishing and laying 1,350 lin.ft. steel pipe. Morris, Knowles Inc., 662 Hanna Bldg., Cleveland, engrs.; adv. E. N.-R. Sept. 27.

O., New Concord — Sept. 26, by M. W. Taylor, clk. Bd. Trustees, constructing c.i. mains in Main St., 4,400 ft. 8 in. 2,670 ft. 6 in. and 4,290 ft. 4 in. pipe. Former bids rejected. Jennings-Lawrence Co., 511 Hartman Bldg., Columbus, engrs.

Wis., Fond du Lac—St. Agnes Hospital, c/o M. Marcella, superior general, 309 Division St., taking bids on 150 ft. rein.-con. stack, 70,000 gal. concrete reservoir, silo, 24 ft. diam., 40 ft. high, and considerable tunnel work. Private plans.

Minn., Staples—Sept. 25, by city, 1 deep well motor-driven pump. Noted Apr. 26.

Minn., St. Paul—Sept. 25, by H. W. Austin, city purch. agt., c.i. valve and service connection boxes required by Bureau of Water.

Tex., Edinburg—See "Excavation, Drainage, Irrigation."

Tex., Lampasas—Oct. 1, by Mayor, 18,000 ft. mains, $20,000.

Okla., Tulsa—Oct. 26, by Water Comn., constructing portion Spavinaw Water Supply Project, Contrs. 14, 15 and 16, A. J. Rudd, chn. J. D. Trammell and W. R. Holway, 508 Wright Bldg., engrs. D. H. Maury, 1445 Monadnock Blk., Chicago, consult. engr.; adv. E. N.-R. Sept. 27. Noted Aug. 23.

Calif., Los Angeles—Oct. 2, by Pub. Serv. Comn., furnishing 20,000 pieces 4 in. c.i. pipe, 10,000 pieces 6 in., 1,000 pieces 8 in. and 650 pieces 12 in., all 12 ft. lengths, Spec. 687-C.

Calif., Montecito — Montecito Co. Water Dist. receiving bids DeLaVaud centrifugal type pipe for distributing system. $110,000.

Que., Acton Vale—G. Ouimet, engr., 76 St. Gabriel St., Montreal, taking bids 2,450 ft. 12 in. c.i. pipe for town.

Que., Montreal — Oct. 1, by Executive Comn., City Hall Annex, 495 lengths 20 in. and 430 lengths 16 in. c.i. pipe. R. Bauset, city clk.

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Sept. 19, mains and appurtenances in (1) Bath, Cropsey, Emmons and 14th Aves., Mackenzie, Norfolk and Oxford Sts., Glenwood Rd. and Shore Blvd. (2) Bedford, Lincoln, Sutter and 15th Aves., 58th, 62nd, 66th, 67th, 70th, East 3rd, East 5th, East 7th, East 8th, East 9th, East 10th, East 12th, East 28th, East 95th, West 10th, Jerome and Osborn Sts., Parrott Pl., Kings Highway and Sheepshead Bay Rd., from Wataga Contg. Co., (1) $133,300 (2) $29,300. Noted Sept. 13.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Sept. 18, laying mains and appurtenances in Aqueduct Ave. West, Davidson, Gouverneur, Orloff, Riverdale, Sedgwick, Tyndall and Van Cortlandt Aves., East 178th, East 193rd, West 235th and 254th St., Grand Concourse and Mosholu Parkway south, from Wattega Contg. Co., $29,300; in Allerton, Benedict, Bruner, Edison, Ely, Fenton, Grace, Gunther, Holland, Lacombe, Mace, Matthews, McGraw, Newman, Nereid, O'Brien, Stephens, Ward, Wayne and Yates Aves., Arnow Pl. and White Plains Rd., from Norton Eng. and Contg. Co., $36,525. Noted Sept. 13.

N. J., Trenton—For 450 tons 10 in. c.i. pipe, from R. D. Wood & Co., 400 Chestnut St., Phila., $61.30 per ton; U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., $61.30. Noted Sept. 13.

O., Cleveland—Cuyahoga Co., Sept. 12, 12,000 ft. 6 and 8 in. c.i. mains, from Salem & George Bros., Erie Bldg., $43,085. Noted Sept. 6.

CONTRACTS AWARDED

O., Cleveland — To Kennedy Valve Mfg. Co., East Water St., Elmira, N. Y., forty 30 in. flanged, eighty 24 in. flanged and forty 24 in. wash water flanged valves, all hydraulically operated, $29,952, $33,167 and $21,992 respectively, one 24 in. flanged valve, electrically operated $675, total cost $85,787; to Rensselaer Valve Co., Ontario St., Troy, N. Y., one 24 in. gate valve $470, two 54 in. valves $4,400, four 48 in. $5,120, one 42 in. $1,540, four 30 in. $2,760, two 12 in. $161, eight 8 in. $337, three 6 in. $80, twenty-one 4 in. $308, two 36 in. flanged valves $1,650, sixteen 12 in. flanged valves $998 and forty 8 in. flanged valves $1,320, all hand operated, also one 24 in. check valve $365, total $19,509. Noted Sept. 6.

Ind., Evansville — Bd. Water Trustees, buildings and structures for 6 m.g. addition to water filtration plant, to A. Phelps & Sons, Knoxville, Ia., $98,480; furnishing filter equipment for same, to International Filter Co., 333 West 25th Pl., Chicago, $57,000. Noted Sept. 13.

Mich., Detroit—Dept. Water Supply, furnishing 100 tons Class C. 42 in. c.i. pipe and 105,600 ft. 6 in. centrifuggal pipe to U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J., $55 per ton $5,000 and $0.878 per ft. $92,677 respectively; 1,504 tons 8 in. c.i. pipe to Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, Va., $55.70 per ton $85,277.

Wis., Portage — Intake cut, submerged pipe line for city water supply, to J. Allmendinger, Benton Harbor, Mich., cost plus fixed fee basis. Noted Aug. 23.

Mo., Edina—Impounding reservoir, filter plant and several miles distributing mains, to F. Shofner, Atchison, Kan., $30,700. Engrs. est. $35,000.

Sewers

PROPOSED WORK

R. I., Cranston (Providence P. O.)—Had surveys made sewerage system. $2,600,000. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, engrs. Noted March 10, 1921.

Conn., Hartford—Street Dept. plans laying new sewers in Church St. from Turnbull St. to railroad station. $50,000. R. N. Clark, city engr.

Conn., New Britain—Bd. Pub. Wks., plans vitr. clay sewers in various streets, $50,000; extension to East Side trunk sewer, 24 in. vitr. clay pipe, $50,000; Cherry St. storm water sewer, main trunk, 15 in. vitr. clay pipe, $25,000; 1,500 ft. 36 in. segmental block, Commonwealth Ave., $25,000. J. D. Williams, city engr.

N. Y., Irondequoit—Making surveys sewage disposal plant. $25,000. Weeks, Cole & Newell, Rochester, engrs.

N. Y., Pittsford—Village making plans Sewerage System 1. $40,000. G. C. Wright, Court House, Rochester, engr.

Pa., Bellevue (Pittsburgh P. O.)—Ross Twp. Bd. Comrs., c/o H. B. Ruehl, Keystone Ave., having plans prepared sanitary sewerage system, terra cotta pipe. $60,000. McCully Eng. Co., Bergen Bldg., Pittsburgh, engrs.

N. C., Goldsboro—See "Waterworks."

Fla., Bartow—Soon takes bids sanitary sewerage system. $90,900. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., engrs. Noted Aug. 16.

O., Cincinnati—Plans to build Duck Creek sewer. $275,000. F. Krug, City Hall, engr.

O., Columbus—See "Streets and Roads."

Ia., Ft. Dodge—Takes bids about Oct. 1 for 25 blocks 8-27 in. vitr. clay sewers. $35,000. C. H. Reynolds, city engr.

Ia., Mason City—Soon takes bids 13,000 ft. 8-3 6 in. vitr. clay or concrete sewers. $25,000. C. H. Stevens, city engr.

Minn., Tracy—City rejected bids sewerage system repairs, extensions and reconstruction, and installing septic tank. $28,000. Will readvertise. Noted Nov. 23.

Kan., Onaga — Making plans sanitary sewerage system. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Mo., Greenfield—See "Waterworks."

Mo., Ridgway—Voted $45,000 bonds for sanitary sewerage system and disposal plant. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs. Noted Sept. 6.

Tex., Laredo—Rejected bids storm sewers and appurtenances. S. F. Crecelius, 211 Alexander Bldg., engr. Noted Aug. 30.

Calif., Visalia—Had plans prepared new modified Imhoff septic tank for sewer farm. $30,000. L. H. Gadsby, city engr.

Que., Montreal—See "Waterworks."

BIDS DESIRED

N. Y., Brighton — Oct. 8, by Bd. Sewer Comrs. Sewer Dist. 2, Clover St., sanitary sewers and sewage disposal plant, Contrs. A, B and C; also by Bd. Sewer Comrs., Sewer Dist. 1 of Town of Pittsford, Clover St., Brighton, sewers, Contr. D. W. S. Lozier, Cutler Bldg., Rochester, consult. engr.; adv. E. N.-R. Sept. 27.

N. J., Asbury Park—Oct. 2, 4,470 lin.ft. 12-36 in. concrete storm drains, etc. N. Rogers, Asbury Park, engr.

Md., Baltimore—Oct. 3, by Bd. Awards, constructing storm water drains and sanitary sewers in Bellwood Ave. near Belair Rd. Storm Water Contr. 64, incl. 900 ft. of 6-9 ft., rein.-con. drain and 700 ft. 18 in. sanitary sewer. $30,000. B. L. Crozier, City Hall, highway engr.

Miss., Crystal Springs—Oct. 1, by Mayor and City Council, sewerage system. $30,000.

Miss., Leland—Oct. 2, by J. T. Mathis, mayor, and Bd. Alderman, furnishing 15,670 ft. 10-30 ft. double strength vitr. hub and spigot sewer pipe or concrete or iron pipe of nearest equivalent size and equal strength, f.o.b. Leland. R. A. Phillips, supt. water and light system.

O., Columbus—See "Streets and Roads."

O., Euclid—Oct. 1, by village, for excavation, concrete work, drainage and land section of outfall sewer. $250,000. Former bids rejected. G. B. Gascoigne, Leader-News Bldg., Cleveland, engr. Noted Apr. 12.

Calif., Los Angeles—Oct. 1, by Bd. Pub. Wks., 270,000 sewer brick and 130,000 vitr. brick for Sect. 3 of North Outfall Sewer.

Calif., Visalia—Oct. 1, by I. Markham, clk., constructing modified Imhoff type septic tank, concrete-lined influent and effluent channels, bar screen, sludge drying bed, water piping system and other appurtenant construction. L. H. Gadsby, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Borough Hall, Sept. 20, sewers in (1) West 8th St. (2) West 10th St. (3) West 12th St. (4) West 15th St. (5) West 16th St. (6) West 19th St. (7) West 24th St. (8) West 27th St. (9) West 28th St. (10) West 29th St. (11) West 35th St. (12) West 36th St. (13) Stillwell Ave. (14) 45th St. (15) West 31st St. (16) Hamilton Ave., from J. J. Guinan Contg. Co., Inc., 2314 Gravesend Ave., (1) 90% engrs. est. ($4,825) (2) 83% ($3,505) (7) 83% ($9,824) (8) 84% ($7,805) (11) $83% ($4,848) (15) 83% ($6,378); Tomasetti & Co., Inc., 1133 60th St. (3) 85.85% ($13,083) (13) 85.85% ($13,547); P. J. Donlon Contg. Co., 82 South 3rd St. (4) 84.9% ($15,762) (5) 83.5% ($14,150) (6) 83.2% ($13,418) (9) 83% ($6,165) (10) 85% ($6,858 (12) 83% ($4,942); Necaro Co., Inc., 97 Court St. (16) $275,424; S. Ambrosio, 1016 60th St. (14) 88% ($450). Noted Sept. 13.

O., Cleveland—Cuyahoga Co. 9,850 ft. 8-10 in. and 9,850 ft. 12-48 in. vitr. clay sewer in Impvt. 33, Sect. A, of Co. Sewer Dist., from Gallagher Burke Co., 1228 Bonnieview Ave., Lakewood, $144,291.

Tex., Laredo — Storm sewers in various streets, 2,425 ft. 30 in. segmental block, 23,433 lin.ft. 12-21 in. vitr. pipe and 30,708 cu.yd. earth trenching, from Kirkwood & Wharton, 231 West Commerce St., San Antonio, $83,315.

Wash., Seattle — Bd. Pub. Wks. laying 4,980 ft. 8 in., 1,030 ft. 10 in., 1,046 ft. 15 in. and 2,214 ft. 12 in. sewers in 32nd Ave. S., from Coluccio & Erickson, 1642 Lane St., Seattle, concrete $34,523, clay $33,948; laying 58,857 ft. 8-30 in., 1,450 ft. 15-30 in. and 415 ft. 8-24 in. c.i. sewers in 30th Ave. S. W. et al., from J. F. Shea & Co., Henry Bldg., Portland, Ore., concrete $200,599, clay $205,016.

Sewers (Continued)

Calif., Tracy — Sewage disposal plant, from Davis-Heller-Pearce Co., Delta Bldg., Stockton, complete plant using vitr. pipe, $63,408; vitr. pipe only from T. E. Clinch, 668 9th St., Richmond, 18 in. $2.18 per ft., 12 in. $1.68 per ft. Noted Sept. 13.

CONTRACTS AWARDED

Conn., East Hartford—Bd. Comrs., Wells Hall, 2,400 ft. 8-15 in. vitr. clay sewers in various streets, to N. C. Casiano Co., 20 Lilly Rd., West Hartford. Est. cost $40,000.

Md., Baltimore—Constructing storm water sewers in Dist. J-1 and other localities, Contr. 59, 6,000 lin.ft. 15-54 in. pipe, to D. Catalano, Knickerbocker Bldg., $34,815. Noted Sept. 20.

Mich., Detroit—Dept. Pub. Wks., 1,251 ft. Liddesdale Ave. Sewer, Sect. 1, in Liddesdale and Sanders Aves., to W. Blanck & Co., 827 Ford Bldg., $97,786. Noted Sept. 13.

Mich., Springwells—B. P. Esper, village clk., lateral sewers in Dists. 18, 19 and 22 to S. Fattore, 2201 St. Aubin Ave., Detroit, $10,133, $13,238 and $13,500 respectively; Dist. 20 to Coolsaet Bros., 911 Detroit Savings Bank Bldg., Detroit, $6,648; Dist. 21 to Rennie & Dibble, 11331 Colonial Ave., Detroit, $26,572; Sewer Arm 38 to G. Pontarelli, Wolverine Hotel, Detroit, $13,975. Noted Sept. 20.

Mo., Edina—Sewage disposal plant and 10 mi. sanitary sewers, to E. K. Ladd Constr. Co., Kansas City, $49,400. Engrs. est. $60,000.

Tex., Houston — For 7,355 ft. 36-72 in. monolithic concrete sewer in Woodland Heights, to C. K. Horton, Box 1025, $102,447.

Waste Disposal

PROPOSED WORK

O., Findlay—Plans modern garbage disposal plant. $75,000. Engineer not announced.

Bridges

PROPOSED WORK

New Jersey—State Hy. Comn., Trenton, rejected bids highway bridge with its approaches over Raritan River between Perth Amboy and South Amboy. New bids will probably be received early in December. Noted Sept. 20.

Fla., Jacksonville—Had plans prepared 2 concrete bridges with steel draw spans. $450,000. Harrington, Howard & Ash, 1001 Orear Leslie Bldg., Kansas City, Mo., engrs.

Ala., Greenville—Butler Co. having plans prepared 1,100 ft. bridge on road from Georgiana to Conecuh Co. line, Federal Aid Project 143, one 80 ft. steel span and fifty-two 16 ft. treated timber spans, concrete piers and treated timber piles. $56,000. W. S. Keller, Belle Bldg., Montgomery, engr.

La., New Orleans—Dept. Pub. Property and New Orleans Pub. Serv., plan cantilever bridge over New Basin Canal on Carrolton St. $100,000.

Tenn., Nashville—Soon takes bids repairing and strengthening steel and concrete bridges over Cumberland River on Sparkman and Jefferson Sts. $300,000. Freeland, Roberts & Co., Independent Life Bldg., consult. engrs. Noted Apr. 19.

O., New Philadelphia—Tuscarawas Co. plans cement bridge to replace Browns Bridge which collapsed. $26,000. G. Fiedler, New Philadelphia, engr.

Ia., Ottumwa—Making plans two 100 ft. spans over water power head race, one at South Wapello St. and other at Black Hawk St., to exceed $50,000. Marsh Eng. Co., Masonic Temple Bldg., Des Moines, engrs.

Kan., Wichita—Plans viaduct on Waterman St. $150,000. P. L. Brockway, city engr.

Missouri—State Hy. Dept., Jefferson City, rejected bids Sept. 5, cleaning, painting and reflooring two 152 ft. steel truss spans over Jacks Fork, State Project Route 17, Sect. 43, Texas Co., also one 120 ft., eight 30 ft. and one 15 ft. steel span bridge over Roark Creek, State Project Route 3, Sect. 116, Taney Co. Noted Sept. 20.

Ore., Portland—Multnomah Co. and City election Nov. 6, to vote on $350,000 bonds for 750 ft. five span steel bridge, concrete piers, over Willamette River. Will use portion of steel from Burnside Bridge, Hedrick & Kremers, 250½ 3rd St., engrs.

California—State Hy. Dept., Sacramento, rejected bids bridge over Cedar and North Fork Pacheco Creeks, Santa Clara Co. Will revise plans. $56,568. Noted Sept. 20.

Calif., Santa Cruz — See "Streets and Roads."

Ont., Bridgeburg—Plans bridge between here and Black Rock, Town has passed through its Council an endorsement of project to extent of $1,000,000. Canadian Natl. Ry. expected to stand expense of approaches on both sides. Province of Ontario will also contribute. Total cost $1,500,000. H. A. Stewart, Vancouver, B. C., promoter.

BIDS DESIRED

Vermont—See "Streets and Roads."

N. Y., Fishkill—Oct. 16, by E. H. McCallin, supt. Highways, Town Hall, steel plate girder bridge known as Brinckerhoff Bridge over Fishkill Creek; adv. E. N.-R. Sept. 27.

Pa., Wilkes-Barre — Oct. 11, by P. J. Schmidt, controller Luzerne Co., Court House, repairing and reconstructing Upper Plymouth Bridge; adv. E. N.-R. Sept. 27.

Pa., Wilkes-Barre — Oct. 12, by P. J. Schmidt, controller Luzerne Co., Court House, sinking test bore holes for new bridge over Susquehanna River, North St.; adv. E. N.-R. Sept. 27.

Virginia—See "Streets and Roads."

W. Va., Williamson—Oct. 16, by Mingo Co. Court, constructing Gilbert and Justice Bridges over Guyandotte River. H. Cook, co. engr.; adv. E. N.-R. Sept. 27.

North Carolina—Oct. 10, by State Hy. Comn., Raleigh, constructing rein.-con. bridges and culverts on Project 763, Surry Co., $53,600, Project 686 Stanley Co., $53,000, Project 404 Chatham Co., $56,000, Project 302 Brunswick Co., $240,000, Project 721 Caldwell Co., $35,000. C. M. Upham, ch. engr.

Fla., West Palm Beach—Oct. 3, by C. H. Holtshaw, engr. Palm Beach Co., 100 ft. rein.-con. bridge on Port Sewell Rd., and timber pile bridge over Ritta River. $26,000.

Ala., Eufaula—Oct. 18, by State Hy. Comn., Montgomery, piers and approaches for Eufaula-Georgetown Bridge over Chattachoochee River, here, 660 ft. long, substructure involves 1,127 cu.yd. concrete, 45,450 lb. reinforcing etc., approaches, 383 cu.yd. concrete, 60,837 lb. reinforcing, etc., for States of Alabama and Georgia. W. S. Keller, Montgomery, state highway engr.

Miss., Lexington — See "Streets and Roads."

Mich., Germfask—Oct. 11, by State Hy. Dept., Lansing, constructing Bridge 750302, 90 ft. concrete girder, 22 ft. roadway, here, Schoolcraft Co. F. F. Rogers, state comr.

Mich., Okemos — Oct. 8, by State Hy. Dept., Lansing, construction Bridge 3310001, 90 ft. concrete girder, 22 ft. roadway, near here, Ingham Co. F. F. Rogers, state comr.

Ia., Indianola—Oct. 9, by Auditor Warren Co., one 20 x 130 ft. high truss bridge and 46 box culverts and extensions, 110,600 lb. steel, 1,275 cu.yd. rein.-con., etc. Iowa Hy. Comn., Ames, engrs.

S. D., Mobridge — Oct. 23, by State Hy. Dept., Pierre, bridge over Missouri River near here. G. H. Henry, secy.; adv. E. N.-R. Sept. 27.

Tex., Hemphill—See "Streets and Roads."

Tex., Centerville — Oct. 26, by W. D. Lacey, judge Leon Co. 1,370 ft. timber pile trestles and 8,160 ft. earth approaches over Keechi, Beaver and Boggy Creeks. $34,500. F. W. Gaines, co. engr.

Ore., Portland—Oct. 22, by Comrs. Multnomah Co., Court House, substructures for Ross Island and Burnside St. bridges across Willamette River, here. C. S. Rudeen, chn. Hedrick & Kremers, 250½ 3rd St., consult. engrs.; adv. E. N.-R. Sept. 27. Noted Mar. 22.

Ore., Portland—Oct. 8, by Comrs. Multnomah Co., timber pile bridge on Government Island Rd., near here, 98,780 ft. timber, etc. C. Rudem, chn. R. C. Bonser, Portland, engr.

BIDS RECEIVED

Louisiana—State Hy. Comn., Reymond Bldg., Baton Rouge, timber approaches for Calcasieu River Bridge between Lake Charles and De Ridder, Calcasieu Parish, from Austin Bridge Co., 1813 Clarence Ave., Dallas, Tex., $38,301.

Ohio — Dept. Highways and Pub. Wks., Columbus, Sept. 14, concrete bridge on Sect. "A" Delphos-Wapakoneta Rd., Auglaize Co., from Stout & Stout, Stoutsville, $27,774; "Dry Run" Bridge on Bellefontaine-Wapakoneta Rd., and bridge on Sect. "Blackhoof Creek" Bellefontaine-Wapakoneta Rd., also on Sect. "C" Picqua-St. Marys Rd., all in Auglaize Co., from W. L. Hastings, Wapakoneta, $3,865, $2,907 and $4,335 respectively; concrete bridge on Sect. "G" Logan-New Lexington Rd., and concrete bridge on Sect. "P-2" Logan-New Lexington Rd., Hocking Co., from C. A. Lunsford, Logan, $2,538 and $1,511 respectively; bridge on Sect. "D" Sidney-Wapakoneta Rd., Shelby Co., from L. Pickering, Bellefontaine, $6,663; bridge on Sect. "B" and "G" New Philadelphia-Uricksville Rd., Tuscarawas Co., from B. C. Patterson, $23,744; on Sect. "E" New Philadelphia-Uhricksville Rd., Tuscarawas Co., from O'Hara & Gerkins, Whitehouse, $25,850; concrete culvert on Sect. "A" Ohio River Rd., Washington Co., from S. A. Palmer, Marietta, $7,087.

Mich., Adrian—State Hy. Dept., Lansing, 50 ft. concrete girder Bridge 460,103 and 90 ft. concrete girder Bridge 460,104, 237 cu.yd. rein.-con., 551 cu.yd. concrete, 53,475 lb. reinforcing steel, Lenawee Co., from Smith & Nichols, Hastings, $24,332.

Wis., Milwaukee—Park Bd., City Hall, concrete piling for new viaduct on Mason St., from Simplex Pile Foundation Co., Keystone Bldg., Pittsburgh, Pa., $76,600. Noted Sept. 13.

CONTRACTS AWARDED

New York — Committee on Bridges, at office of C. MacDonald, engr. Westchester Co., White Plains, constructing Van Cortland Bridge over Croton River, between Cortland and Ossining, to McLean Contg. Co., Fidelity Bldg., Baltimore, Md., $169,597. Noted Aug. 30.

New Jersey—Joint Bridge Comn. Essex and Hudson Counties, Court House (Newark) repairing and repaving bridge deck, concrete and wood block, over Passaic River, Jackson St., to J. Befumo, East Orange, $49,879. Noted Aug. 30.

Pa., Phila.—Delaware River Bridge Joint Comn., Widener Bldg., bridge over, Delaware River connecting Phila. Pa. and Camden, N. J., to Keystone State Constr. Co., 210 South 13th St., 13,500,000 lb. wire cables $0.18, 50,000 ft. suspender ropes $1.60, 180,000 lb. steel castings $0.15, 6,000 lbs. high tensile bolts $0.15, 30,000 lbs. structural steel shims $0.20, 30,000 lbs. c.i. separators $0.10, total $2,546,900.

Fla., Clearwater—Pinellas Co. creosoted tember and steel lift span, over Tarpon Bayou, to Pensacola Shipbuilding Co., Pensacola, $29,565; several concrete arch bridges over Bayshore Rd., to Luten Bridge Co., West Market St., York, Pa., $179,071. Noted May 10.

Louisiana—See "Streets and Roads."

Mich., Grand Haven—State Hy. Dept., Lansing, Bridge 701,302, 512 ft. long, 24 ft. roadway, 3 approach spans and swing span, 1,259,000 lb. steel, near here, to Wisconsin Bridge & Iron Co., North Milwaukee, Wis., $129,057.

Mich., Saline—State Hy. Dept., Lansing, Bridge 8111001, concrete girder, 75 ft. span, 22 ft. roadway, to J. S. Whitcomb Constr. Co., 525 Woodard Ave., Detroit, $39,542. Noted Sept. 6.

O., Cincinnati—Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, one 40 ft. and one 83 ft. through plate girder bridges across Gest St. and Colerain Ave., here, to Seaboard Constr. Co., Real Estate Trust Bldg., Phila., Pa. Engrs. est. $85,000. Noted Sept. 6.

Indiana—State Hy. Comn., Indianapolis, constructing bridges, **F A means Federal Aid, S A State Aid, S R State Road, s t steel truss, r c g rein.-con. girder, r c a rein.-con. arch, r c s rein.-con. slab, sub substructure, super superstructure; sub s t with four 198 ft. spans over White River, S R 4-M, F A 16, Lawrence, means substructure of steel truss bridge with four 198 ft. spans over White River, on State Rd. 4-M, Federal Aid 16, Lawrence Co.;** s t with four 198 spans over White River, S R 4-M, F A 16, Lawrence; sub and small culverts to Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis, $67,121, super to Vincennes Bridge Co., Vincennes, $75,533, approach and grading, to I. C. McDonald, Frankfort, $87,592; to Vincennes Bridge Co., Vincennes, one 30 ft. s t over Drain Ditch S R 2-C, F A 17, Porter, and one 55 ft. s t over Drain Ditch, S R 2-D, F A 17, Laporte Co., $10,592, super one 55 ft. s t over Grassy Creek, S R 1-E, F A 21, Jackson, one 72 ft. s t over Blue Lick Creek, S R 1-B, F A 21C, Clark, one 55 ft. s t over Pigeon Roost Creek, S R 1-C, F A 21, Clark, and one 55 ft. s t over Hutto Creek, S R 1-D, F A 21, Scott, total $22,236, super s t three 124 ft., over Muscatatuck River, S R 1-E, F A 21, Jackson, and one 124 ft. s t over Muscatatuck River, Jackson-Scott, total $37,328; to F. K. Vaughn Building Co., Hamilton, O., 1 r c g with twelve 38 ft. spans, one 124 ft. s t and 1 r c g with five 38 ft. spans, over Muscatatuck River, S R 1-E, F A 21, total $81,030, 1 r c g with

Bridges (Continued)

three 38 ft spans over Flat Creek, 1 r c g with three 38 ft. spans over Muscatatuck Bottoms, S R 1-D, F A 21, one 28 ft. r c g over White Eye Creek, S R 40-G, F A 59, Scott, and one 124 ft. s t and 1 r c g with twelve 38 ft. spans over Muscatatuck River, S R 1-D, F A 21, Jackson-Scott, total $88,486; to H. C. Hall, Carlisle, one 50 ft. r c a over Drain Ditch, S R 10-I, F A 35, Vigo, $7,350; to R. H King, Danville, one 28 ft. r c g over Bush Creek, and 1 r c a with three 65 ft. spans, over Big Eagle Creek, S R 6-H, F A 40, and one 48 ft. r c a over Little Eagle Creek, S R 6-H, S A 6, Marion, total $32,471; to G. O. Reed, Inc., Michigan City, one 60 ft. s t and one 28 ft. r c g over Trail Creek, S R 15-H, F A 48, and one 48 ft. r c s over State Creek, Boot Jack Rd., F A 48, Laporte, total $32,238; to Elkhart Bridge & Iron Co., Elkhart, one 40 ft. s t over Drain Ditch, S R 2-L, S A 2, Whitley, $3,246. Noted Aug. 30.

Ind., Ft. Wayne—Comrs. Allen Co., concrete arch bridge with two 96 ft. and two 99 ft. spans, over Maumee River, 40 ft. roadway, two 8 ft. sidewalks, to I. E. Smith Constr. Co., Richmond, $188,990. Noted Aug. 23.

Ia., Anamosa—Jones Co., 22 box culverts and extensions, 1 pony truss and 2 I-beams, 1,220 cu. yd. rein.-con., 46,560 lb. eteel, etc., to L. Q. Holden, Earlville, $28,996.

Minnesota—State Hy. Dept., St. Paul, Bridge 4090 on State Project 3-39, Federal Aid Project 327, over Clearwater River, Wabasha Co., five 75 ft. truss spans, to Illinois Steel Bridge Co., 552 Gilfillan Blk., St. Paul, $31,949; Bridge 4138 over Zumbro River, on State Project 59-23, Federal Aid Project 335, in Rochester, Olmsted Co., three 65 ft. low truss spans, to Independent Bridge Co., 1101 Metropolitan Life Bldg., Minneapolis, $27,770. Noted Sept. 13.

Missouri—State Hy. Dept., Jefferson City, three 80 ft. steel truss spans, 2 rein.-con. piers, etc., over Marias Des Cygnes River, on Sta. 1219 plus 40, three 80 ft. steel truss spans, 2 rein.-con. piers, etc., over Marias Des Cygnes River, on Sta. 1,250 plus 60, three 100 ft. and two 60 ft. steel truss spans, 4 rein.-con. piers, etc., over Miami River, all in Bates Co., to Western Bridge Co., Harrisonville, $29,082, $32,155 and $54,230 respectively; thirty-nine 20 ft. I-beam spans, over overflow of Grand River, Livingston Co., to Callahan-Walker Constr. Co., 322 Peters Trust Bldg., Omaha, Neb., $40,967; six 20 ft. rein.-oon. slab spans, 20 ft. roadway, over Grand River, Cass Co., six 20 ft. rein.-con. slab spans over Willow Branch, Ray Co., and three 12 ft. rein.-con. slab spans, 2 rein.-con. piers, etc., on Sta. 294 plus 48, Cass Co., to L. A. Woods Constr. Co., Smithville, $8,877, $13,853 and $3,291 respectively; one 50 ft. steel truss span over Jordan Branch, and one 25 ft. concrete girder span, 20 ft. roadway, over East Branch of Jordan Branch, DeKalb Co., also one 70 ft. steel truss span over Castile Creek, one 30 ft. concrete deck girder span over east branch Castile Creek, and one 40 ft., rein.-con. deck girder span over west fork of Castile Creek, DeKalb Co., to Land Constr. Co., Ballinger Bldg., St. Joseph, $21,130 and $31,673 respectively; four 30 ft. I-Beam spans over Cow Branch, and one 60 ft. steel truss, and four 20 ft. rein.-con. slab spans, 2 rein.-con. piers, over Rock Creek, Atchison Co., to G. W. Condon, 510 Farnum Bldg., Omaha, Neb., $24,110; one 180 ft. steel truss and four 20 ft. rein.-con. slab spans, 20 ft. roadway, etc., over Big St. Francis River, Madison Co., to C. T. Fogle, Jefferson City, $30,890; three 80 ft. steel truss spans, 2 rein.-con. piers, etc., over 3rd fork of Platte River, Buchanan Co., to O. Smith, St. Joseph, $27,471; one 60 ft. steel truss and six 20 ft. rein.-con. slab spans, 2 rein.-con. piers, etc., over 102 River, one 60 ft. steel truss and six 20 ft. rein.-con. slab spans, 2 rein.-con. piers, etc., over Platte River, Buchanan Co., to J. Stanton, 5th and Kiowa Sts., Leavenworth, Kan., $40,728; three 10 ft. rein.-con. slab spans over Spring Creek, Douglas Co., to Summerfield-Jones, Billings, $2,017; one 40 ft. I-beam span, 20 ft. roadway, over Maple Slough D.D., Mississippi Co., to R. L. Williams, Wyatt, $6,773; one 70 ft. rein.-con. arch span, 20 ft. roadway, over River Des Peres, St. Louis Co., to E. C. Johnson, Carrollton, $18,131; one 60 ft. steel truss span, 20 ft. roadway, over Minnow Branch, and one 12 ft. rein.-con. slab span, 20 ft. roadway, etc., on Sta. 389 plus 00, Marion Co., to Cameron & Joyce, Keokuk, Ia., $18,729; one 25 ft. rein.-con. deck girder span, 20 ft. roadway, Newton Co., to J. P. Wolfenbarger, Neosho, $3,331. Noted Sept. 20.

Tex., Pittsburg—See "Streets and Roads."

Tex., Brenham—See "Streets & Roads."

Washington—State Hy. Comn., Olympia, steel truss bridge, 100 ft. span with two 20 ft. concrete approaches over Cedar River, King Co., to Ward & Ward, Inc., Tacoma, $28,360; steel span bridge, 240 ft. with two 30 ft. concrete approaches, across Hamilton Creek between Rands and West Greenleaf, Skamania Co., to Union Bridge Co., Central Bldg., Seattle, $47,447.

B. C., Terrace—Provincial Government, Victoria, one 250 ft., one 160 ft., two 140 ft. and two 90 ft. through truss girder spans over Skeena River, substructure to E. H. Shockley and O. Hanson, Prince Rupert, $40,000, superstructure to T. Coughlan & Sons Ltd., Columbia Ave., Vancouver, $125,000.

Ark., Lonoke—Lonoke Co. 105 ft. bridge over Wabbaseeka Bayou, three 25 ft. and one 30 ft. spans on I beams, 44,100 lb. steel, 150.3 cu.yd. concrete, 2,288 lb. reinforcing steel, 882,000 ft. timber, also bridge near Carlisle, three 30 ft. spans on I beams, 45,900 lb. steel, 118.56 cu.yd. concrete, 1,010 lb. reinforcing steel, 3,500 ft. timber, to Western Constr. Co., Little Rock.

B. C., Kamloop—Provincial Government, Victoria, three 212 ft. and two 154 ft. through truss steel spans over Thompson River, substructure to W. Greenlees, 592 Seymour St., Vancouver, $80,000.

Dams

PROPOSED WORK

Mich., Marquette—City having plans prepared rein.-con. and steel dam and penstock in Dead River for power plant. $50,000. Orbinson & Orbinson, 812 College Ave., Appleton, Wis., engrs.

Ia., Albia—See "Waterworks."

Ark., Little Rock—Arkansas Power Corp. along Little Red River near here, soon takes bids power dam on Little Red River, 30,000 cu.yd. earth and 30,000 cu.yd. rock excav., 40,485 cu.yd. concrete, 7,500 sq.ft. power house superstructure, 14 tainter gates, 3,500 sq.ft. racks and supports, 1 electric crane, 4 steel penstocks, 3 water wheels, 3 generators with exciters and switchboards, 15,000 KVA. step-up station at dam. $1,787,600. Dickinson & Watkins, Boyle Bldg., engrs.

Calif., Montecito—Montecito Co. Water Dist. having surveys made concrete dam, 135 ft. high, 300 ft. long on top, 50 ft. at bottom, at Junal Reservoir site, also 6,000 ft. tunnel 7 x 8 ft., at Rorro Canyon through Santa Ynez Mountains. Leeds & Barnard, Central Bldg., Los Angeles, engrs.

Excavation, Drainage Irrigation

PROPOSED WORK

Fla., Bradentown—Manatee Co. making new surveys and will take new bids constructing Cedar Hammock Drain. $25,000. Former bids rejected.

Fla., Tampa — U. S. Chemical Export Corp., Krause Bldg., making plans and estimates dredging ship channel from mouth Alafia River t omain ship channel, 1,000,000 cu.yd. excav. $400,000. P. S. Gilchrist, Charlotte, N. C., engr.

Ark., Walnut Ridge—Village Creek D. D. takes bids about Nov. 15, 2,500,000 cu.yd. excav., main and lateral ditches, levees, etc. $360,000. H. R. Carter, Exch. Bank Bldg., Little Rock, engr.

Tex., Corpus Christi—City and Nueces Co. Navigation Dist. 1, postponed opening bids and will revise plans and readvertise for constructing breakwater, protecting levee around turning basin also dredging in new turning basin. Noted Sept. 6.

Calif., Porterville — Vandalia Irrigation Dist. plans to vote on bonds for system to irrigate 1,255 acres. I. H. Althouse, Terra Bella, engr.

BIDS DESIRED

Miss., Clarksdale—Oct. 9, by Bd. Levee Comrs. for Yazoo-Mississippi Delta, enlarging 5 mi. old Ward Lake levee, 75,000 cu. yd. banquette enlargement and 10,000 cu.yd. topping. W. L. Head, ch. engr. Noted Sept. 13.

Ia., Corydon—Oct. 2, by Supervs. Wayne Co., constructing 18½ mi. channel for Chariton River D. D., 629,000 cu.yd. excav., etc. P. S. Holbrook, 1106 21st St., Des Moines, engr.

Ia., Mason City—Oct. 8, by G. E. Frost, aud. Cerro Gordo Co., for D. D. 118, 38,645 lin.ft. 6-26 in. tile, 12 cu.yd. rein.-con. headwall, etc. $25,000.

Ia., Mason City—Oct. 12, by G. E. Frost, aud. Cerro Gordo Co., for Joint D. D. 95, Cerro Gordo Co., and 67, Worth Co., main section 13,650 ft. 7-36 in. tile, Sect. 2, 20,850 lin.ft. 6-24 in. tile, Sect. 3, 23,400 lin. ft. 6-20 in. tile. $32,000.

Tex., Edinburg — Oct. 1, by W. L. Rockwell, engr., Edinburg, reconstructing 28 mi. canals, pumping plants, clearing right-of-way, constructing wooden and concrete gates and bridges. $200,000.

Ont., Toronto—Oct. 15, by A. Beck, chn. Hydro Electric Power Comn., 190 University Ave., excavation of tailrace channel, 20,000 cu.yd. rock.

CONTRACTS AWARDED

La., Lake Charles—Police Jury Calcasieu Parish, navigation channel from here to Sabine River, 125 ft. wide, 30 ft. deep, Sect. 1, 2,780,000 cu.yd. to United Dredge Co., Galveston, Tex., $383,640; Sect. 2, 3,270,000 cu.yd., to Smith Bros., Alexandria, $457,800. Noted Aug. 23.

Calif., Selma — Consolidated Irrigation Dist. rejected bids rein.-con. intake at Diversion Dam on Kings River, one for Centerville and Kingsbury Canal and one for Fowler Switch canal, also rein.-con. outlet for China Slough. Work will be done by day labor under supervision of I. Tielman, ch. engr. Noted Aug. 23.

Streets and Roads

PROPOSED WORK

Pa., Lewistown—Election Nov. 6, to vote on $125,000 bonds new paving and sewer work. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

Tennessee — Tennessee Dept. Hys. and Pub. Wks., Nashville, having surveys made constructing 15 mi. road from Athens to Monroe Co. line, McMinn Co., 18 ft.; 20 mi. road from Decatur to Hamilton Co. line, Meigs Co. J. G. Creveling, Nashville, highway comr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, had surveys made 25 mi. road from La Follette to Kentucky state line, Anderson Co., 14.5 mi. from Crossville to White Co. line, Cumberland Co. J. G. Creveling, state highway comr.

Tenn., Gallatin—Election soon to vote on $50,000 bonds for streets. B. H. Klyce, 4th & 1st Bldg., Nashville, engr.

Tenn., Sweetwater—Soon takes bids constructing 5 mi. streets, various types.

O., Cincinnati—Plans paving Baymiller St., granite block. $86,600. F. Krug, City Hall, engr.

O., Columbus—Making plans grading, laying necessary water services and sewer connections and paving 9,347 ft. Huron and Guernsey Aves., Olive, Palmetto and Kossuth Sts., 24 ft., brick or asphalt; 1,900 ft. 6 and 8 in. sanitary sewer in Iswald Rd. R. H. Simpson, city engr.

O., New Philadelphia — Plans repaving Public Sq. on High St. between 3rd and 6th Sts. and on Bway. from Front to Fair Sts., brick. $50,000.

O., Ravenna—Plans widening and repaving 8 blocks Main St. $27,500. A. S. Hillig, city engr.

O., Wellsville—City and Columbiana Co. (Lisbon) plan paving about 1 mi. Wells Ave., 30 ft., brick. $30,000. J. George, City Bldg., engr.

Wis., Racine—W. Bechthold, comr. Racine Co., plans concrete surfacing, etc., 8 mi. Howell Rd. Cost to exceed $25,000. State Hy. Comn., Madison, engrs.

Wis., Rhinelander — City retained Jerry Donohue Eng. Co., North 8th St., Sheboygan, to prepare plans for 1924 paving program. Cost to exceed $25,000. A. O. Rendell, city engr.

Minn., Minneapolis—Hennepin Co. plans road work in 1924 as follows: grading Eden Prairie Rd. from Hankins Corner to Co. line. $40,000; 5 mi. Bush Lake Rd. from Jefferson Highway west, $25,000, 5 mi. Bush Lake Rd., between Cahill and Fort Snelling-Shakopee Rd., $30,000, Dayton-Shakopee Rd. between Rockford Rd. and Bass Lake Rd., $20,000; paving about 2 mi. Minnetonka Blvd. between Falvey Ave. and city limits, $80,000. J. W. Shaffer, co. surv.

Minn., St. Paul—Ramsey Co. plans paving 2.5 mi. Prescott Rd., concrete, $75,000; 2 mi. around north end of Lake Phalen, $81,000. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Kan., Hutchinson—Election soon to vote on $80,000 bonds for paving various streets. R. B. Lee, city engr.

Kan., Independence — Soon takes bids grading and brick paving on 5 in. concrete with asphalt filler 2,600 ft. 18th St. from Maple to Cedar Sts., 26 ft. $25,000.

Kan., Marion—Marion Co. soon takes bids grading and surfacing with bituminous filled brick or concrete, 0.818 mi. New Santa Fe. Trail, Federal Aid Project 161, 18 ft. R. K. Walters, co. engr.

Streets and Roads (Continued)

N. D., Dickinson—Soon takes bids paving 11 blocks. $30,000. R. C. Hill, city clk.

Ark., Hot Springs—Plans paving Lower Central Ave. from West Grand to Greenwood Sts., also Dist. 7, Pecan St. from Fern to Prospect Sts., all of Fern and Rose Sts., Hawthorne St. from U. S. Reservation to Quapaw, Orange St. from Prospect to Quapaw Sts. Cost to exceed $25,000. G. C. Smith, city engr.

Ark., Little Rock—Soon takes bids grading, paving, curbing and guttering about 6 blocks, Annex to Dist. 349, rein.-con. or asphaltic concrete. $25,000. H. R. Carter, 2103 Gaines St., Little Rock, engr.

Tex., Abilene—Taylor Co. election Oct. 16, to vote on $350,000 bonds hard surfacing State Highways 1 and 30. W. A. Rinny, co. engr. Noted Sept. 13.

Tex., Bay City — Matagorda Co. plans grading and shell surfacing 8.33 mi. State Highway 12, 16 ft. $72,000. E. N. Gustafson, Angleton, co. engr.

Tex., Belton — Bell Co. making plans constructing concrete base and bituminous topping 8 mi. Belton-Temple Rd., State Highway 2, 20 ft. $400,000. G. W. Sutton, co. judge.

Tex., Canton — Van Zandt Co. making plans grading and concrete paving 9 mi. State Highway 15, 9 ft. $120,000. C. L. Hubbard, co. judge.

Tex., Carthage—Panola Co. making plans grading, gravel surfacing and bridging 15.9 mi. State Highway 8, Rd. Dist. 2, 18 ft., $250,000; grading and surfacing with bituminous macadam 5.6 mi. State Highway 8, Rd. Dist. 4, 18 ft., $86,500. Titus & Dillon, Center, engrs.

Tex., Clarksville — Voted $75,000 bonds constructing and widening various streets.

Tex., Corpus Christi—Nueces Co. making plans constructing 5.6 mi. road from Robstown toward here, 16 ft., bituminous macadam. $90,000. C. E. Cocke, Corpus Christi, engr.

Tex., Dallas—Making plans widening and paving Cockrell St. from Burnett to Forest Sts., $25,000; Elm St. east of Harwood St., $25,000. E. A. Kingsley, city engr.

Tex., Dickens—Dickens Co. making plans grading and gravel surfacing 18 mi. State Highway 18, 16 ft. $60,000. J. W. Alger, Dickens, engr.

Tex., Floresville — Wilson Co. making plans hard surfacing 13.2 mi. State Highway 9 from Saspamco to point 2 mi. south of here, 18 ft. $400,000. L. W. S. Mantel, Alice, engr. Noted Aug. 16.

Tex., Ft. Worth—Making plans permanent paving, probably bituminous curbing, guttering and grading streets in Sisk Heights. $25,000. D. L. Lewis, city engr.

Tex., Ft. Worth — Fairmount Land Co., Wheat Bldg., making plans permanent paving, curbing and guttering streets in University Pl. $30,000.

Tex., Ft. Worth—Hammond & Hammond, F. & M. Bank Bldg., making plans paving, curbing and guttering, etc., addition near Texas Christian University. $25,000. Baker & Von Zuben, Ellison Bldg., engrs.

Tex., Hemphill—Sabine Co. soon takes bids grading, gravel surfacing and bridging 7.19 mi. State Highway 8, 16 ft. $57,000. W. A French, San Augustine, co. engr.

Tex., Hemphill —Sabine Co. soon takes bids grading, gravel surfacing and constructing timber pile trestle bridges on 8.4 mi. State Highway 8, 16 ft. $90,000. W. A. French, San Augustine, co. engr.

Tex., Italy — Making plans permanent paving, etc., Main St. et al. $25,000. Engineer not announced.

Tex., Italy — Ellis Co. (Waxahachie) plans election to vote on $100,000 bonds, improving roads in Italy Rd. Dist. W. A. Spaulding, Waxahachie, engr.

Tex., Leakey—Real Co. soon takes bids graveling 18 mi. Highway 41, 18 ft. $70,000. W. E. Simpson Co., N. B. C. Bldg., San Antonio, engrs. Noted July 26.

Tex., New Boston — Bowie Co. making plans grading, gravel surfacing and amesite paving 3 m. State Highway 5, between New Boston and Texarkana, 16 ft. $40,000.

Tex., San Antonio — Bexar Co. making plans grading, gravel surfacing and bituminous topping 7.3 mi. Sequin Rd., Sect. of State Highway 3, 18 ft. $116,500. State Hy. Dept. granted $77,384 not to exceed ½ of cost. A. C. Pancoast, co. engr.

Tex., Sweetwater—Nolan Co. election Oct. 20, to vote on $600,000 bonds constructing 70 mi. Bankhead and Del Rio Canadian Highways, crushed rock with bituminous top. A. Z. Mauzey, co. judge.

Tex., Tyler — Smith Co. making plans grading and bridging 7 mi. State Highway 15 A, 25 ft., $27,500. D. K. Caldwell, co. engr.

Okla., Davis—Election soon to vote on $36,000 bonds grading and paving Main St., 9,000 sq.yd. concrete, 7,800 lin.ft. curbing and 2,800 cu.ft. excav. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs.

Okla., Fairfax—Having plans prepared grading and paving 4th, 3rd and Maple Sts., 16,200 sq.yd. vertical fibre brick, etc. $90,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Okmulgee — Had plans prepared grading and paving 7th St. and Kern Ave., 11,800 sq.yd. concrete, 6,300 lin.ft. curbing, etc. $45,000. T. J. Embree, Okmulgee, engr.

Okla., Sayre—Election soon to vote on $31,000 bonds grading and paving 6th, Cedar and Poplar Sts. 7,600 sq.yd. concrete, 4,600 lin.ft. curbing, etc. V. V. Long Co., 1300 Colcord Bldg., Oklahoma City, engr.

Okla., Tonkawa—Plans 12 blocks brick paving. Ruckel Eng. Co., Interurban Bldg., Hutchinson, Kan., engrs.

Nevada—State Hy. Comn., Carson City, making plans gravel surfacing 18 mi. across Mormon Mesa, 18 ft., and 10 mi. across Mormon Mesa to Nevada State Line, both Clark Co., 12 mi. road from Eastgate to east county line, Churchill Co., 15.5 mi. Winnemucca-Golconda Rd. and 2.4 mi. in city of Winnemucca, Humboldt Co.; concrete and gravel surfacing 7 mi. Sparks-Hafed Rd. and 4.5 mi. road from Lawton to point 2 mi. east of Verdi, Washoe Co. G. W. Borden, state highway engr.

California—Following counties will contribute toward constructing Skyline Blvd., San Francisco $50,000, San Mateo $20,000, Santa Clara $20,000 and Santa Cruz $10,000.

Calif., Modesto — Comrs. Stanislaus Co. plan 3½ mi. highway between Newman and Hill Ferry Bridge over San Joaquin River. $62,000. J. H. Hoskins, co. surv.

Calif., San Diego — San Diego Co. had plans prepared paving 38,434 sq.yd. streets in Kensington Park, 1½ in. top, 2½ in. base, both willite, T. C. Martin, 4756 Kensington Dr., engr.; 24,932 sq.yd. Adams Ave. except between car tracks, 1½ in. asphaltic concrete surface, 5 in. portland concrete base with 4 in. sub-base of decomposed granite, $79,310, 12,881 sq.yd. Adams Ave. between car tracks, Normal Heights, 1½ in. asphaltic wearing surface, 5 in. concrete base, 11,588 sq.yd. 37th St., Normal Heights, 1½ in. asphaltic concrete surface, 3½ in. asphaltic concrete base and 3 in. sub-base of decomposed granite, E. R. Childs, Court House, engr.

Calif., Santa Cruz—Had plans prepared improving portions California Ave., 16,076 sq.ft. grading, 16,076 sq.ft. 5 in. concrete, etc.

Calif., Santa Cruz—Plans election to vote on $135,000 bonds paving Cliff Dr., constructing viaduct over Branciforte Creek and Garfield St. bridge.

Calif., Sonora—Tuolumne Co. plans paving with asphaltic concrete or other permanent pavement road leading from Tuolumne to Sonora and from Columbia to Sonora. $25,000 or more.

Que., Montreal—Plans 9,548 ft. asphalt pavements, 22, 24 and 30 ft. on 9th Ave., Langevin, St. Christophe, Dominion and Chabot Sts., $108,796; 7,449 ft. concrete sidewalks 4, 5 and 6 ft., on Carrieres Rd., Park, Pacific and 4th Aves., Little Alexandria, Bennett, Patterson, Peloquin, St. Ambroise, Melrose, Fabre and DeGaspe Sts., $32,719; 8,145 ft. cement slab sidewalks, 4 ft., on 2nd and 3rd Aves., Iberville and Bocage Sts., $6,614. E. Gauthier, asst. city clk.

BIDS DESIRED

New Hampshire—Oct. 4, by F. E. Everett, state highway comr., Concord, gravel surfacing 5 mi. highway in Newbury, Jaffrey, Grafton, and Exeter-Hampton, paving 0.88 mi. in Wakefield, modified asphalt.

Vermont—Oct. 4, at office of T. W. Dix, ch. engr. Dept. Highways, Montepelier, constructing highways and bridges; adv. E. N.-R. Sept. 27.

Massachusetts—Oct. 2, by W. F. Williams, state highway comr., Boston, bituminous macadam paving 21,046 ft. road, 18 ft., in Truro and Wellfleet. $120,000.

New York—Oct. 5, by State Dept. Pub. Wks., Bureau of Highways, Albany, construction, completion and reconstruction of roads in Albany, Allegany, Cortland, Dutchess, Livingston, Otsego, Seneca, Suffolk, Ulster and Yates Counties. L. Grossman, comr.; adv. E. N.-R. Sept. 27.

N. J., Keansburg—See "Waterworks."

Pa., Phila.—Oct. 2, by Dept. Pub. Wks., asphalt pavements on Camac and Cassimer Sts., Schedule A, granite block pavements on 49th St., Schedule B, 27,020 sq.yd. concrete floor and 1,500 ft. curb for West League Island Park bathing beach, Schedule C. F. H. Caven, dir. pub. wks.

Virginia — Oct. 11, at office State Hy. Dept., Richmond, constructing 3 mi. Project S-143, Bedford Co., 3.6 mi. Project S-145 A, Sussex Co., 2.9 mi. Project F-183, Stafford Co., 2 mi. Project S-310B, Brunswick Co., 0.7 mi. Project F-225B, Spotsylvania Co., 2 mi. Project S-327, Russell Co., 3 bridges Project S-320A, B and C, Norfolk and Princess Anne Counties. H. G. Shirley, chn.; adv. E. N.-R. Sept. 21

North Carolina—Oct. 10, by State Hy. Comn., Raleigh, grading and hard surfacing roads in Edgecombe-Pitt, New Hanover, Wake and Stanley Counties; topsoiling, sand clay, gravel, or grading, etc., in Chatham, Guilford, Davie, Surry and Caldwell Counties; macadamizing or graveling in Transylvania Co., one bridge in Bladen Co.; adv. E. N.-R. Sept. 27.

Ga., Atlanta—Oct. 5, by C. M. Holland, purch. agt. Fulton Co., Court House, resurfacing 10,106 sq.yd. Park Dr., hard surfacing 17,850 sq.yd. Peeples St., 7,700 sq.yd. Asby St. and 4,820 sq.yd. Beecher St.

Fla., Avon Park—Oct. 2, by Bd. Trustees, 40,000 sq.yd. asphalt paving and 4.75 mi. concrete curbing and guttering on various streets East of Lake View Ave., $95,000; clay surfacing 90,000 sq.yd. various streets, $30,000. Peacock & Hood, Avon Park, engrs.

Fla., Inverness—J. A. Kelley, chn. Citrus Co. Comn., receiving bids 19 mi. stone and clay paving, 38,000 cu.yd. grading. $30,000. E. V. Camp and associate, Decatur Court House, Atlanta, Ga., engrs.

Fla., West Palm Beach—Oct. 3, by C. H. Holtshaw, engr. Palm Beach Co. resurfacing 19,000 sq.yd. Ocean Boulevard, rock. $28,000.

Alabama—Oct. 23, by State Hy. Dept., Montgomery, improving 20.232 mi. Montgomery-Selma Rd., Federal Aid Project 139, Lowndes Co., 36 acres clearing, 214,821 cu.yd. common excav. and borrow, 115,000 sta. yd. overhaul, 55,000 cu.yd. local gravel surfacing, 150,000 half mi. units overhaul, 8,000 cu.yd. gravel screened, 30,000 sq.yd. mixing sand clay and gravel, 975 cu.yd. Class A concrete, etc. W. E. Keller, state highway engr.

Miss., Lexington—Oct. 5, by City Clerk, City Hall, grading and paving various streets, 14,304 sq.yd. rock asphalt, asphalt macadam or rein.-con., and preparing old gravel base, 11,683 cu.yd. earth excav., etc. $47,500. W. S. Hawkins, Greenwood, engr. Noted July 28.

Miss., Lexington—Oct. 15, by Holmes Co., grading and bridging 6.388 mi. Federal Aid Project 137 B, between here and Durant. $41,785. H. C. Dietzer, c/o State Highway Dept., Jackson, engr.

Miss., Meadville—Oct. 17, by Franklin Co., gravel surfacing 8.514 mi. Federal Aid Project 150, between here and Summit, 12 ft. $63,754. H. C. Dietzer, State Highway Dept., Jackson, engr.

Louisiana—Oct. 11, by State Hy. Comn., Reymond Bldg, Baton Rouge, 11.572 mi. Sect A and 7.122 mi. Sect. B, Winnfield-Colfax Highway, Federal Aid Project 139, Winn Parish, washed gravel, sand, clay, gravel or broken stone. J. M. Fourmy, ch. engr.

Louisiana—Oct. 11, by State Hy. Comn., Reymond Bldg., Baton Rouge, 4.98 mi. State Project 381, Bossier-Doyline-Minden Highway, Webster Parish, also furnishing 5,165 cu.yd. washed gravel. J. M. Fourmy, ch. engr.

Kentucky—Oct. 23, by State Hy. Dept., Frankfort, surfacing (**F. A. P. 41 A, Henderson means Federal Aid Project** 41, **Sect. A, Henderson Co.)** 4.4 mi. F. A. P. 41 A, Henderson, 18 ft., 29.2 mi. F. A. P. 34 F, Webster, 18 ft. 7.5 mi. F. A. P. 41 F, Hopkins, 18 ft., 9.2 mi. F. A. P. 41 G, Hopkins, 18 ft.; grading 4 mi. F. A. P. 109, Henderson, 24 and 28 ft., 2.6 mi. F. A. P. 62 B, Knox, 24 ft., 7.32 mi. F. A. P. 102, Breathitt, 24 and 28 ft.; reconstructing 5.795 mi. State Project 10 A, McLean, 18 ft. J. Boggs, ch. engr.

O., Columbus—Oct. 2, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 2,485 ft. Buttles Ave., 34 ft., asphalt; 3,902 ft. Rich St., Chittenden, Southwood and Allen Aves., 26 ft., and 1,066 ft. Ohlen and Findley Aves., 24 ft., brick or asphalt; 2,392 ft. Pearl St. and alley west of Pennsylvania Ave., 20 ft. and 2,339 ft.

Streets and Roads (Continued)

2nd alley north of Main St., alley west of Stoddart Ave., alley west of Cypress Ave., and alley north of Gates St., 16 ft., brick or concrete; also 248 ft. 8 in. sanitary sewer in alley west of Taylor Ave.

Michigan — Oct. 1, by State Hy. Dept., Lansing, grading and surfacing 4.896 mi. State Trunk Line Rd. 10-30, Iosco Co., 9,338 cu.yd. excav., 46,292 sq.yd. gravel. F. F. Rogers, state comr.

Michigan — Oct. 8, by State Hy. Dept., Lansing, grading and surfacing 5.977 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co., 63.120 sq.yd. asphalt, concrete or bituminous concrete, or 56,107 sq.yd. gravel or stamp sand. F. F. Rogers, state comr.

Michigan—Oct. 12, by State Hy. Dept., Lansing, grading and surfacing 5.148 mi. Federal Aid Project 57, Sect. D, Kent Co., 58,110 cu.yd. excav., 54,503 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comrs.

Michigan — Oct. 15, by State Hy. Dept., Lansing, grading and surfacing 9.329 mi. State Trunk Line Rd. 27-6, Sects. A and B, Huron Co., 35,010 cu.yd. excav., 99,086 cu. yd. asphalt, concrete or bituminous concrete or 88,755 sq.yd. gravel. F. F. Rogers, state comr.

Ia., Cherokee — Oct. 2, by Auditor Cherokee Co., grading 5.21 mi. primary road south of here, 99,272 cu.yd. excav., 87,800 sta.yd. overhaul, etc. Iowa Hy. Comn., Ames, engrs.

Kan., Marion—Oct. 19, by Clerk Marion Co., grading and brick or concrete surfacing 0.818 mi. New Santa Fe Trail, Federal Aid Project 161, 18 ft., 0.578 mi. New Santa Fe Trail, Federal Aid Project 162, 18 ft. R. K. Walters, co. engr

Kan., Norton—Oct. 22, by Clerk Norton Co. grading 7.528 mi. Pikes Peak Ocean to Ocean Highway, 29½ ft., Federal Aid Project 143, Sect. A. F. E. Foot, co. engr. Noted May 10.

Kan., Oberlin—Oct. 5, by Kansas Eng. Co., engrs., Topeka, constructing 9.62 mi. earth road, Federal Aid Project 165, Sect. A, 28 ft., for Decatur Co. Noted Sept. 20.

Mo., Clayton—Oct. 1, by St. Louis Co., grading and paving 781 squares Chambers St., $21,188, also 1,003 squares Old Florissant St., $17,050, both waterbound macadam. W. Elbring, Court House, engr. Noted Aug. 3.

Ark., Little Rock — Oct. 11, by Comrs. Pulaski Rd. Impvt. Dist. 10, at office Gazette Bldg., graveling 11 mi. Perryville Rd., widening and paving with sheet asphalt Prospect Ave., between 3rd and Victory Sts. and Lee Ave., also paving Markham and Victory Sts. D. A. MacCrea, ch. engr.

Tex., Hemphill—Oct. 18, by W. H. Davidson, judge Sabine Co., grading, gravel surfacing and bridging 7.19 mi. State Highway 21, Federal Aid Project 357-B, 16 ft., $57,170; 8.38 mi. State Highway 8, Federal Aid Project 327-A, 16 ft., $91,240. W. A. French, San Augustine, co. engr.

Tex., Houston—Oct. 18, by Comrs. Harris Co., grading, etc., Red Bluff Rd. $25,000. Howe & Wise, co. engrs.

Tex., Paris—Oct. 19, by W. D Lawrence, judge Lamar Co., grading and concrete paving 1.99 mi. State Highway 5, Federal Aid Project 380 C, 18 ft., $63,665; 3 mi. State Highway 5, Federal Aid Project 395 B, 18 ft. $89,872. W. M. Fooshee, co. engr.

Okla., Oilton—Oct. 2, by city clerk grading and paving Main St., 16,200 sq.yd. concrete, 7,800 lin.ft. concrete curbing and 5,100 cu.yd. excav. $65,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs. Noted May 10.

Okla., Sayre — Oct. 1, by T. J. Means, city clk., grading and paving Cedar, 2nd and 3rd Sts., 8,100 sq.yd. concrete, 5,350 lin.ft. curbing, etc. $37,500. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Sept. 20.

Calif., Newport Beach — City Trustees taking bids paving portions of Ocean, Santa Ana, 12th St., etc., 10,020 cu.yd. excav., 28,238 sq.ft. 6 in. concrete, 75,722 sq.ft. 8 in. concrete, etc. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, consult. engr. Noted Jan. 25.

Calif., San Diego—Oct. 8, by Supervs. San Diego Co., paving 4.59 mi. Coronado Strand, 18 ft., 4 in. Warrenite or Willite on present oil macadam surface or 5 in. portland cement concrete with surface removed; paving 3,300 ft. National Ave. between National City and Chula Vista, 18 ft., 6 in. rein.-con., and building overflow curtain wall. G. E. Heath, co. engr.

Calif., South Pasadena (Pasadena P. O.) —Oct. 8, by City Trustees, N. A. Hewitt, clk., curbing, paving, building sidewalks and sewers in portion of Grevelia St., 67,400 sq.ft. 3 in. oiled macadam, 13,500 sq. ft. concrete gutter, etc.; portion of Fremont Ave., 81,000 sq.ft. 5 in. concrete pavement, etc.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, Boro pres., Boro Hall, Sept. 20, repaving with permanent asphalt (1) Calyer St. (2) Fulton St. (3) Hinsdale Ave. (4) Park Pl. (5) 73rd St. (6) 86th St.; repaving with grade 1 granite (7) 73rd St.; grading, curbing and flagging (8) West 8th St., from Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $3,092 (2) $41,474; Cleveland Trinidad Paving Co. Flushing, (3) $33,078 (4) $11,753; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (5) $11,164 (6) $53,777; Galco Contg. Co., Inc., 745 Dean St., (7) $6,437; W. J. McHale Contg. Co., 1250 Jefferson St., (8) $3,277. Noted Sept. 13.

N. Y., Tonawanda — Grading, curbing, paving and building storm sewers in crosstown boulevard, from J. Schaaf, 201 Norwood Ave., Buffalo, Proposal 1 $978,500, Proposal 2 $1,017,500; F. J. Mumm, 176 Best St., Buffalo, Proposal 1, $986,753; D. Schoentag Co., Inc., Saugerties, Proposal 1, $993,857, Proposal 2 $1,003,573; Meyer & Meyer Corp., Lancaster, Proposal 2, $1,021,000. Noted Aug. 30.

N. J., Trenton—Bd. Freeholders Mercer Co., Sept. 18, asphalt paving 5,230 sq.yd. Hamilton Ave, Hamilton Twp., and 9,600 sq.yd. Parkway Ave., Ewing Twp., incl. 6,000 ft. concrete curb and gutter, from Gallena-Poole Co., 146 East Front St., $28,270 and $49,723 respectively. Noted Sept. 13

Pa., Phila.—Dept. Pub. Wks., Sept. 11, grading (1) C and Ruscomb Sts. (2) Kingessing St. (3) 55th St., asphalt pavements on (4) Allman St. (5) Gaul and Miller Sts. (6) Godfrey St. (7) Larchwood St. (8) Limekiln Ave. (9) Palmetto St. (10) York St., redressed granite block repaving (11) Delaware Ave. (12) 13th St. country road improvements on (13) G St., furnishing material for repairing bridges (14) structural steel (15) wood block (16) creosoted lumber (17) constructing dumping platform at Green St. Wharf (18) grading for West League Island Park bathing beaches, from T. L. Flanagan, 531 East Girard St., (1) $1,145 (12) $37,725; T. P. Lee, 5629 Cherry St., (2) $5,237; E. A. Mullen, 5512 Vine St., (3) $7,132; Barber Asphalt Paving Co., 239 North 30th St., (4) $2,210 (5) $6,627 (6) $6,846 (7) $5,549 (8) $4,512 (9) $2,480 (10) $1,404; Acchione & Canuso, 804 South 12th St., (11) $7,478 (13) $15,620; Montgomery Iron & Steel Co., 918 Berks St., (14) $4.045; Republic Creosoting Co., 1614 Merchants Bank Bldg., Indianapolis, Ind., (15) $1,805 (16) $4,954; H. E. Eyre, 1212 North Delaware Ave., (17) $15,145; J. Meehan & Son, 916 West Dakota Ave., (18) $1,725.

Delaware—State Hy. Dept., Dover, paving, etc., from Broadcreek Contg. Co. of Maryland, Elkton, Md., 9.622 mi. Contr. CK-18, through Clayton, 1,350 cu. yd. excav. $1.50, 1,100 cu.yd. concrete $16, etc., total $20,660; from Highway Eng. & Constr. Co., Shelbyville, 2.16 mi. Contr. No. CS-26, Bridgeville-Clarks Cross Rds., 6,500 cu.yd. excav. $1.25, 3,250 cu.yd. concrete $15, etc., total $61,231, 1 mi. Constr. CS-26, through Greenwood, 3,200 cu.yd. excav. $1.25, 2,375 cu.yd. concrete $15, etc., total $43,643. Noted Sept. 13.

O., Cleveland—Cuyahoga Co. Sept. 12, paving Miner Rd., from E. Gedney, Ansel Rd., macadam $36,422, concrete $45,332. Noted Sept. 6.

Michigan — State Hy. Dept., Lansing, grading and surfacing 9.8 mi. Federal Aid Project 105 Iron Co., 93,429 sq.yd. gravel, from J. Long, Iron River, $66,053, 5.319 mi. Federal Aid Project 69, Sects. C and D, Livingston and Ingham Counties, 61,767 sq. yd. concrete, from Charlevoix Abstract & Eng. Co., Charlevoix, $138,713. Noted Aug. 30 and Sept. 17.

Michigan—State Hy. Dept., Lansing, grading and surfacing 1.956 mi. State Trunk Line Rd. 12-38, Dickinson Co., from A. Carlson, Menominee, $62,861. Noted Sept. 13.

Mich., Detroit—Grading and paving with 3½ in. sheet asphalt on 8 in. concrete on (1) 6,000 sq.yd. Canfield Ave., Sect. 1, (2) 5,800 sq.yd. Canfield Ave., Sect. 2, (3) 1,100 sq.yd. Hussar St. (4) 4,800 sq.yd. Kentucky Ave. (5) 3,200 sq.yd. Klein Ave. (6) 2,600 sq.yd. Longwood Ave. (7) 7,500 sq.yd. La Salle Ave. (8) 19,800 sq.yd. Monica Ave. (9) 12,050 sq.yd. Six Mile Rd. (10) 13,900 sq.yd. Seven Mile Rd. (11) 2,800 sq.yd. Yosemite Ave., from Detroit Asphalt Paving Co., 20 McGraw Bldg., (1) $37,809 (2) $37,458 (3) $7,269 (5) $14,648 (11) $18,555; M. R. Hanna Co., 1430 Natl. Bank Bldg., (4) $29,951 (7) $44,915 (8) $115,106 (9) $72,337 (10) $83,523; Cooke Asphalt Paving Co., 1260 Penobscot Bldg., (6) $13,496.

Wyoming—State Hy. Comn., Cheyenne, Sept. 14, grading and surfacing 10.87 mi. Bosler-Lookout Rd., Lincoln Highway, Federal Aid Project 156 A, Albany Co., from H. C. Lallier Constr. Co., Hudson, Colo., $54,990. Engrs. est. $55,000.

Tex., Newton — Newton Co. grading, gravel surfacing, etc., 20.94 mi. State Highway 7, Federal Aid Project 339, from D. Word, Itasca, $191,133. Noted Aug. 30.

Ariz., Phoenix—Paving Culver St. from Central Ave. to 12th St., Dist. 21-5, from Phoenix Tempe Stone Co., Home Builders Bldg., 19,316 sq.yd. Spec. 26AA paving $2.455 sq.yd. Spec. 30A paving $2, 19,772 sq. yd. grading $0.25, 9,631 lin.ft. combined curb and gutter $1.40, etc., total $67,248.

Wash., Seattle—Paving, etc., West 65th St., et al., and East 61st St., et al., from Fiorito Bros., 3950 6th St. N.W., 16,390 sq.yd. 6 in. concrete at $1.65 per sq.yd., 1,425 lin.ft. asphaltic concrete curbing $0.60, 8,190 lin.ft. concrete curbing $0.35, 4,100 cu.yd. earth excav. $0.65, total $46,694.

Calif., Arcata—Improving 7th, 9th and H Sts., etc., from Mercer-Fraser Co., Eureka, 81,870 sq.ft. grading at $0.035, 27,935 ft. 5 in. asphaltic concrete, $0.225, 42,000 sq.ft. 2 in. warrenite bitulithic on 4 in. asphaltic concrete $0.225, 5,997 lin.ft. concrete curb $0.55, 8,845 sq.ft. concrete gutter $0.31, etc. Noted Aug. 16.

Calif., Marysville—Yuba Co. graveling 3.5 mi. Woodruff School House Rd., from L. A. Williams, Marysville, $2.10 per cu.yd. Noted Sept. 6.

Calif., Stockton—Paving East Main and East Washington Sts., 191,911 sq.yd. asphaltic concrete, 55,836 sq.ft. sidewalks, 11,412 lin.ft. concrete curb and gutter, from J. E. Johnson, Savings & Loan Bank Bldg., $64,072.

CONTRACTS AWARDED

R. I., Providence — Removing old macadam and replacing 25,000 sq.yd. new bituminous macadam, to Callan Constr. Co., Bristol, $1.38 per sq.yd. Engrs. est. $35,000.

New York — State Hy. Comn., Albany, Sept. 14, constructing 1.08 mi. Repair Contr. 1390, Highway 104, Washington Co., to W. M. Bronk, Hudson Falls, $56,919; 1.03 mi. Repair Contr. 1385, Highway 149, Westchester Co., to L D. Sullivan Co., Inc., White Bldg., Utica, $53,664; 1.89 mi. Repair Contrs. 1381 and 1384, Highways 865 and 50, and 1.75 mi. Repair Contr. 1387, Highways 587, 54 and 143, Westchester Co., to S. B. Van Wagenen, Inc., Rondout, $134,964 and $97,289 respectively; 3.5 mi. Repair Contr. 3065, Highway 5005 and 427, Jefferson Co., Repair Contr. 3066, Highway 934, Otsego Co., to A. F. McConville, Ogdensburg, $121,745 and $212,264 respectively; 1.71 mi. Repair Contr. 3064, Monroe Ave., Rochester, Monroe Co., to Hendrickson-McCabe Constr. Co., Mercantile Bldg., Rochester, $64,566; 2.91 mi. Repair Contr. 1386, Highways 748 and 609, Dutchess Co., to Mascetti & Holley, 561 South Main St., Torrington, Conn., $123,956; 2.76 mi. Repair Contr. 3067, Highways 39 and 59, Saratoga Co. to Belmar Contg. Co., Proctor Bldg, Troy, $115,187. Noted Sept. 6.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Borough Asphalt Co., 1301 Metropolitan Ave., repaving with sheet asphalt Georgia Ave. $13,389, repaving with permanent asphalt Manhattan Ave. $146,709; to Cleveland Trinidad Paving Co., Flushing, repaving with permanent asphalt, Schenectady Ave. $17,705; to Cranford Co., 52 9th St., repaving with permanent asphalt Forrest and 67th Sts. $5,706 and $9,627; to Uvalde Asphalt Paving Co., 1 Bway., New York, repaving with sheet asphalt two sections of Prospect Ave. $12,143 and $39,830 respectively ;to J. Meehan & Son, 74 Cortlandt St., New York, repaving with grade 1 granite Kent Ave. $45,468; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., repaving with permanent asphalt Kings Highway and Joralemon St. $124,814 and $9,726 respectively; to F. J. Gallagher, 490 Park Pl., repaving with grade 1 granite Forrest St. $18,333. Noted Sept. 20.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving with bituminous concrete roadway of Myrtle Ave., to W. P. McDonald Constr. Co., 342 Madison Ave., New York, $45,760; concrete curbing and guttering, etc. Benziger Ave., to J. Johnson Sons, 455 Bway., West New Brighton, $6,632. Noted Sept. 20.

N. J., Belvidere—Warren Co. rebuilding 3.5 mi. Hainesburg-Columbia Rd., to Smith Bros., Hacketstown, $39,836. Noted Sept. 6.

Pa., Waynesburg—Greene Co., 11,050 lin. ft. Greensboro Rd., rein.-con., in Monon-

Streets and Roads (Continued)

gahela Twp., to J. I. Dick, Scottdale. $120,815.

Md., Baltimore — Paving streets, Contr. 243-NA, 22,000 sq.yd. asphalt on concrete, to D. Marine Constr. Co., Knickerbocker Bldg., $56,738. Engrs. est. $60,000. Noted Sept. 20.

Va., Petersburg — Paving 25,000 sq.yd. various streets, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $100,000.

N. C., Washington—City paving and improving streets in Washington Park to G. R. Lassiter & Co., Citizens Bank Bldg., Raleigh, $50,000.

Fla., Stark—Bradford Co., grading 12 mi. State Rd. 3, 68,000 cu.yd. excav., etc., to S. R. Johns & Co., Stark, $74,336. Noted Sept. 6.

Fla., Titusville—Brevard Co. improving Allenhurst and Beach Rds. in Road and Bridge Dist. 8, to Langston Constr. Co., Titusville, $112,000; paving 9¼ mi. road to C. H. Fay, $30,000.

Ala., Alabama City—Bitulithic paving 5 mi. Kyle Ave., 20 ft., to Lashley Bros., Chattanooga, Tenn., $38,356.

Miss., Corinth—Grading and paving 9.794 mi. Federal Aid Project 149, to McElrath & Rogers, Grenada, $89,623. Noted Sept. 6.

Miss., Forest—Scott Co. improving 6.785 mi. Federal Aid Project 134, between here and Morton, to Richston Constr. Co., Richston, $57,266. Noted Sept. 6.

Miss., Pittsboro—Calhoupn Co. improving 19.122 mi. Federal Aid Project 152, to McElwrath & Rogers, Grenada, $195,674. Noted Sept. 6.

Miss., Walthall— Webster Co. improving 12.866 mi. Federal Aid Project 157, to McElwrath & Rogers, Grenada, $129,908. Noted Sept. 6.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, gravel surfacing 9 mi. Sect. A Project 81, St. Francisville-Mississippi Highway West Feliciana Parish, to B. H. Bass, Hazelhurst, Miss., $47,425, also 7.49 mi. Sect. B of above project to F. O. Hamilton, Francisville, $36,815; 3.84 mi. Project 383 Sect. A. to Banta & Mutersbaugh, Lake Charles, $19,663; 2.67 mi. Grand Coteau Loop, St. Landry Parish, to A. M. Wilk, Bunkie, $10,390; Bayou Carencro Bridge on Opelousas-Lafayette Highway, St. Landry Parish, to W. F. Brown, Port Barre, $7,660.

Tenn., Rutledge—Grainger Co., 10 mi. road from Joppa to Clutch Mt., limestone, to R. L. Peters Constr. Co., Knoxville, $65,000.

O., Canton—Bd. Control paving ¾ mi. 9th St., 40 ft., vitr. brick, to H. Corl, 809 7th St. N.W., $38,271, engrs. est. $40,000; about 1 mi. 4th St. N.W., 30 ft., Trinidad asphalt, to Garaux Bros. Co., 415 9th St. S.W., $49,000, $50,000.

O., Canton—Stark Co., improving Whipple Rd. from Canton-Massillon Rd. north to Plain Twp. line, about 1 mi., monolithic type brick, to Wise Bros., Canton, $60,943. Engrs est. $65,000. Noted Sept. 13.

O., Cleveland — Grading, paving, etc. Elbra Court, to A. M. Pejsa Paving Co., 3161 Derbyshire Rd., $3,121; East 131st St., to Gould & Mayback, 16311 Saranec Rd., $17,246; repaving East 18th, East 19th and East 24th Sts., to Highway Constr. Co., 903 Lorain County Bank Bldg., Elyria, $61,529. Work involves 20,150 sq.yd. asphalt, 3,925 sq.yd. vitr. brick, etc. Noted Sept. 20.

O., Lisbon—Columbiana Co., improving 1.13 mi. Goshen Rd., 20 ft., from Salem to Mahoning Co. line, to Ohio Willite Paving and Surfacing Co., East Liverpool, $31,895. Engrs. est. $35,000. Noted Sept. 6.

Indiana—State Hy. Dept., Indianapolis, 5.875 mi. Project 22, Franklin Co., 80,397 cu.yd. excav., to Weintrout Constr. Co., Shelby, $51,204; 6.399 mi. Project 42 B, 82,106 cu.yd. excav., 7.5 mi. Project 42C, 5.048 mi. Project 50A, and 6.551 mi. Project 50B, all in Perry Co., to Ellis & Scamahorn, Rockport, $93,652, $104,273, $57,987 and $47,425 respectively; 5.743 mi. Project 58D, Orange Co., to A. B. Krempp, Jasper, $63,925; 5.054 mi. Project 58A, Crawford Co., to S. M. Cunningham, English, $68,606; 6.2 mi. Project 58C, Crawford and Orange Counties, to Deer & Bergen, Franklin, $43,005; 6.951 mi. Project 60A, Martin Co., to Scott Constr. Co., Indianapolis, $213,748. Noted Aug. 2.

Michigan—State Hy. Dept., Lansing, grading 3.345 mi. State Trunk Line Rd., 43-3, Ionia Co., 65,112 cu.yd. excav., to Hersey Gravel Co., Hersey, $30,057. Bids for surfacing above project rejected. Noted Aug. 30.

Michigan—State Hy. Dept., Lansing, grading 4.197 mi. Federal Aid Project 50, Sect. B, Monroe Co., 41,579 cu.yd. excav., to Closser Bros., 8427 Senator Ave., Detroit, $40,491. Noted Sept. 20.

Michigan — State Hy. Dept., Lansing, grading 5.523 mi. State Trunk Line Rd. 43-4, Montcalm Co., 32,652 cu.yd. excav., to Hillman & Lewis, Mt. Pleasant, $22,626. Bids rejected for surfacing above project. Noted Aug. 30.

Michigan — State Hy. Dept., Lansing, grading and surfacing **(S. T. L. Rd. 79-2, A, Barry means State Trunk Line Rd. 79-2, Sect. A, Barry Co.)** 4.034 mi. S. T. L. Rd. 79-2, A, Barry, to A. J. Hoffman, North Adams, $51,036; 4.146 mi. S. T. L. Rd. 33-4, Oscoda, to Edwards Constr. Co., 1920 Clinton Ave., Saginaw, $35,670; 5.14 mi. S. T. L. Rd. 95-1, Presque Isle, to L. W. Edison, Charlevoix, $62,372; 4.988 mi. S. T. L. Rd. 18-24, Gladwin, to Russell & Russell, Beaverton, $53,673; grading 10.68 mi. S. T. L. Rd. 27-12, A and C, Sanilac, A to Moore-Elmer Constr. Co., Snover, $21,438, C to Westfall, Leach & Westfall, Montrose, $22,774. Noted Aug. 30 and Sept. 20.

Ill., Harrisburg—Grading and gravel surfacing 3,500 ft. roads in Harrisburg Twp., 18 ft., to L. W. Raben, Mount Vernon, Ind., $31,136.

Ia., Anamosa — Jones Co., grading 7.62 mi. Anamosa-Wyoming Rd., 26 ft., to Foley Bros., Anamosa, 106,660 cu.yd. excav. $0.22, 8,700 cu.yd. channel change $0.48, etc.; Jensen & Christensen, Anamosa, 30,690 ft. 6 in. tile $0.122, 540 ft. 8 in. $0.178 and 1,325 ft. 12 in. $0.34, etc. Noted Aug. 30.

Minnesota — State Hy. Dept., St. Paul, 7.3 mi. State Project 3-44, Federal Aid Project 328, 102,000 cu.yd. excav., to P. W. Roark, Thief River Falls, $39,430, 77,600 sq.yd. concrete paving to Ostrand & Hallett, Crosby, $171,632; 20 mi. State Project 10-46, Federal Aid Project 313, 259,000 cu.yd. excav., to M. W. Barnard & Son, 612 Globe Bldg., Minneapolis, $90,151; 11.2 mi. State Project 3-39, Federal Aid Project 327, 296,000 cu.yd. excav., 5 mi. Sect. 1, State Project 44-22, Federal Aid Project 329, 80,000 cu.yd. excav., 8 mi. State Project 44-22, Sect. 2, Federal Aid Project 330, 125,000 cu.yd. excav., and 10 mi. State Project 44-22, Sect. 3, Federal Aid Project 331, 130,000 cu.yd. excav., to Nelson, Fulton & Nelson, 355 Temple Court, Minneapolis, $129,576, $81,404, $75,121 and $93,847 respectively. Noted Sept. 13.

Minn., St. Paul—For 2 mi. concrete and 1 mi. asphaltic concrete paving on Wheelock Parkway between Mackubin and Nebraska Sts. and between Edgerton St. and Payne Ave., to Hanlon & Okes, 338 Lumber Exch., Minneapolis, Minn., $176,138.

Minn., St. Paul—Paving 8 blocks Front St., sheet asphalt, and part of Jackson St., brick, to Hanlon & Okes, 338 Lumber Exchange, Minneapolis, $63,448 and $34,385 respectively; 3 blocks Goodrich Ave., 4 blocks Palace St., 9 blocks West 7th St. and part of Jackson St., asphalt, to Fielding & Shepley, 216 University Ave., $14,223, $22,720, $61,999 and $50,000 respectively. Noted Sept. 13.

Minn., St. Paul — Ramsey Co., paving, etc., Centerville Rd. between Edgerton St. and North Birch Lake Blvd., 40,700 sq.yd. concrete paving, 47,500 cu.yd. excav., 194,000 cu.yd. overhaul, etc., to Hanlon & Okes, 338 Lumber Exch., Minneapolis, $133,906. Noted Sept. 20.

Kan., Garnett — Anderson Co. grading 8.474 mi. King of Trails, Project 113, Sect. B, 18 ft., to A. L. Cook, Ottawa, $16,929; draining to Walters, Walters & Walters, Iola, $19,837. No bids received for surfacing. Noted Aug. 16.

Kan., Paola—Grading and paving with asphaltic concrete 3,500 ft. Agate, Walnut, Oak and Chippewa Sts. and 2 alleys, to J. B. Watts, Paola. Engrs. est. $36,000. Noted July 12.

South Dakota—State Hy. Dept., Pierre, paving 0.83 mi. road with vibrolithic, Minnehaha Co., to C. H. Atkinson Paving Co., Watertown, $26,624. Noted Sept. 6.

N. D., Fargo—Cass Co., gravel surfacing 23,395 cu.yd. Federal Aid Project 144, west of Mapleton, to W. H. Noel, Jamestown, $40,329.

N. D., Mandan—For 42,000 sq.yd., rein.-con., paving, to Woodrich Constr. Co., 1141 Metropolitan Life Bldg., Minneapolis, Minn., $160,000.

N. D., Napoleon—Logan Co., grading 8 mi. Federal Aid Project 188, 63,000 cu.yd. excav., etc., to H. Knudson, Adrian, $29,517. Noted Sept. 6.

Wyoming—State Hy. Comn., Cheyenne, (1) grading and surfacing (2) building structures on 8.4 mi. Clearmont-Cadiz Rd., Federal Aid Project 149, Sheridan Co., to C. Waegele, U-Cross, (1) $58,499, to Security Bridge Co., 502 North 32nd St., Billings, (2) $49,915; grading, surfacing and building culverts on 7.4 mi. Cover Cut-Kirby Rd., Yellowstone Highway, Federal Aid Project 141, Hot Springs Co., to P. Sawyer, Thermopolis, $57,243. Noted Aug. 2 and Sept. 6.

Wyo., Cheyenne — Grading, curbing and paving 4,000 ft. 18th St., 40 and 50 ft., to A. H. Read, Omaha, Neb., $59,400. Noted Aug. 23.

Missouri—State Hy. Dept., Jefferson City, grading roads **(S. P. 16-7 Newton means State Project Route 16, Sect. 7, Newton Co.)** 2.386 mi. S. P. 16-7, Newton, 3.817 mi. S. P. 16-9, Newton and 5 mi. S. P. 16-10 Barry, to Kelly & Underwood, Granby, $10,606, $17,550 and $6,758 respectively; 3.976 mi. S. P. 5-1, Putnam, and 5 mi. S. P. 31-2, DeKalb, to L. W. Spengler, Mexico, $22,395 and $26,174 respectively; 4.989 mi. Federal and S. P. 234A and 4.948 mi. Federal and S. P. 234B, DeKalb, to Land Constr. Co., Ballinger Bldg., St. Joseph, $33,533 and $30,546 respectively; 4.202 mi. Federal and S. P. 205B, 4.202 mi. Federal and S. P. 205B, 2.599 mi. Federal and S. P. 205A, 2.258 mi. Federal and S. P. 205C, and 2.599 mi. Federal and S. P. 205A, all in Buchanan Co., to J. Stanton & Son, 5th and Kiowa Sts., Leavenworth, Kan., $131,113, $20,500, $44,933, $64,156 and $44,933 respectively; 4.943 mi. S. P. 35-7, Cass, 2.34 mi. S. P. 13-14, Ray, 4.94 mi. S. P. 35-6, Cass, 4.656 mi. S. P. 35-8, Cass, and 4.98 mi. S. P. 13-15, Ray, to L. A. Woods Constr. Co., Smithville, $19,590, $12,072, $16,322, $32,574 and $24,946 respectively; 4.451 mi. S. P. 10-18, Carroll, 2.784 mi. S. P. 10-19, Carroll, 1.462 mi. S. P. 14-85, St. Louis, and rock asphalt surfacing 178,508 sq.yd. S. P. 14-85, St. Louis, to E. C. Johnson, Carrollton, $7,605, $9,388, $14,465 and $20,885 respectively; 2.147 mi. S. P. 12-42, Osage, to Birmingham & Terry, Vienna, $5,381; 3.37 mi. S. P. 1-107, Newton, to J. P. Wolfenbarger, Neosho, $9,835; 0.606 mi. S. P. 70-4, Madison, to C. T. Foggle Constr. Co., Jefferson City, $8,204; 1.108 mi. S. P. 12-43, Gasconade, and 4.242 mi. S. P. 29-1, Worth, to A. L. Cook, Ottawa, Kan., $26,553 and $23,224 respectively; 4.919 mi. S. P. 3-3, and 4.606 mi. S. P. 3-4, both Mercer Co., to M. Haase, Trenton, $24,219 and $19,020 respectively; 1.704 mi. S. P. 47-11, Warren, to J. B. Turner & Co., Warrenton, $26,414; 4.789 mi. S. P. 15-62, Miller, to G. R. De Graffenreid, Bagnell, $17,659; 3.136 mi. S. P. 10-17, Carroll, to A. W. Mosley, Gilliam, $8,675; 2.258 mi. Federal and S. P. 205C, Buchanan, to H. Schmidt, 3108 Jule St., St. Joseph, $43,663; 5 mi. S. P. 1-5, Atchison, to G. W. Condon Co., 510 Farnum Bldg., Omaha, Neb., $39,084; 0.453 mi. S. P. 3-36, Lafayette, to A. J. Cosby, Leeds, $21,393; 1.186 mi. S. P. 32-30, St. Francis, to Smith & Creech Constr. Co., St. Louis, $18,888; 4.318 mi. S. P. 5-37, Howard, to Highway Constr. Co., Webb City, $60,001; 3.746 mi. Federal and S. P. 233C, Livingston, to Callahan-Walker Constr. Co., 322 Peters Trust Bldg., Omaha, Neb., $56,177; 3.593 mi. Federal and S. P. 167F, Bates, to Western Bridge Co., Harrisonville, $34,853; 4 mi. S. P. 2-2, Jackson, to W. R. Ross Constr. Co., Kansas City, $127,383; 3.421 mi. S. P. 55A-2, Mississippi, to R. L. Williams, Wyatt, $73,372; 4.171 mi. S. P. 8-70, Marion, to Cameron-Joyce Co., Keokuk, Ia., $63,717; 3.723 mi. S. P. 5-91, Douglas, to Summerfield-Jones, Billings, $24,874. Noted Sept. 20.

Mo., Marysville—Grading, paving, curbing and guttering 2,350 ft. West 3rd St. and Grand Ave., 6,207 sq.yd. vitr. brick on concrete, etc, to Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, $24,665. Noted Mar. 15.

Ark., Forest City—St. Francis Co., grading and paving 6½ mi. Rd. Impvt. Dist. 12, 38,000 cu.yd. earth excav., 16,600 tons gravel ,to S. J. Jones Constr. Co., Memphis, Tenn. Engrs. est. $75,000. Noted Sept. 13.

Ark., Lake Village — Graveling 17 mi. road from Montrose to Luna Landing Rd., to M. McMurray, Texarkana, and Levinson Constr. Co., Dermott, $110,000. Engrs. est. $115,000.

Tex., Austin — Travis Co. grading and bridging 7.92 mi. Highway 20 A, Fredericksburg Rd., 18 ft., to H. J. Evans, 500 West 15th St., $39,820.

Tex., Brenham—Washington Co. grading 17.3 mi. State Highway 36, Federal Aid Project 358, 24 ft., to L. F. McMillian, 4213 Ave. D, Austin, $46,047; constructing bridges and draining same, to Austin Bros. Bridge Co., Coombs St., Dallas, $72,413. Noted Sept. 20.

Tex., Houston—Paving 12,800 sq.yd. Sunset Blvd., bituminous, to S. Shambaugh, Larenden Bldg., $45,765.

Streets and Roads (Continued)

Tex., Pittsburg—Camp Co. grading, surfacing with crushed iron ore rock base, bituminous topping and constructing rein.-con. bridges on 6.19 mi. State Highway 11, 18 ft., to Womack Constr. Co., Sherman, $147,336. Noted Sept. 20.

Tex., Sonora—Sutton Co. grading 22.7 mi. and gravel surfacing 1½ mi. on Del Rio-Canadian Highway, 16 ft., to Larkin & Son, Ft. Worth Pike, Dallas, $134,868. Noted Aug. 23.

Okla., Davis—Grading and paving Main St., 5,530 sq.yd. concrete, etc., to Cook & Cone, Ardmore, $22,137. Noted Sept. 13.

Okla., Tulsa—Tulsa Co., 3 mi. concrete road near Collinsville, to Highway Constr. Co., Tulsa, $85,000.

Washington—State Hy. Comn., Olympia, surfacing with crushed rock or crushed gravel 11.6 mi. Central Washington Highway from Pasco to Eltopia, to J. E. Edwards, Spokane, $57,933; concrete paving 1 mi. Ocean Beach Highway, from Kelso west, Cowlitz Co., to Yakima Paving Co., Yakima, $42,583. Noted Aug. 30.

Wash., Kelso—Paving in Dist. 48, 41,320 cu.yd. excav., 6,543 cu.yd. gravel surfacing, 136,377 sq.ft. of 4 in. concrete sidewalks, etc., to United Contract Co., Northwest Bank Bldg., Portland, $86,599; paving, etc., in Dist. 52, 12,105 sq.ft. cement sidewalk, 9,882 sq.yd. 8 in. concrete paving, etc., to Yakima Paving Co., State Bldg., Tacoma, $43,580. Noted Sept. 6.

Wash., Seattle—King Co. paving 4 mi. Renton-Maple Valley Rd., 47,080 sq.yd. concrete, 8 in. at center, 6 in. at edges, 20,000 cu.yd. earth excav., to Florito Bros., 3950 6th St., N. W., $127,000. Engrs est. $130,000. Noted Aug. 30.

California—State Hy. Dept., Sacramento, grading and graveling 3 mi. road between 1/5 mi. south of Benito River and Paharo River bridge, San Benito Co., to Granite Constr. Co., Watsonville, $76,947. Noted Sept. 20.

Calif., Fresno—Fresno Co. improving 9.7 mi. road, 14,729 cu.yd. earthwork, 822,755 sq.ft. 4 in. asphaltic concrete, etc., to Thompson Bros., Divisadero and G Sts., $144,160. Noted Sept. 20.

Calif., Marysville—Yuba Co. will grade and reconstruct road from state highway to Jaynes Ranch, by day labor. $25,000. Former bids rejected. Noted Aug. 23.

Industrial Works

PROPOSED WORK

Conn., Hartford—Long Bros., State St., having plans prepared by F. C. Walz, archt., 407 Turnbull St., 1 story, 60 x 240 ft., rein.-con. and brick garage, plain foundation, Market St. $40,000.

Conn., Rocky Hill—Belamose Corp., 303 5th Ave., New York City, plans 1 story and basement, 140 x 160 ft. factory, brick and timber, two 2 story storehouses, brick and steel, and 1 story and basement, 50 x 70 ft. boiler house, brick and steel, all plain foundations, here. Private plans.

N. Y., Buffalo — Kremer & Lehr, 467 Spring St., having plans prepared by L. R. Veatch, Prudential Bldg., 9 story, 35 x 80 ft. malt house, rein.-con., brick and steel. $150,000.

N. Y., North Tonawanda—Amer. Kardex Co., Inc., Main St., plans addition to plant. To exceed $100,000.

Va., Suffolk—Planters Nut & Chocolate Co. plans 5 story, 80 x 150 ft., steel and tile factory, concrete foundation. $250,000. Engineer and architect not selected.

N. C., Burlington—Queen Anne Textile Co., plans to construct and equip cotton mill. $1,000,000. W. H. Morton, Adams, Mass., pres. J. M. Cook, Burlington, vice-pres.

N. C., Leaksville—Marshall Field Corp., 22 East Washington St., Chicago, plans 5 story and basement, 116 x 216 ft., warehouse. $175,000.

Fla., Tampa—See "Miscellaneous."

La., Bogalusa—Bogalusa Paper Co., subsidiary of Great Southern Lumber Co., Whitney Bldg., New Orleans, plans 2 to 6 story, 200 x 600 ft. concrete, brick and steel plant, here. $750,000.

La., Monroe—Acme Carbon Mfg. Corp., Ouachita Natl. Bank Bldg., plans thirty 12 x 120 ft. burning houses, 25 x 75 ft. warehouse, 30 x 50 ft. packing house, 20 x 30 ft. machine shop, etc., all steel. $125,000.

Tenn., Ashland City — Dark Tobacco Growers Assn., Hopkinsville, Ky., soon takes bids warehouse, here. $40,000.

Tenn., Memphis — Ford Motor Co., 740 Union Ave., acquired 40 acre site on Riverside Blvd. for new assembly plant and buildings. C. Alexander, local representative.

Ky., Ashland — Ashland Sanitary Milk Co. plans 2 story brick plant, 34th and Winchester Sts. $50,000.

Ky., Louisville—Standard Sanitary Mfg. Co., 6th and Shipp Sts., having plans prepared by F. Erhart, archt., Norton Bldg., 1 story, 65 x 200 ft., brick and steel shop. $75,000.

O., Cleveland—City Ice & Fuel Co., Cadilac Bldg., having plans prepared by A. C. Bishop & Co., Guardian Bldg., 1 story, 70 x 158 ft., brick, steel and concrete plant, East 124th St. and Union Ave. $60,000.

O., Cleveland—Eaton Axle & Spring Co., East 65th St. and Central Ave., plans brick factory. $100,000. G. S. Rider & Co., Century Bldg., archts.

O., Cleveland—A. W. Haiman, Society for Savings Bldg., having plans prepared by A. Sogg, 319 Hippodrome Annex, 3 story, 65 x 120 ft., brick and concrete garage, 1718 East 18th St. $100,000.

O., Cleveland—R. C. Patton and R. T. Hisey, 536 Engineers Bldg., having plans prepared by L. Skolnik, Sixth St. Clair Bldg., 1 story, 45 x 280 ft. garage, brick and steel. $60,000.

O., Cleveland—Richman Bros., 1600 East 55th St., having plans prepared by Christian, Schwarzenberg & Gaede, 1900 Euclid Ave., 2 story and basement (ultimately 8 story), 65 x 200 ft. factory addition, brick, steel and concrete, 1600 East 55th St. $125,000.

Wis., Berlin—Berlin Tanning & Mfg. Co. plans to rebuild 3 story, rein.-con., brick and steel tannery, plain foundation, recently destroyed by fire. $60,000. C. H. Boettge, pres. Engineer and architect not selected.

Wis., Black Earth—Lakeside Mfg. Co. plans 2 story, brick, rein.-con. and steel factory, plain foundation. $50,000. Engineer and architect not selected.

Wis., Cashton—Danish Pride Milk Products Co., 608 North 8th St., Sheboygan, plans 2 story, brick, rein.-con. and steel condensory, plain foundation, here. $55,000. Engineer and architect not selected.

Wis., Madison—Piper Bros. Co., c/o S. Piper, mgr., 31 North Pinckney St., plans 2 story and basement, 60 x 150 ft., brick, rein.-con. and steel bakery, plain foundation, Washington St. $50,000. Engineer and architect not selected.

Wis., Plymouth—J. E. Curtiss plans 2 story garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Prairie du Chien—General Cigar Co., c/o B. Shannon, mgr., Portage, having plans prepared by Parkinson & Dockendorff, Linker Bldg., La Crosse, 2 story, 71 x 132 ft., brick, rein.-con. and steel plant, plain foundation. $40,000.

Wis., Racine—Wisconsin Incubator Co., 18th and Holborn Sts., having plans prepared by W. J. Redden, 2819 Arlington Ave., 2 story, 50 x 100 ft., brick and timber warehouse, plain foundation. $40,000.

Wis., Rice Lake — C. O. Ronning Co. rescinded contract 2 story and basement, 60 x 160 ft. brick and concrete garage, plain foundation. Will readvertise later. $60,000. Noted July 26.

Wis., Stratford—Stratford Canning Co. plans 2 story, brick, rein.-con. and steel plant. $45,000. Engineer and architect not selected.

S. D., Rapid City—H. E. Swander having plans prepared by J. C. Ewing, Rapid City, 2 story and basement, 75 x 140 ft. rein.-con., brick and steel garage. $40,000.

Tex., Amarillo — Amer. Metal Co., c/o Chamber of Commerce making plans smelter plant. $500,000. Private plans.

Tex., Amarillo—New Jersey Zinc Co., c/o Chamber of Commerce, having plans prepared plant. $500,000. Private plans.

Tex., Dallas—J. E. Morris, 120 Lancaster St. plans 1 story, 75 x 185 ft., concrete and brick garage, 9th and Lancaster Sts. $50,000. Engineer and architect not announced.

Tex., Dallas—Ford Motor Co., Highland Park, Mich., having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 2 story, 150 x 200 ft., rein.-con and brick plant, plain foundation, here.

Calif., Fresno — Richfield Oil Co., Van Nuys Bldg., Los Angeles, plans warehouse and service stations in various sections of city. $200,000 or more.

Calif., Los Angeles—J. Delmas having plans prepared by Walker & Eisen, archts., Pacific Finance Bldg., 8 story and basement, 150 & 150 ft., rein.-con. garage, 6th St. and Kenmore Ave. $500,000.

Calif., Los Angeles—Fidelity Fireproof Storage Co., 1836 Arapahoe St., having plans prepared by E. T. Flaherty & Co., I. W. Hellman Bldg., 6 story, 125 x 250 ft. warehouse, probably rein.-con., Manhattan and 62nd Sts.

Calif., Los Angeles—W. M. McGee, 325 Los Angeles Bldg., plans 8 story warehouse, probably rein.-con., vicinity Slausson St. and Central Ave. To exceed $500,000.

Calif., Los Angeles—A. C. Vaughn, Detwiler Bldg. (representing interests) plans rein.-con. garage, approximately 6 story, 6th and Kenmore Ave. To exceed $100,000.

Calif., Oakland—Pacific Spring Bed Co., 180 New Montgomery St., San Francisco, purchased 3 acre site here and plans plant.

Calif., San Francisco—Baker-Hamilton & Pacific Co., 700 7th St., plans warehouse, offices, etc., 137 x 550 ft., about 6 story, rein.-con., Beale St. between Bryant and Brannan Sts. $1,000,000.

Calif., San Francisco—Grinnell Co., 453 Mission St., having plans prepared by Austin Co., Santa Fe Bldg., 1 and 2 story, 90 x 240 ft. factory, brick, concrete and steel, 5th and Brannan Sts.

Calif., San Francisco—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros. Inc., 315 Montgomery St., 3 story and basement, 47 x 137 ft. rein.-con. warehouse, Fremont St. near Folsom St., $65,000; 3 story and basement, rein.-con. warehouse, Fremont St near Harrison St., $50,000.

Calif., San Francisco—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 2 or 3 story and basement, rein.-con. warehouse, 12th St. between Howard and Folsom Sts. $40,000 or more.

BIDS DESIRED

Md., Baltimore—Oct. 6, by G. R. Callis, archt., Amer. Bldg., 8 story, 60 x 250 ft. publishing plant, rein.-con. and brick, Pratt and Commerce Sts., for Baltimore News & American, Fayette and Calvert Sts. Noted July 19.

N. C., South Rocky Mt.—Oct. 10, by Atlantic Coast Line R.R., Atlantic Coast Line Bldg., Wilmington, 1 story, 100 x 320 ft. and 2 story, 50 x 150 ft. coach shop; 1 story, 100 x 320 ft. and 2 story, 50 x 200 ft. paint shop, concrete, brick and steel. Noted April 5, under "Railways."

Ill., Chicago—Henschien and McLaren, archts., 1637 Prairie Ave., receiving bids 3 story canning factory for Foell Supply Co., 331 West 22nd Pl. $125,000.

Ill., Chicago—C. W. Lampe, archt., 155 North Clark St., receiving bids 1 story, 112 x 150 ft. factory, rein.-con., brick and steel, Adams St. and California Ave., for J. D. Wallace & Co., 1401 West Jackson Blvd. $50,000.

Wis., Ashland—Ashland Daily Press, c/o J. Chopple & Co., 321 Erd Ave. W., taking bids 2 story and basement, 64 x 100 ft., brick and concrete plant, plain foundation. $50,000. Private plans.

Wis., Cedar Grove—Dick & Bauer, archts., 811 State St., Milwaukee, taking bids and opens same about Oct. 4, 2 story and basement, 32 x 100 ft., concrete factory, plain foundation, for Cedar Grove Shoe Mfg. Co. $42,000.

Wis., Cleveland—N. J. Johannes, Knellsville (P. O. Port Washington), taking bids 1 story, 50 x 95 ft., brick and tile factory, plain foundation. $40,000. Private plans.

Wis., Milwaukee—Milwaukee Coke & Gas Co., 187 Greenfield Ave., taking bids and opens same about Sept. 31, 1 story, 60 x 72 ft., and 4 story, 60 x 82 ft., brick, steel and concrete plant, plain foundation. $50,000. Private plans. Noted Aug. 9.

Kan., Topeka—Jordan Bakery Co. taking bids 3 story and basement, 75 x 100 ft. $100,000. W. E. Grover, Stormont Bldg., archt.

Calif., Los Angeles—A. C. Martin, archt., Higgins Bldg. receiving bids 4 story and basement, 90 x 250 ft., factory, rein.-con., 7th and Utah Sts., for Volker Co., 532 South Spring St. Noted Aug. 30.

Calif., San Francisco — Weeks & Day, archts., 318 Montgomery St., receiving bids 3 story publishing plant, rein.-con., Mission, 5th, Minna and Mary Sts., for Chronicle Publishing Co., Chronicle Bldg., Leland & Haley, 58 Sutter St., engrs.

Que., Quebec—Oct. 10, by Harbor Comrs., cold storage warehouse, power plant and fish storage house, etc.

Industrial Works (Continued)

CONTRACTS AWARDED

Mass., Boston — Hunt-Spiller Mfg. Co., 383 Dorchester Ave., 1 story, 135 x 140 ft., rein.-con. and steel foundry, woodpile foundation, to C. A. Dodge Co., Albany St., Cambridge, $150,000.

Mass., Boston—T. S. and E. J. Owen, 174 Blue Hill Ave., 2 story, 75 x 112 ft. garage, Rand St., to Buckley & Co., 164 Federal St., Boston, $50,000.

Mass., Charlestown (Boston P. O.)—Merchants Terminal Co., 3 story, 60 x 100 ft. shipping building, with 30 x 100 ft. ell, rein.-con and steel, concrete pile foundation, Medford St., to Pultz, Inc., Boston, $160,000. Archts. est. $170,000.

Mass., East Walpole—Bird & Son, 1 story, 80 x 140 ft., brick and steel factory, plain foundation, to Central Eng. & Constr. Co., Pawtucket, $40,000. Noted May 3.

Mass., Fall River—Small Bros. Mfg. Co., 37 Hillside St., 4 story, 84 x 90 ft. factory addition, brick and steel, plain foundation, Hillside St., to A. H. Leeming, 353 Bank St. Archts. est. $60,000.

Conn., Middletown — Standard Oil Co., 26 Bway., New York City, buildings and dock facilities for distributing plant here, to R. H. Beattie Constr. Co., Buffington Bldg., Fall River. Archts. est. $1,000,000. Noted July 26.

N. Y., Buffalo—See "Buildings."

N. Y., New York—Lorington Constr. Co., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 1 story garage, rein.-con., brick and steel, Longfellow Ave. and 139th St., by day labor. Archts. est. $150,000.

N. Y., New York—Maxmoor Realty Co., c/o J. M. Felson, archt. and engr., 1133 Bway., will build rein.-con., brick and steel garage, Jackson Ave., by day labor. $75,000.

Tenn., Knoxville — Planters Tobacco Warehouse Co., Knoxville, 1 story, brick and steel warehouse, to L. A. Hayes Constr. Co., Knoxville, $40,000.

Ky., Louisville—Louisville Petroleum Refining Co., Inter Southern Bldg, will build first unit of oil refining plant, by day labor. $100,000 (ultimate cost $300,000). W. M. Mitchell, pres.

O., Cleveland — Cleveland Laundry Co., 2840 Central Ave., 1 story, 32 x 80 ft. laundry and boiler house, brick and steel, 2840 Carnegie Ave., to W. F. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $40,000.

Ind., Frankfort — Toledo, St. Louis & Western R.R. Co., Pierce Bldg., St. Louis, Mo., 27 stall roundhouse, etc., here, to Bierd, Lydon & Grandpre, Inc., 340 West Harrison St., Chicago, $300,000.

Ill., Chicago — G. F. Marchant & Co., Rockwell and 14th Sts., 1 story, 73 x 124 ft. factory addition, rein.-con., brick and steel, to A. B. Larson Co., 19 South La Salle St. Archts. est. $40,000.

Ill., Freeport—W. T. Rawleigh Co., 101 South Liberty St.; 2 story, 75 x 100 ft. power plant, brick, steel and rein.-con., to A. Zwack, 1301 Central Ave., Dubuque, Ia. Engrs. est. $100,000. Noted Aug. 30.

Ill., Mason — Illinois Coal Corp., Old Colony Bldg., Chicago, general contract 40 x 140 ft. warehouse, 50 x 140 ft. shop, 60 x 60 ft. power plant and hoist engine house 20 ft. high, all 1 story, brick and tile, to H. N. Leighton Co., 127 South 10th St., Minneapolis, Minn., about $150,000.

Wis., Green Bay—St. Joseph's Orphanage, R 6, 2 story, 38 x 150 ft., brick, rein.-con. and steel boiler house, plain foundation, to Pinchard Bros., 605 George St., $61,000. Archts. est. $50,000. Noted Aug. 30.

Wis., Kenosha—Nash Motors Co., Edward St., general contract 1 story, 210 x 600 ft. storage and loading plant, brick, steel and timber, plain foundation, to T. Stark & Co., 130 Muskego Ave., Milwaukee; steel, to Worden-Allen Co., Port Washington Rd., Milwaukee. Engrs. est. $225,000.

Wis., North Milwaukee—W. P. Schwartzburg, 43rd St. and Hammond Ave., 1 story, 60 x 100 ft., brick and concrete garage, plain foundation, to Coddington Eng. Co., 290 3rd St., Milwaukee. $40,000.

Wis., Rio Creek — Rio Creek Builders Veneer and Woodwork Co., will build 2 story, 52 x 100 ft., timber factory, plain foundation, by day labor. $40,000. M. Bank, pres.

Mo., St. Louis—A. Roy, 4455 Manchester Ave., 1 and 2 story, 98 x 125 ft., rein.-con. and brick garage, Manchester Ave., by day labor. $40,000. Private plans

Mo., St. Louis—St. Louis Coffin Co., 1857 Chouteau Ave., will build 2 and 3 story, 125 x 160 ft., rein.-con. and brick addition to factory, by day labor. $60,000 E. J. Hass, 3228 Magnolia Ave., archt.

Wash., Vancouver—Columbia River Paper Mill Co., 2 story, 80 x 380 ft. mill, steel and tile, Columbia River, to Austin Contract Co., Portland, Ore., cost plus basis. Archts. est. $60,000. Noted Feb. 8.

Calif., San Francisco — Pelton Water Wheel Co., 19th and Harrison Sts., 2 story, rein.-con. factory and office, Florida St., to G. Wagner, 251 Kearny St., percentage basis, about $100,000. Noted Sept. 6.

Que., Windsor—Messrs. Kilgour Bros., 2 story, 90 x 130 ft. brick and timber factory, to Newton & Dakin, Sherbrooke, $200,000. Noted Sept. 20.

Buildings

PROPOSED WORK

Me., Thomaston — Prison — State Dept., Augusta, plans prison buildings, here, to replace those recently destroyed by fire. P. B. Baxter, governor.

N. H., Newmarket—High School—Town having plans prepared by J. A. Bickford Co., 6 Beacon St., Boston, 2 story, 66 x 138 ft, brick and steel. $175,000.

Mass., Boston—Dormitory—Trustees of Harvard Medical School, Longwood Ave., having plans prepared by Coolidge & Shattuck, Ames Bldg., 4 story, 150 x 190 ft., brick and steel, Longwood Ave. $850,000.

Mass., Boston—Hospital—Massachusetts Womens Hospital, had plans prepared by M. Biscoe, 50 Congress St., and takes bids about Oct. 20, 1 story 75 x 150 ft. addition. $150,000.

Conn., Hartford—Apartment—J. P. Nielson, 494 New Britain Ave., had plans prepared 3 story, 60 x 120 ft., brick, plain foundation, Buckingham Ave. $150,000. Private plans.

Conn., Hartford—High School—School Bd., Municipal Bldg., rejected bids 3 story, brick and steel, plain foundation, Maple Ave. Will readvertise. $1,200,000. E. T. Willey, 75 Pratt St., archt. Noted Aug. 30.

Conn., Meriden — Schools — Bd. Educ. plans following schools: East Side Junior High, Miller St., $350,000; North End Primary School, $150,000; 2 story addition to West Grammar School, $150,000; 2 story addition to King St. School, $120,000. Engineer and architect not selected.

Conn., Mystic—Dormitory—Mystic Oral School for the Deaf having plans prepared by Payne & Keefe, Manwaring Bldg., New London, 3 story and basement, 80 x 150 ft., rein.-con. and brick, plain foundation. $265,000. Noted July 26.

N. Y., Brooklyn—Apartment—S. Silk, c/o Slee & Bryson, archts. and engrs., 154 Montague St., having plans prepared 6 story, brick, steel and stone, Joralemon St. $350,000.

N. Y., Buffalo—Hospital—Mercy Hospital, Abbott Rd. and Choate Ave., having preliminary plans prepared 3 story and basement, 200 x 350 ft., rein.-con., brick and stone. $400,000. J. A. Kloepfer, Liberty Bank, member of executive com. Architect's name withheld.

N. Y., Dunkirk—High School—Oct. 24 to vote on $500,000 bonds for addition to high school. Architect not announced.

N. Y., Rochester—School—Bishop Hickey, c/o Catholic Aid Assn., 387 Main St., conducting campaign to raise $650,000 for Aquinas Institute (school for boys).

N. Y., Rochester—University—University of Rochester, 490 University Ave., plans campaign to raise $10,000,000 for new buildings. G. W. Todd, 1050 University Ave., chn. Citizens Comm. Architect not announced.

Pa., Kingston — Club House — Black Diamond Post 395, American Legion, plans club house, Wyoming Ave. $150,000. Engineer and architect not announced.

Pa., Lancaster—School—Bd. Educ. having plans prepared by C. E. Urban, Woolworth Bldg., junior high school, West End. $500,000.

Pa., Meadville—Home-Hospital—Odd Fellows Home Assn., W. C. Moritz, secy., plans 2 story. $250,000. Engineer and architect not announced.

Pa., Oil City—Church—Trinity Methodist Episcopal Church having plans prepared by C. W. Belton & Son, Witherspoon Bldg., Phila., 1 and 2 story, 120 x 130 ft. $200,000.

W. Va., Huntington—Apartment—P. J. Deegan, having plans prepared by R. M. Bates, Jr., 416 11th St., 7 story and basement, 60 x 80 ft., concrete and steel. $200,000.

N. C., Greensboro—Municipal—City plans 4 story, 60 x 90 ft., West Gaston and North Greene Sts. $250,000. P. C. Painter, city mgr. Engineer and architect not selected.

N. C., Morganton — Institutional — State Hospital for Insane, rejected bids for 3 large dormitories, brick. $300,000. Will readvertise. C. C. Hook, Trust Bldg., Charlotte, archt. Noted June 1.

Ga., Atlanta—Resort—E. C. Wachendorff, archt., 620 Forsythe Bldg., takes bids about January or February, brick, concrete and steel, for Blackman, Terrace Co. $225,000.

Fla., Orlando—Hotels—Florida Auto Tel System, Orlando, making plans 15 hotels in various sections state. $1,000,000. Private plans. M. O. Overstreet, Orlando, pres.

Fla., Stuart—Hotel—Oak Park Hotel Co. plans 3 story rein.-con. and steel. $150,000.

Fla., Tampa—Hotel—I. T. Roberts, Birmingham, Ala., having plans prepared by M. L. Elliott, Citizens Bank Bldg., for hotel, here. $2,000,000.

Miss., Biloxi—Schools—Plans election to vote on $100,000 bonds for 3 ward schools. Total cost $200,000. $100,000 now available.

La., New Orleans—Store—J. Katzenstein and L. B. Loeb, Shreveport, takes bids about Oct. 8, 5 story, 81 x 150 ft. brick, Texas Ave. $250,000 to $300,000. Jones, Roessle, Oschner & Weimer, Maison Blanche Bldg., archts. Feibleman & Co., Magazine St., lessee.

Tenn., Dyersburg—Depot—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, plans passenger and freight depot, brick, here. $150,000. F. R. Thompson, ch. engr.

Tenn., Lebanon—Schools—Oct. 16, to vote on $150,000 bonds for 2 schools. Engineer and architect not selected.

O., Cincinnati—Apartment—D. G. Ebersole is pres. of new company (name not decided upon), which is having plans prepared by H. Hake, Telephone Bldg., 12 story, 91 x 110 ft., rein.-con., 4th St. and Bway. $1,200,000. Noted Mar. 1.

O., Cleveland—Station, etc.—Cleveland Union Terminals Co., c/o O. P. and M. G. Van Swerigen, Marshall Bldg., having plans prepared by Graham, Anderson, Probst & White, 80 East Jackson Blvd., Chicago, 10 and 14 story passenger station and freight terminal, brick, steel and concrete, incl. tracks and bridges leading to building, Public Sq. $60,000,000. H. D. Jouett, 323 Lakeside Ave., ch. engr.

O., Youngstown—Church—Baptist Church plans 5 story, 70 x 150 ft., Gothic type, Boardman St. $500,000. Stanley & Scheibel, Wick Bldg., archts.

Ind., Richmond—Municipal Markets and Assembly Hall—City having preliminary plans prepared by C. E. Werking & Son, Palladium Bldg., and takes bids about Jan. 1, 2 story and basement, 85 x 271 ft. $250,000.

Mich., Detroit — Apartment—Apartments Co., c/o Brown & Derrick, archts., Capitol Theatre Bldg., having plans prepared 10 story and basement, 50 x 150 ft. rein.-con., brick and steel, plain foundation, Jefferson and Hibbard Aves.

Mich., Detroit—Bank—U. S. Bond & Mortgage Co., 312 Majestic Bldg., having plans prepared 8 story and basemeent, 45 x 120 ft. rein.-con., brick and steel, plain foundation, Shelby and Congress Sts. Engineer and architect not selected.

Ill., Chicago—Apartment—M. P. Morrissey, c/o R. F. France, archt., 155 North Clark St., plans three 3 story, 250 x 330 ft. rein.-con., brick and steel, Oak Park and Erie Sts. $800,000.

Ill., Chicago—Apartment—A. V. Teison, archt., 4804 North Kedzie Ave., preparing plans 3 story, 100 x 100 ft., rein.-con., brick and steel, Diversey Ave. and Abbott Court. $200,000. Owner's name withheld.

Ill., East St. Louis—Theatre—O. Dane, 1403 Locust St., St. Louis, Mo., plans rein.-con. and brick, 2 or more stories, here. $250,000. Architect not selected.

Ill., Mooseheart—Lodge—New York State Assn., Loyal Order of Moose, W. A. Marakle, vice-supreme dictator, 134 South Ave., Rochester, N. Y., plans Empire State Bldg., here. $150,000. Architect not announced.

Wis., Madison—Church—First Church of Christ, c/o W. D. Hrestand, chn., 423 Wisconsin Ave., plans 2 story, brick, rein.-con. and steel, plain foundation. $200,000. Engineer and architect not selected.

Wis., Monroe—School—Bd. Educ., c/o M. E. Boltzer, secy., 102 Jefferson St., having plans prepared by E. Tough, Washington Bldg., Madison, 2 story and basement, 60 x 200 ft., brick, rein.-con. and steel, plain foundation.

Wis., Oshkosh—Temple—Local Masonic Lodges combined, c/o J. C. Thompson, chn. building comn., 1304 Ohio St., receiving competitive sketches 4 story and basement,

Buildings (Continued)

100 x 102 ft., brick, stone and concrete, plain foundation. $250,000.

Wis., Waukesha—Hotel—M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, soon takes bids 3 story and basement, brick and concrete, plain foundation, Hartwell Ave., for Hotel Silurian, c/o F. Strong, 151 South East Ave. $500,000.

Ia., Sioux City—Hospital—Mother Superior St. Joseph's Hospital, having plans prepared by J. Wheeler, archt., Exchange Bank Bldg., St. Paul, Minn., 5 story and basement hospital addition, 21st and Court St. $275,000. Noted May 10.

Minn., Minneapolis — Auditorium — See "Miscellaneous."

Kan., Leavenworth — City Hall — Voted $200,000 bonds city hall. Engineer and architect not selected. Noted Aug. 30.

Wyo., Casper—Court House—Natrona Co. election Nov. 6 to vote on $500,000 bonds for court house. Garbutt, Weidner & Sweeney, Consolidated Royalty Bldg., archts.

Mo., Columbia—College—Stephens Junior College plans dormitory, brick, stone and rein.-con., also library and study hall, 2 and 3 story. $300,000. Architect not selected.

Mo., Kansas City — School — Bd. Educ. soon takes bids 6 story and basement, 126 x 200 ft., rein.-con., brick, stone and steel. $850,000. C. A. Smith, Finance Bldg., archt.

Mo., St. Louis—School—St. Teresas School Assn., c/o A. Newman, Grand St. near North Market Sts., having preliminary plans prepared 3 story, rein.-con. and brick, Fall Ave. $200,000. Engineer and architect not selected.

Ark., Little Rock—School—School Bd. sold $220,000 bonds for school buildings.

Tex., El Paso—Sanatorium—Homan & Crimen having plans prepared by O. H. Horman, El Paso, 7 story, brick and steel, Cotton Ave. and Erie St. $200,000.

Tex., Ft. Worth — Hospital — City and Tarrant Co. plan hospital on South Main St. $1,000,000. City election soon to vote on $500,000 bonds. Engineer and architect not selected.

Tex., Ft. Worth—Schools—Bd Educ., c/o M. H. Moore, supt., plans $1,000,000 bond issue for new high schools in Arlington Heights, and miscellaneous buildings.

Tex., Texarkana — City Hall — Having preliminary plans prepared 3 story, brick, rein.-con. and stone, Texas Ave. $200,000. Private plans. Noted Sept. 6.

Wash., Seattle — Schools — City having preliminary plans prepared by F. A. Naramore, city archt., for the following buildings, addition to West Seattle High School $190,000, addition to John Muir School $130,000, Dunlap Grade School $120,000, Portage Grade School $120,000, first unit of large intermediate school $150,000. Noted Apr. 4.

Calif., Berkeley — Church — Methodist Episcopal Church, c/o J. N. Score, pastor, 2728 Garber St., plans church, fireproof, Durant St. near Telegraph Ave. $250,000.

Calif., Elmhurst—Theatre and Store—L. J. Toffelmier & Sons, 701 Parrott St., San Leandro, plans 1 story, fireproof, 89th Ave. and East 14th St. $150,000.

Calif., Los Angeles — Church — Ninth Church of Christ Scientist, c/o Milwaukee Building Co., archts., Wright-Callendar Bldg., having preliminary plans prepared for church, fireproof, Normandie and 5th Sts. To exceed $150,000.

Calif., Los Angeles—Hotel—J. Foote having plans prepared by L. L. Jones, 603 Grosse Bldg., 12 story, 60 x 128 ft., rein.-con., Bixel and Ingraham Sts. $600,000.

Calif., Los Angeles—Office—J. B. Fahy, et al., c/o O. H. Neher, archt., Marsh-Strong Bldg., having plans prepared 13 story, 100 x 150 ft., rein.-con. and steel, South Spring St. H. Hasenberger, Marsh Strong Bldg., engr.

Calif., Los Angeles—Store and Loft—Sun Realty Exchange, 5508 South Vermont St., had plans prepared by Curlett & Beelman, Union Bank Bldg., 6 story and basement, (ultimately 12 story) 85 x 160 ft., rein.-con., Olive and 9th Sts.

Calif., Oakland — Administration — Alameda Co. had plans prepared by H. H. Meyers, Kohl Bldg., San Francisco, rein.-con. and terra cotta, on county hospital grounds. $600,000-$700,000.

Calif., Oakland—Store—C. J. Heeseman, 15th and Washingtgon Sts., had plans prepared by H. H. Meyers, Kohl Bldg., San Francisco, 4 story, rein.-con., 13th and Clay Sts. $150,000. Jackson Furniture Co., 14th and Clay Sts., lessee.

SEWERS, ETC—LOUISVILLE, KY.

Following are lowest three bids opened by Comrs. of Sewerage, July 17, for constructing Napoleon Blvd. sewer and drain and Speed Ave. laterals, S., Contr. No. 14, (A) A. H. Bickel Co., Inc., Louisville, Type B; (B) Frazier-Davis Constr. Co., St. Louis, Mo., Type D; (C) G. W. Jackson-Fitzpatrick Co., Chicago, Type B. The unit bids were as follows:

	A	B	C
4,100 cu.yd. earth excavation and refill	$3.15	......	$2.6
3,940 cu.yd. earth excavation and refill	......	$2.90	......
5,580 cu.yd. earth excavation and refill	3.65	2.90	3.20
395 cu.yd. rock excavation and refill	15.00	......	15.50
382 cu.yd. rock excavation and refill	20.00	......	15.00
475 cu.yd. rock excavation and refill	......	12.00	......
352 cu.yd. rock excavation and refill	......	15.00	......
365 cu.yd. class A concrete masonry	30.00	......	24.50
130 cu.yd. class A concrete masonry	40.00	......	40.00
100 cu.yd. class A concrete masonry	......	40.00	......
135 cu.yd. class A concrete masonry	40.00	40.00	40.00
907 cu.yd. class C concrete masonry	15.00	14.00	19.00
330 cu.yd. class C concrete masonry	......	15.00	......
630 cu.yd. hydrated lime class A	.75	......	.80
235 cu.yd. hydrated lime class A	......	1.20	......
1 cu.yd. brick masonry	50.00	32.00	30.00
220 sq.yd. vitrified brick lining	6.00	......	6.00
1,300 lb. reinforcing bars	.08	.10	.07
70 cu.yd. earth excavation below sewer	.50	4.00	6.00
70 cu.yd. gravel refill below sewer	5.00	5.00	5.00
$7,295.83 A.S.T.M. clay pipe	44%	31%	40%
$10,507.30 manufacturers standard clay pipe	45%	31%	41%
$645.00 pipe for underdrain	50%	35%	43%
1,365 ft. 6 in. laying with plastic comp	.50	.20	.75
3,970 ft. 8 in. laying with plastic comp	.32	.25	.80
1,725 ft. 12 in. laying with plastic comp	.48	.30	.90
2,216 ft. 15 in. laying with plastic comp	.60	.35	1.00
550 ft. 18 in. laying with plastic comp	.72	.55	1.25
993 ft. 21 in. laying with plastic comp	.84	.65	1.50
641 ft. 33 in. segment black sewer	......	7.00	......
852 ft. 36 in. segment black sewer	......	7.35	......
860 ft. 4 in. laying underdrain	.60	.10	.75
860 ft. 6 in. laying underdrain	.65	.30	1.00
2,000 ft. B.M. sheeting, bracing	50.00	100	50.00
2,310 sq.yd. water bound macadam	1.25	4.00	1.70
125 sq.yd. sheet asphalt	5.50	5.00	6.00
570 sq.yd. bituminous concrete	3.00	5.00	4.00
Making connections	350	2,500	1,000
11 tons 8 in. A.S.T.M. C.I. pipe (lump sum)	200	150	100
5 ft. 8 in. laying c.i. pipe	2.00	5.00	5.00
Cleaning up (lump sum)	500	2,000	1,000
Extended totals	$107,203	$111,470	$111,547

Type "B" monolithic concrete 33 and 36.
Type "D" segment block 33 and 36.

Calif., Orange—Jail—City having plans prepared by F. K. Benchley, Benchley Bldg., Fullerton, 3 story, rein.-con. $175,000.

Calif., Redlands—Hotel and Apartment—California Real Estate & Finance Corp., c/o L. L. Jones, archt., Grosse Bldg., Los Angeles, having preliminary plans prepared 4 story, brick, here. To exceed $200,000.

Calif., Sacramento — Auditorium — City plans auditorium. $750,000. H. G. Denton, clk. Engineer and architect not selected.

Calif., San Francisco—Office—See "Industrial Works."

Calif., San Jose—Office, Apartment and Hotel—Weeks & Day, archts., 318 Montgomery St., San Francisco, preparing plans 6-10 story and basement Class A fireproof office, apartment and hotel building. To exceed $150,000. Owner's name withheld.

Calif., San Pedro—Hotel—D. Barnes, c/o O. H. Neher, archt., Marsh-Strong Bldg., Los Angeles, having plans prepared rein.-con. hotel, approximately 15 story, 7th St. and Pacific Blvd., here. To exceed $250,000.

Calif., San Pedro—Hotel—L. De Carlo, c/o L. L. Jones, archt., Grosse Bldg., Los Angeles, had plans prepared 6 story and basement, rein.-con., 7th St., here. $250,000.

BIDS DESIRED

R. I., Providence—Armory—Oct. 1, by J. J. Richards, secy. Comn. of Armory of Mounted Commands, Industrial Trust Bldg., 1, 2 and 4 story, 198 x 536 ft., brick and steel, plain foundation, North Main St. $380,000. W. G. Richards, 17 Exchange St., archt. Noted July 26.

Conn., Bridgeport—High School—Oct. 16, by Bd. Educ., 3 story and basement, brick, steel and concrete, plain foundation, Boston and Central Ave. $900,000. Caldwell, Walker & Beckwith, 886 Main St., archts. Noted Jan. 4.

N. J., Woodbury — School — Oct. 4, by Secretary Bd. Educ., 2 story and basement, 65 x 74 x 188 x 191 ft., rein.-con., brick, steel and limestone, plain foundation, Delaware and Broad Sts. $190,000. Ballinger Co., 12th and Chestnut Sts., Phila., archts.

Miss., Jackson—Office—Oct. 1, by Lamar Life Insurance Co., 10 and 12 story, 80 x 148 ft., rein.-con., brick and steel, concrete pile foundation. $500,000. Sanguinet & Staats, Ft. Worth, Tex., archts. N. W. Overstreet, Jackson, associate archt.

Ky., Winchester—Schools—Oct. 4, by City, high school, grade school and colored school. $150,000. R. M. Bates, Jr., 414 11th St., Huntington, W. Va., archt.

O., Bowling Green—High School—Oct. 9, by W. E. Kleppisch, secy. Bd. Educ., for high school. M. J. Geise, 800½ Main St., Quincy, Ill., archt. Noted July 12.

O., Cleveland—Apartment—J. E. Arnoff, 10111 North Blvd., taking bids and opens same about Oct. 5, 4 story and basement, 37 x 160 ft., brick and timber, Orville Ave $150,000. G. Rudolph, Hunkin-Conkey Bldg., archt.

O., Cleveland—Temple—Oct. 1, by Euclid Ave. Temple Assn., c/o J. Laronge, Williamson Bldg., 1 and 3 story, 88 x 120 ft., brick, steel and concrete addition, East 82nd St. and Euclid Ave. $200,000. Morris & Weinberg, 3226 Euclid Ave., archts.

Mich., Flint—School—Oct. 1, by A. J. Wildanger, secy. Bd. Trustees Bd. Educ., 2 story and basement, 40 ft. high, 67 x 210 ft. and 65 x 100 ft., rein.-con., brick and steel, plain foundation, Saginaw St. $350,000. Malcolmson & Higginbotham Industrial Bank Bldg., Detroit, arcnts.

Mich., Redford—School—Bd. Educ. Redford Union Schools, taking bids 2 story and basement, 66 x 132 ft. rein.-con., brick and stone, plain foundation, Burt and Carlton Aves. $150,000. Verner, Wilhelm & Molby, 603 Book Bldg., Detroit, archts. Noted Aug. 2.

Wis., Madison — Church — E. Tough, archt., Washington Bldg., taking bids 2 story, 60 x 150 ft. brick, rein.-con. and steel, plain foundation, for Parkside Presbyterian Church, 1418 East Dayton St. Noted July 12.

Wis., Waukesha—Hotel—Oct. 2, by M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, 3 story and basement, rein.-con. and tile, plain foundation, Hartwell Ave., for Hotel Silurian, c/o F. J. Strong, 151 South East Ave. $350,000. Noted Aug. 31.

Ia., Marion—High School—Oct. 24, by Bd. Educ., 3 story and basement, 66 x 158 ft., rein.-con., brick, tile and stone. $200,000. E. Miller, secy. W. J. Brown, Amer. Trust Bldg., Cedar Rapids, engr. Noted Aug. 23.

Minn., Duluth—Store and Office—Oct. 4, by W. M. Prindle & Co., Lonsdale Bldg., representing Bradley Estate, 4 story and basement, 110 x 115 ft., rein.-con., steel and brick, Superior St. and Lake Ave. $300,000. F. G. German, 407 Exchange Bldg., archt. Noted July 26.

Buildings (Continued)

Ark., Hot Springs—Hotel—Oct. 6, by Mann & Stern, archts., A. O. U. W Bldg., Little Rock, 11 story, 200 x 200 ft., brick, stucco, tile and rein.-con., for Arlington Hotel Co. $2,225,000. Noted May 31.

Okla., Oklahoma City—Schools—Oct. 1, by A. E. Mushrush, clk. Bd. Educ., addition to Classen High School, 18th and Douglass Sts.; 3 story 160 x 220 ft. high school, 33rd and Hill Sts.; 3 story 100 x 150 ft. Junior High School, 9th and Western Sts., rein.-con. $350,000. Layton, Smith & Forsyth, 701 Southwest Natl. Bank Bldg., archts. Noted May 10.

Calif., Santa Rosa—High School—Trustees High School Dist. taking bids and opens same about Oct. 22, rein.-con. and brick. $375,000. W. H. Weeks, 369 Pine St., San Francisco, archt.

BIDS RECEIVED

R. I., Howard—Hospital—State Welfare Comn., Providence, Sept. 20, general contract 4 story, brick, here, from Hope Bldg. Co., Weybosset St., Providence, $124,326.

N. Y., Richmond Hill—School—Bd. Educ., 500 Park Ave., New York, Sept. 18, general construction P. S. 108, brick, steel and stone, plain foundation, Suwanee Ave. and 108th St., here, from P. Cleary, 115 Marion St., Brooklyn, (a) $879,300 (b) $909,300 (c) $959,300. Noted Sept. 13.

N. J., Newark—School—Bd. Educ., City Hall, Broad St., Sept. 12, 3 story, brick, steel and stone, Webster St., general contract from E. M. Waldron, Inc., 27 Central Ave., $187,400; heating and ventilating from Stewart & Farrell, $42,975.

O., Geneva—High School—Bd. Educ., 2 story and basement, 159 x 182 ft., brick and steel, from Yeager & Sons, Danville, Ill., $199,883.

Ia., Iowa City—Hospital—State Bd. Educ., Des Moines, general contract 3 story and basement, rein.-con., brick, tile and stone addition, at State University, here, from J. H. Hunzinger, Davenport, $119,629. Noted Sept. 13.

Minn., Winona—School—State Bd. Control, St. Paul, 3 story and basement, 200 x 210 ft. main building with power plant in basement, rein.-con., tile, brick and stone, here, from L. Fleisher Co., 505 Plymouth Bldg., Minneapolis, $470,000; S. M. Klarquist Sons Co., 745 Security Bldg., Minneapolis, $473,407; J. A. McDonald Constr. Co., 750 Builders Exch., Minneapolis $479,709. Bids rejected, asked to refigure. Noted Aug. 30.

Calif., Los Angeles—High School and Auditorium, etc.—City, constructing Hollywood High School, 2 story and basement, rein.-con and brick, from Kinne-Westerhouse Co., H. W. Hellman Bldg., $294,000.

Calif., Santa Barbara—Schools—City, from D. R. Wagner, Call Bldg., San Francisco, general contract Franklin School, 1 story, brick and concrete, $119,990, assembly hall addition $27,980, Roosevelt School, 1 story, brick and concrete, $133,842. Noted July 26.

CONTRACTS AWARDED

Mass., Cambridge—Dormitory—Trustees of Radcliffe College, 4 story, 90 x 130 ft., brick and steel, to Leighton, Mitchell Co., 99 Chauncy St., Boston, $300,000.

Mass., New Bedford — Hospital — St. Lukes Hospital Corp., 3 story, 45 x 148 ft., brick and steel, to J. W. Bishop, Times Bldg., $150,000.

Mass., Tewksbury — Infirmary — Dept. Health, State House, Boston, 2 story and basement, rein.-con. and brick addition to State Infirmary, plain foundation, to J. Miles & Sons, 393 Main St., Worcester. Engrs. est. $150,000. Noted June 22.

R. I., Pawtucket—Church—M. A. Herbert, Newport Ave., in charge of Church, 2 story, 90 x 150 ft., brick, plain foundation, Newport Ave., to Bovier-Brien Constr. Co., Sayles St., Woonsocket, $153,000. Archts. est. $150,000.

R. I., Providence—Hospital—Trustees of Homeopathic Hospital, 3 story, 45 x 207 ft., brick and steel, to J. W. Bishop Co., Times Bldg., New Bedford, Mass., $185,000.

Conn., New London—Business—F. W. Mercer, 64 Huntington St., 3 story, 50 x 110 ft., brick and steel, plain foundation, State St., to H. Wales-Lines Co., 134 State St., Meriden. Archts. est. $150,000.

N. Y., Brooklyn — Apartment — Annette Bldg. Corp., c/o M. A. Cantor, archt., 373 Fulton St., will build rein.-con., brick, steel and stone, 41st St., by day labor. Archts. est. $200,000.

N. Y., Brooklyn—Apartment—St. Johns Pl. and Plaza St. Corp., c/o W. I. Hohauser, archt. and engr., 116 West 39th St., New York, will build 5 story, brick, steel and stone, Bushwick and Gates Aves., here by day labor. Archts. est. $170,000.

N. Y., Brooklyn—School—St. Michaels Parish, c/o Elliott, Lynch & McKenna, archts. and engrs., 347 5th Ave., New York, 4 story, brick, steel and stone, 43rd St. and 4th Ave., here, to W. L. and G. H. O'Shea, 29 Bway., New York. Archts. est. $200,000.

N. Y., Buffalo—Store, etc.—E. H. Close Realty Co., 309 Main St., Toledo, O., 6 story, 18 x 100 x 150 ft. store, and 1 story, 38 x 81 x 150 ft. garage, brick and tile, Main St. here, to Metzer Constr. Co., 676 Genessee St. Archts. est. $112,500-$150,000. Noted Aug. 23.

N. Y, Jamaica—Bank—Corn Exchange Bank, William St., New York, 40 x 100 ft., brick, steel and stone, Archer St., here, to W. L. Crow Constr. Co., 103 Park Ave., New York. Archts. est. $200,000.

N. Y., New York—Apartment—K. Bagdanoff, c/o C. Kreymborg, archt., 2534 Marion Ave., will build 5 story, 100 x 115 ft., brick, steel and stone, Elliott Pl., by day labor. Archts. est. $200,000.

N. Y., New York — Apartment — Octo Building Corp., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build 12 story, brick, steel and stone, West 80th St., by day labor. Archts. est. $1,500,000.

N. Y., New York—Apartment—M. Perlbinder, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, steel and stone, West Farms Rd., by day labor. Archts. est. $250,000.

N. Y., New York—Apartment—Six Thirty West 170th St. Corp., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 6 story, 100 x 150 ft., brick, steel and stone, West 170th St., by day labor.

N. Y., Wende (Millgrove P. O.)—Home and Infirmary—Supervs. Erie Co., City Hall, Buffalo, general contract 2 and 3 story, brick, stone and steel, here, to H. Shenk, Erie, Pa., $1,079,000. Noted Sept 13.

Pa., Ambridge—High School—Bd. Educ., 3 story and basement, 100 x 360 ft., Duss Ave., to R. B. McDanil Co., New Brighton, plumbing to Moss & Blakeley, 223 Beltzhoover Ave., Pittsburgh, steel to Amer. Bridge Co., Ambridge, total est. $385,000.

Pa., Phila.—Nurses Home—H. W. Coster, archt., St. Girard Bldg., 4 story and basement, 36 x 92 ft. rein.-con., brick and steel, plain foundation, Broad and Wolf Sts., to Cramp Co., 11th and Market Sts., for Methodist Episcopal Hospital, Broad and Wolf Sts., $150,000. Noted Sept. 6.

Pa., Villanova—Dormitory—Cardinal D. J. Dougherty, 1723 Race St., Phila., 3 story and basement, 70 x 208 ft., here, for Villanova College, to R. C. Ballinger Co., 925 Chestnut St., Phila., $230,000.

Miss., Bay St. Louis—Hotel—H. S. Weston, general contract, 2 story and basement, brick and concrete, to C. A. D. Bailey & Co., New Orleans, La., $120,500. Noted Aug. 2.

Ky., Lexington—Chemistry—University of Kentucky plans adding wing to Chemistry Bldg. $150,000. Architect not selected.

O., Akron—Auditorium—City, 2 story auditorium at Central High School, Union St., white brick, to Carmichael Constr. Co., 524 Hamilton Bldg., $186,542.

O., Cleveland—Store—Fries & Schule Co., 1968 West 25th St., 2 story, brick, steel and concrete top addition, to S. W. Emerson Co., Union Bldg. Archts. est. $150,000.

O., Dayton—Dormitory—University of Dayton, 5 story, 40 x 188 ft., rein.-con. and brick, plain foundation, to Danis-Hunt Constr. Co., 907 Schwind Bldg., $350,000. Noted Oct. 13.

O., Mineral Ridge—School—Town, 2 story and basement, white brick and stone, to Hawkins, Downey Mason Constr. Co., Youngstown, $200,000.

Mich., Flint — Administration — Durant Motor Co., 3 story and basement, 48 x 217 ft rein.-con. and steel, to H. G. Christman Co., West Saginaw St., Lansing. Noted Aug. 30.

Ill., Chicago—Apartment—H. Reisen, c/o A. S. Hecht, archt., 155 North Clark St., 3 story and basement, 125 x 225 ft., rein.-con., brick and steel, Fulton St. and Central Park, to Welch Constr. Co., 841 North California Ave. Archts. est. $450,000.

Ill., Chicago—Bank and Office—Madison Square State Bank, 19 North Circle Ave. 3 story, 75 x 175 ft., rein.-con., brick and steel, 4810 West Madison St., to R. C. Wiebold & Co., 1534 West Van Buren St. Archts. est. $200,000.

Ia., Ames—Foundation—Wesley Foundation, Ames, general contract 2 story and basement, 110 x 125 ft., rein.-con., brick tile and stone, to Madsen & Peterson, 646 Builders Exch., Minneapolis, Minn. $104,980.

Ia., Boone—High School—Bd. Educ., general contract, 3 story and basement, 85 x 132 ft., rein.-con., brick and stone, to Lippert Bros., Boone, $126,990. Noted Aug. 9.

Ia., Mediapolis—School—Bd. Educ., general contract 3 story and basement, 66 x 179 ft., with gymnasium annex, rein.-con., brick and stone, to C. W. Getchell, 2910 High St., Des Moines, $89,428. Noted Aug. 23.

Minn., Minneapolis—Lodge—St. Anthony Aerie No. 1247, Fraternal Order of Eagles, 3½ story and basement, 76 x 150 ft., rein.-con., brick and tile, Central Ave. and 4th St. S. E., general contract to R. S. Billingsley & Co., 724 Plymouth Bldg. Total $200,000. Noted Sept. 14, 1922.

Minn., Willmar — Cottages — State Bd. Control, St. Paul, two 2 story and basement, 55 x 120 ft., rein.-con., brick and tile, at State Hospital for Insane, here, to J. H. Olson, Willmar, $123,930. Noted Sept. 13.

Mo., St. Louis—Club and Office—Town Club, Century Bldg., 7 story and basement, 46 x 110 ft., rein.-con., tile, brick and steel, Locust St., to Humes-Deal Co., Century Bldg. Archts. est. $350,000.

Mo., Unionville—Court House—Putnam Co. general contract 3 story and basement, 70 x 90 ft., Bedford or Carthage stone, to G. H. Gossman, Arkansas City, Kan., $128,000. Noted July 26.

Tex., Ft. Worth—Y. M. C. A., 914 Monroe St., 4 story and basement, 100 x 145 ft. brick, stone and concrete, 5th and Lamar Sts., to H. B. Friedman, 1st Natl. Bank Bldg., $238,500. Archts. est. $300,000. Noted Sept. 13.

Wash., Olympia — Hospital — Sisters of Charity, 5 story, 175 x 240 ft., steel and concrete, to A. W. Quist & Co., Hoge Bldg., Seattle. Archts. est. $310,000.

Calif., Fullerton—City Hall—City Trustees, Sept. 11, 2 story, concrete and steel, (1) structure complete, (2) in rough, from W. G. Reed, Southwest Bank Bldg., Long Beach, (1) $197,000, (2) $107,000. Noted Sept. 6.

Calif., Long Beach—Store and Office—Pine Avenue Realty Co., 610 Pine Ave., 7 story and basement, rein.-con., 5th Ave. and Pine St., to J. V. McNeil Co., H. W. Hellman Bldg., Los Angeles, $283,900.

Calif., Los Angeles—Bank and Office—Natl. City Bank, 13 story and basement, brick and steel, 8th St. between Main and Spring Sts., to Edwards, Wildey & Dickson, 515 Black Bldg., Los Angeles. $800,000. Foundation already constructed.

Calif., Los Angeles—Hospital—Industrial Clinic & Hospital Assn., 2 story and basement, rein.-con. and brick, West Jefferson St., to E. B. Newcomb, Pantages Bldg., $150,000.

Calif., Los Angeles — Loft and Store—Wayside Press, 311 East 4th St., 4 story and basement, 140 x 175 ft. rein.-con., San Pedro and 9th Sts., to Los Angeles Building & Constr. Co., Marsh Strong Bldg.

Calif., Los Angeles—Store and Loft—M. G. Cooper Co., 700 South Los Angeles St., 2 and 11 story and basement, rein.-con., 9th and Los Angeles Sts., general contract to McNeil Co., H. W. Hellman Bldg., to exceed $600,000.

Calif., Los Angeles—Store, Office and Bank—Commercial Building Co., 715 Junior Orpheum Bldg., 1 and 13 story and basement, rein.-con. and steel, Hollywood Blvd. and McCadden St., to Simpson Constr. Co., Bank of Italy Bldg., $450,000.

Calif., Los Angeles—Store and Office—Sun Realty Co., c/o Curlett & Beelman, archts., Union Bank Bldg., 12 story and basement, 85 x 160 ft., rein-con., Olive and 9th Sts., to Macdonald & Kahn, Loew State Bldg., to exceed $800,000.

Calif., Oakland—Store and Office—Smith Bros., 472 13th St., 3 story, rein.-con., Bway. near 17th St., to C. W. Heyer, Jr., Mills Bldg., San Francisco, $150,000.

Calif., San Francisco—Apartment—M. E. Bell, 825 Pine St., will build 4 story and basement, rein.-con., Pine St. near Powell St., by day labor. $150,000.

Calif., San Francisco—Store and Club—Elks Club, c/o Meyer & Johnson, archts., 742 Market St., 13 story, steel, etc., Post St. between Powell and Mason Sts., general contract, to R. McLeran Co., Hearst Bldg., about $1,000,000.

Que., Montreal—Office—Messrs. Caron Bros., Bleury St., 10 story, 136 x 207 ft. rein.-con., brick, steel and stone, Bleury St., to O. Archambault, 610 Parc Lafontaine St., $750,000.

Buildings (Continued)

B. C., Vancouver—Apartment-Hotel—Georgia Ltd., 657 Granville St., 7 story and basement, 120 x 125 ft. apartment with 60 x 75 ft. court, rein.-con., brick, stone and terra cotta, Georgia and Hornby Sts., to Smith Bros. & Wilson, 850 Hastings St., W., $425,000.

Federal Government Work

PROPOSED WORK

Ky., Addison—Steel, etc.—U. S. Engineer, P. O. Box 72, Louisville, plans purchasing 1 carload 1 in. round soft steel, shop lengths, and 3,200 lb. c.i. washers, 4 in. diam., for Dam 45, here.

BIDS DESIRED

N. Y., Niagara Falls—Extension—Oct. 3, by Treas. Dept., Wash., D. C., extension to U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

N. Y., Port Chester—Dredging, etc.—Oct. 26, at office U. S. Engineer, Army Bldg., 39 Whitehall St., New York, dredging and rock removal in Harbor, here; adv. E. N.-R. Sept. 27.

Florida—Road—Oct. 18, by A. E. Loder, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, Shepherd Bldg., Montgomery, Ala., constructing 12 mi. Mossyhead-Niceville National Forest Rd., partly within Florida National Forest, Okaloosa Co., here, 10.6 mi. machine grading, 16,600 cu.yd. common excav., 21,235 cu.yd. sand clay, 34,950 ft. timber bridges, etc.

Ill., Rock Island—Discharge Pontoons—Oct 17, at office U. S. Engineer, Rock Island, furnishing 20 steel discharge pontoons; adv. E. N.-R. Sept 27.

Wyoming—Road—Oct. 4, by J. W. Johnson, dist. engr., Dept. Agriculture, 301 Custom House, Denver, Colo., clearing, grading and building structures on 3.8 mi. National Forest Rd., Cody-Yellowstone Park, Park Co., 20 and 24 ft.

Calif., Los Angeles—Dredging—Oct. 15, at office U. S. Engineer, 725 Central Bldg., dredging in Harbor, here, 585,000 cu.yd. excav. and 115,000 cu.yd. allowable overdepth.

H. T., Pearl Harbor—Storehouse—Spec. 4859—Nov. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 120 x 480 ft., steel and concrete storehouse, at Naval Operating Base, here. Noted Sept. 20.

P R., Quebradillas—Dam—Nov. 30, by Dept. of Interior, at office of Isabella Irrigation Serv., constructing Guajataca Dam and appurtenant structures, near here. R. A. Gonzalez, ch. engr. Isabella Irrigation Serv.; adv. E. N.-R. Sept 27.

BIDS RECEIVED

Mass., Rutland—Quarters—F. T. Hines, dir. U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., constructing, complete, nurses quarters, mess hall and utilities building at U. S. Veterans Hospital, 89, here, (1) work complete, from Imbach-Wozny, 700 Knickerbocker Bldg., Baltimore, Md., (1) $122,000 (2) $55,000 (3) $49,000 (4) add $300 (5) deduct $150 (6) add $1,800 (7) add $850 (8) mastic floor $5, excavation $1.50, concrete Class A $14, Class B $15, rein. steel $100, structural steel $200, brick $70, 8 in. wall tile $0.45, 4 in. $0.25. (Begin 10 days complete in 8 months.) Noted Aug. 23.

D. C., Wash.—Laboratory—Dept. of Interior, for pathological laboratory at Freedmens Hospital, from Ennis & Hare, 1933 East 31st St., Baltimore, Md., $59,330 alternate (1) $900 alternate (2) $185 (8 months). Noted Aug. 30.

La., New Orleans—Earthwork—U. S. Engineer, 200,000 cu.yd. earthwork for levees in Pontchartrain Dist., from Grasser Contg. Co., Canal Commercial Bldg., $0.30.

South Dakota—Road—U. S. Bureau Pub. Rds., Custom House, Denver, Colo., grading 3.766 mi. Custer Pringle National Forest Rd., Custer Co., here, from M. J. Kenney, 512 Bank Blk., Denver, Colo., $30,096 (Government furnishing explosives), $32,447 (contractor furnishing explosives). Noted Sept. 13.

Ore., Klamath Falls—Dam—U. S. Recl. Bureau, Klamath Falls, for Gerber Dam, 10,000 cu.yd. wet excav., 1,300 cu.yd. fill, 8,500 cu.yd. concrete and 1,400 lin.ft. grouping, from W. D. Miller, Klamath Falls, $150,480. Noted Aug. 9.

CONTRACTS AWARDED

Mass., Boston—Flooring—Treas. Dept., Wash., D. C., flooring, mechanical equipment, renovation and remodeling in U. S. Post Office and Sub-Treasury Bldg., here, to F. J. Low, 14 Everett Ave., Chelsea, $118,000 (6 months). Noted Sept. 20.

Ky., Louisville—Piling—U. S. Engineer, P. O. Box 72, furnishing five hundred 25 ft. and one thousand 30 ft. round wood oak piles for Dam 46 Ohio River, to L. W. Johnson, Calhoun, $7,175.

Tex., Ft. Worth—Helium Plant—U. S. Bureau of Mines, c/o U. S. Helium Plant, Decatur Rd., here, steel factory buildings, to Taylor Building Co., B. Burnett Bldg., $160,000; miscellaneous machinery, incl. pumps, power plant improvements, etc., in above, to Macbeth Eng. Co., Magnolia Bldg., Dallas. Total estimated cost $200,000. Noted June 27.

Washington—Dredging—U. S. Engineer, Seattle, removing 8,035 cu.yd. ledge rock and 2,400 cu.yd. other material from Willapa Harbor, here, to Puget Sound Bridge and Dredging Co., Central Bldg., Seattle, $9.30 and $1.50 respectively.

Miscellaneous

PROPOSED WORK

Coal Tipple—Monongahela, Pa.—Natl. Mining Co., Washington, plans large coal tipple with connecting runway, at Ginger Hill Mine, near here. $500,000. Engineer not announced.

Electric Tower etc.—Lynchburg, Va.—Chesapeake & Ohio R.R., 825 East Main St., Richmond, plans 2 story electric tower and interlocking pneumatic switch. $42,000.

Dock Terminal, etc.—Tampa, Fla.—U. S. Export Chemical Corp., Krause Bldg., having plans prepared dock terminal elevators and plant for manufacture of double superphosphate. $400,000. Address P. S. Gilchrist, Charlotte, N. C., engr. and archt.

Winter Resort—Pecan Island, La.—E. A. McIlHenny, 355 Drexel Bldg., Phila., is president of company which is promoting construction on $2,000,000 winter resort and club house, here, concrete, tile and stucco.

Transmission Lines — Indiana — Indiana Electric Corp., Indianapolis, plans 66,000 volt transmission line from new power station on Wabash River to Indianapolis, about 90 mi., $250,000; also 33,000 volt high tension transmission line from new plant in Vigo Co. on Wabash River to Sullivan, about 24 mi., $95,000. J. H. Brewer, pres.

Subway—Cotton Hill (Glenarm P. O.), **Ill.**—Illinois Central R.R., 135 East 11th Pl., Chicago, plans subway for tracks, here. $28,000. F. L. Thompson, ch. engr.

Gas Holder — Madison, Wis.—Madison Gas & Electric Co., c/o J. St. John, pres., 100 North Fairchild St., plans 60 x 95 ft., gas storage holder, brick, rein.-con. and steel, plain foundation, East Main St. $50,000. Engineer and architect not selected.

Stadium—Minneapolis, Minn.—University of Minnesota having plans prepared by F. M. Mann, 1009 Metropolitan Bank Bldg., stadium, rein.-con., University Ave. S.E. between Harvard and Oak Sts. May include 3 or 4 story auditorium. $1,500,000. Noted Oct. 26, under "Buildings."

Levees—Walnut Ridge, Ark.—See "Excavation, Drainage, Irrigation."

Fill, etc.—Portland, Ore.—Port of Portland, plans filling Guild Lake, and 1,200 acres adjoining; straightening and deepening Willamette River and Harbor, involving 3,032,760 cu.yd. dredging, $170,000. Plans being made for dredge equipped with four 750 hp. Diesel engines and 30 in. suction and discharge pipe. J. H. Polhemus, Spalding Bldg., genl. mgr. G. B. Hegardt, Stark St. Dock, engr.

Breakwater—Long Beach, Calif.—Plans 3,000 ft. breakwater in vicinity of Pine Ave. pier, 350,000 tons rock. C. H. Windham, city mgr.

Shovel—San Luis Obispo, Calif.—San Luis Obispo Co. plans to purchase gasoline shovel for Rd. Dist. 1.

BIDS DESIRED

Dragline—Memphis, Tenn.—Clark-Hunt Cont. Co., 608 McCall Bldg., taking bids one 3 T Monighan dragline equipped with Diesel oil engine, immediate delivery.

Ornamental Lighting System — Bexley (Columbus P. O.), **O.**—Oct. 9, by S. W. Roderick, village clk., installing ornamental street lighting system, lights will be placed 100 ft. apart on main thoroughfares and 200 ft. apart on other streets, standards will be 12½ ft. sheet metal. $80,000. Jennings-Lawrence Co., 511 Hartman Bldg., Columbus, engrs.

Steam Shovel—Chicago, Ill.—Gibbons & Griffin; 118 North La Salle St., in market for steam shovel, 2-3 yd. dipper.

Tunnel Work—Fond du Lac, Wis.—See "Waterworks."

Garbage Truck, etc.—Kenosha, Wis.—B. W. Bolerjack, city purch. agt., taking bids 2 or 3 ton garbage truck. May also buy street sweeping machine.

Heating Plant—Sheboygan, Wis.—Bd. Pub. Wks., taking bids central heating plant for almshouse, incl. boiler, piping and radiation. R. F. John, city engr. Noted Aug. 2.

Locomotive and Car Bolsters, etc.—St. Louis, Mo.—Oct. 4, by G. E. Scott, purch. agt. Missouri-Kansas-Texas R.R., 1520 Ry. Exch. Bldg., 87 tons locomotive and car bolsters, and side frames in such quantities from time to time during last quarter of 1923.

Steel Castings—St. Louis, Mo.—Oct. 3, by G. E. Scott, purch. agt. Missouri-Kansas-Texas R.R., 1520 Ry. Exch. Bldg., 150 tons miscellaneous cast steel castings, excluding couplers, bolsters and side frames. To be furnished in such quantities from time to time during period Oct. 1 to Dec. 31, 1923, as railroad may require.

Mud Shell—Houston, Tex.—Oct. 4, by H. L. Washburn, aud. Harris Co., Court House, 17,000-23,000 cu.yd. mud shell for ballast in classification yards, turning basin, Harris Co. Navigation Dist.

Gravel—Kountze, Tex.—Oct. 15, Tyler Co. 25,000 cu.yd. gravel road. $25,000. T. F. Teel, co. judge.

Transmission Lins—St. Paul, Kan.—Oct. 4, by C. E. McAtee, city clk., 13,200 volt transmission line from here to Parsons. E. H. Bass, City Hall, engr.

Tunnel—Hood River, Ore.—Oct 1, by Directors of Farmers Irrigation Co., 210 ft. tunnel through solid rock, 430 cu.yd. excav., etc. C. M. Hurlburt, Hood River, engr.

Truck Equipment—Madera, Calif.—Oct. 2, by Madera Co., two 4 yd. square corner, two 2½ yd. all purpose, combination steel pump body with removable sides, equipped with manual tail gate control, double action tail gate, spreader chains, steel underbody suitable for mounting bodies to trucks. L. W. Cooper, co. clk.

BIDS RECEIVED

Asphaltic Cement, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, Sept. 20, furnishing and delivering 300,000 gal. asphaltic cement from Warner Quinlan Co., 79 Wall St., New York, $15,600; 6,000 cu.yd. binder stone from Calvin Tompkins Co., 30 Church St., New York, $13,860; 50,000 asphalt paving blocks from Hastings Paving Co., 25 Broad St., New York, $4,780; 50,000 grade 1 granite paving blocks from Rockport Granite Co., 13 Park Row, New York, $6,900; 50,000 wood paving blocks from Amer. Creosoting Co., 17 Battery Pl., New York, $2,950; 60,400 ft lumber from East River Mill & Lumber Co., 92nd St. and East River, New York, $3,962. Noted Sept. 13.

Asphaltic Cement, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, Tremont and 3rd Aves., Sept. 19, furnishing 400 ton asphaltic cement, from Standard Oil Co., 26 Bway., $7,700; 1,000 cu.yd. broken trap rock from Ames Building Material Co., 3437 Kingsbridge Rd., $8,463. Noted Sept. 13.

Heating and Ventilating Apparatus, etc.—New York, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Sept. 19, heating, ventilating and temperature regulating apparatus in Annex to P. S. 72, East 104th and East 105th Sts. and Lexington Ave., here, from Almirall & Co., Inc., 1 Dominick St., $73,593. Noted Sept. 13.

Lock, Gates, etc.—Illinois—Director Dept. Pub. Wks. and Buildings, Div. Waterways, Springfield, constructing Lockport Lock, also water gates and valves of Lockport and Marseilles Locks, from Green & Sons Co., 6 North Michigan Blvd., Chicago, $1,870,757. Noted Aug. 23.

Grade Separation—Milwaukee, Wis.—Grade separation of Leeds Pl. Forest Home and Pabst Aves., 9,200 cu.yd. fill, 5,300 cu. yd. excav., 1,237 cu.yd. concrete in retaining wall and bridge abutment, etc., from H. Danischefsky, 1484 Humboldt Ave., $47,698. Noted Sept. 13.

Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., Sept. 11, furnishing and delivering structural reinforcing for repairing Wabasha St. Bridge over Mississippi River, from St. Paul Fdry. Co., Como Ave. and McKubin St., $4,587; materials for reflooring Wabasha St. Bridge, incl. 1,320 sq. yd. 3½ in. creosoted wood block, from Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $2.70 per sq.yd.; eight hundred and eighty 12 ft. lengths 6 in. Class B c.i. pipe, from Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala.,

Miscellaneous (Continued)

$60.16 per ton; three hundred and eighty 12 ft. lengths 16 in. Class B c.i. pipe, from Glamorgan Pipe Fdry. Co., The Rookery, Chicago, $58.10 per ton. Noted Sept. 6.

Copper and Steel Standards, etc.—Santa Ana, Calif.—Installing 86 double light copper and steel standards, from Osborn Electric Co., 1311½ South Grand St., San Pedro, $54,641. Noted Sept. 6.

Levee—Yuba City, Calif.—Recl. Dist. 1660, California Fruit Bldg., Sacramento, levee construction as follows: From Olympian Dredging Co., 149 1st St., San Francisco (all cash payments), (a) 323,000 cu.yd. clamshell and team work excav. $0.0993 per cu.yd. (b) 42,000 cu.yd. suction dredging $0.50 per cu.yd., alternate for rental of equipment, suction dredges $25 per hr., 6¼ yd. bucket dredge $12.50 per hr., 6 yd. bucket dredge $11.50 per hr., 5¼ yd. bucket dredge $10.50 per hr., Argyle Dredging Co., Kohl Bldg., San Francisco, portion of clamshell dredger work $0.11 per cu.yd., alternate, 4½ yd. bucket dredger $9.85 per hr., team and scraper work on levee, 43,000 cu.yd. $0.48 per yd. Conduit work incl. (a) main conduit and 4 gates, (b) auxiliary conduit similar to main conduit, (c) rock sub-foundation (d) concrete piles, from Jenkins & Elton, 36th and Y Sts., Sacramento, Prop. 1 (cash payments) (a) $17.700 (b) $9,720 (c) $8 per cu.yd. (d) $5 per lin.ft.; Olympian Dredging Co., 149 1st St., San Francisco, Prop. 1, (a) $18,404 (b) $11,484 (c) $6.50 per cu.yd. (d) $3.50. Noted June 14.

CONTRACTS AWARDED

Fire Alarm System—New York—T. J. Drennan, fire comr., Municipal Bldg., New York, extension to fire alarm system, Boro of Queens, to J. Sudgen & Co., 100 5th Ave., New York, $41,622. Noted Sept. 20.

Lumber and Piles—New York, N. Y.—E. W. Buckley, comr. Dept. Purchase, Municipal Bldg., lumber and piles to Dept. Docks, to Robinson Lumber Co., New York, $113,622; Cooney, Eckstein & Co., 302 Bway., $9,837; J. A. Maloney & Co., 1170 Bway., $4,464. Noted Aug. 30.

Grain Elevator—Oswego, N. Y.—Bd. Pub. Wks., Albany, constructing and equipping grain elevator, 5 story, 69 x 213 ft., rein.-con. and steel, here, to James Stewart Co., Inc., 30 Church St., New York, $1,119,959. Noted Sept. 20.

Heating and Ventilating Equipment—Louisville, Ky.—Kosairs Assn., furnishing and installing heating and ventilating equipment in temple, Bway., to A. J. Anderson, 338 West Main St., $51,000. Noted Sept. 13.

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R., 10th St. and Bway., 450 tons structural steel for bridges, to American Bridge Co., Ambridge, Pa., engrs. est. $25,000; 400 tons structural steel for bridge work, to Mt. Vernon Bridge Co., Mt. Vernon, Ind., engrs. est. $20,000.

Grade Separation—Lincoln Park (Wyandotte P. O.), Mich.—Wayne Co. Rd. Comn., 1103 Real Estate Trust Bldg., Detroit, grade separation on St. Cosme Rd. and Pennsylvania and Detroit Ry., to Closser Bros., 3917 Lawton Ave., $39,182. Noted Sept. 20.

Steel—Chicago, Ill.—Illinois Central R.R., 135 East 11th Pl., furnishing 400 tons structural steel for track elevation work, to Truscon Steel Co., 22 West Monroe St. Engrs. est. $24,000.

Sub-Basements and Caissons—Chicago, Ill.—Store—The Fair Co., 140 South State St., 2 new sub-basements under present 12 story structure and caissons for 4 additional stories, 190 x 351 ft. rein.-con., brick and steel, to J. Griffiths & Sons Co., 112 West Adams St. Ultimate cost $2,000,000. Noted Apr. 26 under "Buildings."

Steam Heating Plant—Madison, Wis.—Hotel Wisconsin Realty Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, steam heating plant in new hotel, to P. E. Mueller Co., 323 East Wilson St., $90,000. Noted July 5, under "Buildings."

Tunnel—Colorado—Moffat Tunnel Dist., Club Bldg., Denver, Moffat Tunnel under James Peak, Gilpin and Grand Counties, to Hitchcock & Tinkler, Club Bldg., Denver. See "News of the Week" section of E. N.-R., Sept. 27, for detail. Noted Sept. 20.

Loader, etc. — San Jose, Calif. — Santa Clara Co., furnishing 1 Spearwell Mogul Loader, creeper track, to Spears-Wells Mchy. Co., 9th and Cedar Sts., Oakland, $3,800. Noted Aug. 23.

Arena—Niagara Falls, Ont.—Niagara Falls Arena Ltd., ice arena Victoria Ave., to Gardner Constr. Co., Welland, $52,000.

OFFICIAL PROPOSALS

Bids: Oct. 11

State Highway Work

Richmond, Va., Sept. 18, 1923.

Sealed bids will be received at the office of the State Highway Dept., 413 N. 10th St., Richmond, Va., until 10:30 A.M., October 11th, 1923, for the construction of:

1. Proj. S-143—Rt. 10—Three miles east of Bedford to Bedford, Bedford Co. 3.0 mi. 18′ Bit. Mac. Approx. .25 ac. clearing, 41,900 cu. yds. Exc., 708 lin. ft. Pipe, 96 cu. yds. "A" Conc. 103 cu. yds. "B" Conc. 9,215 lbs. reinf. steel, 44 lin. ft. Gd. Rail. The right is reserved to limit the project to the two miles immediately East of Bedford.
2. Proj. S-145A—Rt. 35—Southampton Co. Line-Homesville, Sussex Co. 3.6 mi. 16′-8-6-8 conc roadway approx. 6 ac. clearing, 12,605 cu. yds. exc., 476 lin. ft. Pipe, 20 cu. yds. "B" conc. State will furnish cement.
3. Proj. F-183—Rt. 31—Cranes Corner-Falmouth, Stafford Co., 2.9 mi. 18′-8-6-8 conc. Approx. 8 ac. clearing, 44,000 cu. yds. Exc., 500 cu. yds. Borrow, 528 lin. ft. Pipe, 470 cu. yds. "A" conc., 35 cu. yds. "B" conc., 18,934 lbs. reinf. steel, 2,800 lin. ft. Wood. Gd. Rail. State will furnish cement.
4. Proj. S-310B—Rt. 12—Lawrenceville towards Edgerton, Brunswick Co., 2.0 mi. 18′-8-6-8 conc. Approx. 0.6 ac. clearing, 6,047 cu. yds. Exc., 206 lin. ft. Pipe, 8 cu. yds. "B" Conc., 1,000 lin. ft. Wood Gd. Rail. State will furnish cement. The right is reserved to cut off the work at the expenditure of $100,000.00.
5. Proj. F-225B—Rt. 31—Approaches to Falmouth Bridge, Spotsylvania Co., 0.7 mi. 18′-8-6-8 conc. Approx. 3,705 cu. yds. Exc., 210 lin. ft. Pipe, 35 cu. yds. "A" conc., 54 cu. yds. "B" conc., 3,243 lbs. reinf. steel, 130 lin. ft. Gd. Rail. Bids to be based on understanding that this work will be let in conjunction with Proj. F-183. State will furnish cement.
6. Proj. S-320 ABC—Rt. 10—Three reinforced concrete clear beam span bridges over Broad Creek, Lynnhaven River, and Thalia Arm in Norfolk and Princess Anne Cos., Approx. 724 cu. yds. A Conc., 639 cu. yds. "B" conc., 83,000 lbs. reinf. steel, 19,360 lin. ft. untreated piling.
7. Proj. S-327—Rt. 11—Moorefield-Hamlin-Russell Co.. 2.0 miles 16′ Bit. Mac. Approx. 5.6 Ac. Clearing, 46,000 cu. yds. Exc., 4.000 cu. yds. Borrow. 736 lin. ft. Pipe, 150 cu. yds. "A" conc., 114 cu. yds. "B" conc., 4.571 lbs. reinf. steel. 5,192 lin. ft. Wood Gd. Rail, 72 cu. yds. Rubble Masonry. The right is reserved to cut off the work at the expenditure of $40,000.00

Proposal guaranties will be $500.00 for bids less than $100,000.00 and $1.000 for bids amounting to or more than $100,000.00.

Plans and specifications are on file at the Office of the State Highway Dept. and at the office of the following Dist. Engrs. Proj. S-143-Salem. Proj. S-145 A and S-320 ABC Suffolk. Proj. F-183 and F-225B Fredericksburg. Proj. S-310 Richmond. Proj. S-327 Bristol.

Additional plans for bidders for the above project can be obtained upon application to the State Highway Dept. upon receipt of $5.00 payable to H. G. Shirley, of which $2.50 will be refunded if plans are returned within two weeks after bids are opened. Bridge plans can be obtained from W. F. Hobart, 805½ E. Franklin St., Richmond, to cost as follows: Proj. S-320ABC-$1.62.

Engrs. will be at the following places to show prospective bidders over the projects as follows:

Proj. S-143 Hotel Bedford 10:30 A.M., Friday, October 5th, Proj. S-145A Hotel at Sebrell 11 A.M., Wed., Oct. 3rd; roj. F-183 and F-225B, Dist. Engrs. Office, Fredericksburg, 10:30 A.M., Wed., Sept. 26th; Proj. S-330 Lawrenceville Court Couse, 10:30 A.M., Monday, Oct. 1st; Proj. S-320 Lorraine Hotel, 10:30 A.M., Norfolk, Fri., Sept. 28th; Proj. S-327 Blue Sulphur Hotel, St Paul, Va., 10 A.M., Monday, Oct. 8th.

Proposals will not be available until September 25th.

The State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY,
Chairman.

C. S. MULLEN,
Acting Commissioner.

Bids: Oct. 23.

Filter Equipment

Buffalo, N. Y.

Sealed proposals for furnishing and installing the necessary meters, rate controllers, gages, chemical feed devices, operating tables and other filter equipment and appurtenances in connection with the Filter Plant for the City of Buffalo, endorsed "Proposal for Filter Equipment," will be received by the Commissioner of Public Works at his office in the Municipal Building, Buffalo, N. Y., until eleven A.M. on Tuesday, the 23rd day of October, 1923, and at that time will be publicly opened and read.

Copies of the plans and specifications may be seen at the office of the Engineer, Filtration Division, Bureau of Water, Buffalo, N. Y., and copies of the plans, specifications, contract and form of proposal may be obtained at said office, upon the deposit of Twenty-five Dollars ($25.00) for each set furnished, which sum will be refunded if the said plans and specifications are returned in good condition within thirty (30) days after bids have been received and acted upon by the City of Buffalo. Plans and specifications may also be seen at the office of Fuller & McClintock, Consulting Engineers, 170 Broadway, New York City.

Each bid must be accompanied by a certified check upon an acceptable National Bank or Trust Company, made payable to the Commissioner of Public Works of the City of Buffalo, in the amount of Ten Thousand Dollars ($10,000.00).

A bond in the sum of one-third the total amount of the proposal with a satisfactory surety company as surety will be required, conditioned upon the faithful performance of the work, said bond to remain in force for one year after the final completion and acceptance of the work.

GEORGE C. ANDREWS,
Engineer, Filtration Division.
September 10, 1923.

Bids: Oct. 2.

Cast Iron Pipe

Bayonne, N. J.

Sealed proposals will be received by the Board of Commissioners of the City of Bayonne, New Jersey, at the meeting place of said Board, in the City Hall, Avenue E and 30th Street, on Tuesday, October 2, 1923, at 8.30 o'clock P.M., for furnishing and delivering to the Water Department, f.o.b. cars Pennsylvania Railroad, Passaic Avenue, Kearnry Meadows, Kearny, N. J., thirty (30) lengths of thirty (30) in. Class B, standard cast iron B. & S. pipe for Water Supply purposes, and the following fittings for the same:

Four (4) thirty (30) inch 90 degree Ells.
Four (4) thirty (30) inch 45 degree Ells.

All bids must be submitted in sealed envelopes, plainly endorsed, "Proposal for Cast Iron Pipe" and the name of the bidder. A certified check for 10% of the amount bid must accompany each proposal.

The Board reserves the right to reject any and all proposals.

By order of the Board of Commissioners of the City of Bayonne.

Dated, Sept. 20, 1923.

WM. P. LEE,
City Clerk.

Bids: March 18, 1924.

18-Mile Railway Construction Tenders

DOMINION OF NEW ZEALAND

Wellington, New Zealand.

Tenders close with the Public Works Tenders Board, Wellington, New Zealand, at noon on 18th March, 1924, for construction of 18 miles of railway including bridges, station buildings, earthworks, approach road metalling, etc. Plans and specification may be inspected at the New York office of Engineering-News Record.

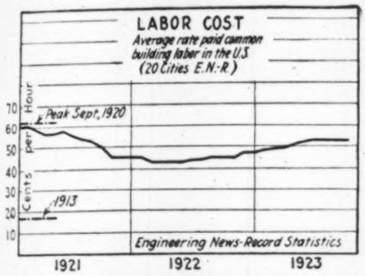
CONSTRUCTION NEWS

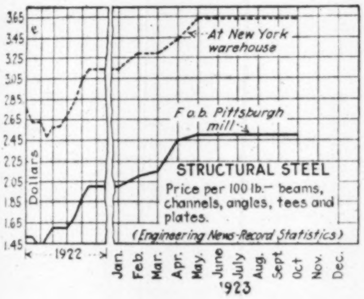
Engineering News-Record, October 4, 1923

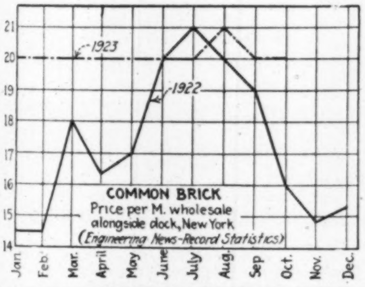
The Construction Barometer

Prices Firm—Domestic Buying Slow—Great Demand for Materials in Japan

THE fourth quarter opens with an apparent stability of materials prices and labor, due more to contraction in domestic demand, perhaps, than to actual stabilization. Japanese reconstruction requirements have already exerted a firming effect upon certain basic materials, particularly fir lumber. Replenished domestic stocks and lack of pressure for mill deliveries serve to offset this tendency toward higher prices, caused by the demand for materials in Japan. Unprecedented car loadings indicate the rate of consumption on orders already placed. According to R. G. Dun & Co. there were fewer business failures in the U. S. during September than for any month since January, 1921.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Sept. 13	$27,304,000	$21,935,000	$49,239,000
Sept. 20	13,016,000	19,333,000	32,349,000
Sept. 27	16,057,000	24,127,000	40,184,000
3 Weeks	$56,377,000	$65,395,000	$121,772,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

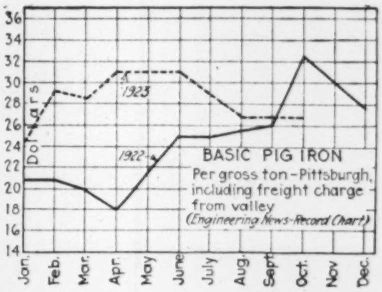
Week Ended	No.	Public Work	No.	Private Work
Sept. 13	9	$2,955,000	30	$13,607,000
Sept. 20	7	1,181,000	35	16,913,000
Sept. 27	13	1,355,000	36	12,761,000
3 Weeks	29	$5,491,000	101	$43,281,000

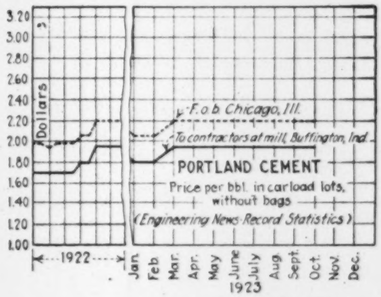
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

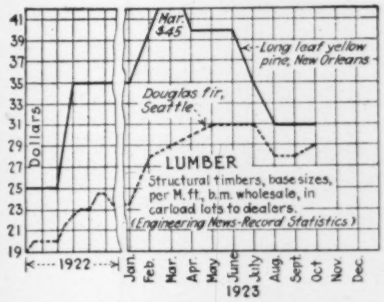
Week Ended	Private	Public			
		All	Streets and Roads	Waterworks and Sewers	All Buildings
Sept. 13	36	178	67	39	36
Sept. 20	35	179	51	35	37
Sept. 27	32	165	44	31	32

LABOR AND MATERIALS FIRM AT PRESENT LEVELS

	Quoted on Oct. 4, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M. ft.	61.00	63.00	Sept. 6
Fir, San Fran., M. ft.	41.00	42.00	Sept. 27
Common labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 8	Milbank, S. D.	Sept. 20
Oct. 9	Toronto, Ont.	Sept. 13
Oct. 9	Kings Mountain, N. C.	Sept. 20
Oct. 9	New York, N. Y.	Oct. 4
Oct. 9	Brooklyn, N. Y.	Oct. 4
Oct. 10	Lewiston, Idaho	Sept. 20
Oct. 10	Elyria, O.	Sept. 27
Oct. 11	Danville, Va.	Sept. 13
	Adv. Sept. 13 to Oct. 4.	
Oct. 16	Matawan, N. J.	Oct. 4
	Adv. Oct. 4.	
Oct. 18	Winona, Minn.	Oct. 4
	Adv. Oct. 4.	
Oct. 18	South Bend, Ind.	Oct. 4
Oct. 23	Buffalo, N. Y.	Sept. 20
Oct. 24	Cleveland, O.	Oct. 4
	Adv. Oct. 4.	
Oct. 26	Tulsa, Okla.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	

SEWERS

Bids Close		See Eng. News-Record
Oct. 8	Brighton, N. Y.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 9	Bluefield, W. Va.	Sept. 13
Oct. 9	Roxboro, N. C.	Sept. 20
Oct. 10	Fond du Lac, Wis.	Oct. 4
Oct. 22	Berea, O.	Oct. 4
	Adv. Oct. 4.	
Oct. 30	St. Louis, Mo.	Oct. 4
Nov. 1	Fort Erie, Ont.	Aug. 23

BRIDGES

Bids Close		See Eng. News-Record
Oct. 8	Portland, Ore.	Sept. 27
Oct. 8	Okemos, Mich.	Sept. 27
Oct. 9	Alabama	Sept. 20
Oct. 9	Indianola, Ia.	Sept. 27
Oct. 10	Wheeler, S. D.	Sept. 20
Oct. 10	North Carolina	Sept. 27
Oct. 11	Louisiana	Sept. 20
Oct. 11	Germfask, Mich.	Sept. 27
Oct. 11	Wilkes Barre, Pa.	Sept. 27
Oct. 12	Wilkes Barre, Pa.	Sept. 27
Oct. 13	West Virginia	Oct. 4
Oct. 13	Libertyville, Ill.	Oct. 4
	Adv. Oct. 4.	
Oct. 15	New Jersey	Oct. 4
	Adv. Oct. 4.	
Oct. 16	Clearwater, Fla.	Sept. 13
Oct. 16	Fishkill, N. Y.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 16	Williamson, W. Va.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 16	Ohio	Oct. 4
Oct. 19	Tennessee	Oct. 4
Oct. 22	Portland, Ore.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 23	Mobridge, S. D.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	

Bids Close		See Eng. News-Record
Oct. 23	Alabama	Oct. 4
Oct. 26	Centerville, Tex.	Sept. 27
Oct. 26	Phillipsburg, Kan.	Oct. 4
Nov. 30	Sydney, Australia	Apr. 19
Oct. 30	Alabama	Oct. 4

RAILWAYS

Mar. 18	New Zealand	Sept. 20
	Adv. Sept. 20 and 27.	

EXCAVATION, DRAINAGE IRRIGATION

Oct. 8	Mason City, Ia.	Sept. 27
Oct. 8	New York, N. Y.	Oct. 4
Oct. 9	Clarksdale, Miss.	Sept. 27
Oct. 10	Elkhorn, Wis.	Sept. 20
Oct. 12	Mason City, Ia.	Sept. 27
Oct. 15	Toronto, Ont.	Sept. 27
Oct. 15	Byron, Calif.	Oct. 4
Oct. 19	Granite Falls, Minn.	Oct. 4

STREETS AND ROADS

Oct. 5	New York	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 8	Huntington, W. Va	Oct. 4
Oct. 8	Michigan	Sept. 27
Oct. 8	San Diego, Calif.	Sept. 27
Oct. 8	South Pasadena (Pasadena P. O.), Calif.	Sept. 27
Oct. 8	East Orange, N. J	Oct. 4
Oct. 9	Alabama	Sept. 20
Oct. 9	Barstow, Tex.	Sept. 20
Oct. 9	New York, N. Y	Oct. 4
Oct. 9	Red Wing, Minn.	Oct. 4
Oct. 9	Parkersburg, W. Va	Oct. 4
Oct. 9	Inverness, Fla.	Oct. 4
Oct. 9	Maryland	Oct. 4
	Adv. Oct. 4.	
Oct. 9	St. Paul, Minn.	Oct. 4
Oct. 9	St. George, N. Y.	Oct. 9
Oct. 10	Belvidere, N. J.	Sept. 20
	Adv. Sept. 20 to Oct. 4.	
Oct. 10	North Carolina	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 10	Michigan	Oct. 4
Oct. 10	Reading, Pa.	Oct. 4
Oct. 10	Barberton, O.	Oct. 4
Oct. 10	Palestine, Tex.	Oct. 4
Oct. 10	Baltimore, Md.	Oct. 4
Oct. 10	Brooklyn, N. Y	Oct. 4
Oct. 11	Louisiana	Sept. 20
Oct. 11	Little Rock, Ark.	Sept. 27
Oct. 11	Virginia	Sept. 27
Oct. 11	Brooklyn, N. Y.	Oct. 4
Oct. 11	New York, N. Y.	Oct. 4
Oct. 12	Michigan	Sept. 27
Oct. 12	Plainsboro, N. J.	Oct. 4
Oct. 13	West Union, W. Va	Oct. 4
Oct. 15	Weston, W. Va.	Sept. 20
Oct. 15	Michigan	Sept. 27
Oct. 15	Lexington, Miss.	Sept. 27
Oct. 15	Tavares, Fla.	Oct. 4
Oct. 15	Center, Tex.	Oct. 4
Oct. 16	Clearwater, Fla.	Sept. 13
Oct. 16	Waterloo, Ia.	Oct. 4
Oct. 16	Fayetteville, W. Va.	Oct. 4
Oct. 16	Ohio	Oct. 4
Oct. 17	Meadville, Miss.	Sept. 27
Oct. 17	Rhode Island	Oct. 4
	Adv. Oct. 4.	
Oct. 17	Michigan	Oct. 4
Oct. 17	San Francisco, Calif	Oct. 4
Oct. 18	Houston, Tex.	Sept. 27
Oct. 18	Hemphill, Tex.	Sept. 27
Oct. 19	Marion, Kan.	Sept. 27
Oct. 19	Paris, Tex.	Sept. 27
Oct. 19	Tennessee	Oct. 4
Oct. 20	Quebec	Oct. 4
Oct. 22	New Jersey	Oct. 4
	Adv. Oct. 4.	
Oct. 22	Norton, Kan.	Sept. 27
Oct. 23	Kentucky	Sept. 27
Oct. 23	New Albany, Miss.	Oct. 4
Oct. 24	Alpha, N. J.	Oct. 4
	Adv. Oct. 4.	
Nov. 6	Washington	Oct. 4

INDUSTRIAL WORK

Oct. 8	Astoria, N. Y.	Oct. 4
Oct. 9	Louisville, Ky.	Sept. 20
Oct. 10	Wilmington, N. C.	Sept. 27
Oct. 10	Quebec, Que.	Sept. 27
Oct. 10	River Rouge, Mich.	Oct. 4
Oct. 13	Bemidji, Minn.	Oct. 4
Oct. 24	Andrews, N. C.	Oct. 4
	Adv. Oct. 4.	

BUILDINGS

Bids Close		See Eng. News-Record
Oct 8	Wichita, Kan.	Sept. 6
Oct. 8	Fayetteville, N. C.	Sept. 20
Oct. 8	Syracuse, N. Y.	Sept. 20
Oct. 8	Indianapolis, Ind.	Oct. 4
Oct. 8	Phila., Pa.	Oct. 4
Oct. 9	Louisville, Ky.	Sept. 13
Oct. 9	Trenton, N. J.	Sept. 20
Oct. 9	Bowling Green, O.	Sept. 27
Oct. 10	Birmingham, Ala.	Aug. 30
Oct. 10	Virginia, Minn.	Sept. 13
Oct. 10	West Haverstraw, N. Y.	Oct. 4
Oct. 11	New York, N. Y.	Oct. 4
Oct. 12	Ft. Worth, Tex.	Oct. 4
Oct. 13	Lakewood (Cleveland P. O.), O.	Oct. 4
Oct. 15	Cleveland, O.	Sept. 20
Oct. 15	Waseca, Minn.	Sept. 20
Oct. 15	Bakersfield, Calif.	Sept. 27
Oct. 15	Nevada, Mo.	Oct. 4
Oct. 15	Indianapolis, Ind.	Oct. 4
Oct. 16	Bridgeport, Conn.	Sept. 27
Oct. 16	Brooklyn, N. Y.	Oct. 4
Oct. 16	Montclair, N. J.	Oct. 4
Oct. 16	Leonia, N. J.	Oct. 4
Oct. 17	Clifton, N. J.	Oct. 4
Oct. 18	Springwells, Mich.	Oct. 4
Oct. 20	Louisville, Ky.	Sept. 13
Oct. 22	Johnstown, Pa.	Oct. 4
Oct. 23	Ann Arbor, Mich.	Oct. 4
Oct. 23	St. Francis, Kan.	Oct. 4
Oct. 23	Madison, N. J.	Oct. 4
Oct. 24	Marion, Ia.	Sept. 27
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2
Nov. 30	Maggie, W. Va.	Oct. 4

FEDERAL GOVERNMENT WORK

Oct. 8	Extension, etc.—Waterloo, Ia.	Sept. 20
Oct. 10	Garage, etc.—Bar Harbor, Me.	Sept. 20
Oct. 10	Barracks, etc.—Bellevue, D. C.	Oct. 4
Oct. 13	Cradles—Cairo, Ill.	Oct. 4
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23
Oct. 15	Dredging—Los Angeles, Calif.	Sept. 27
Oct. 15	Resurfacing—Castle Point (Chelsea P. O.), N. Y.	Oct. 4
	Adv. Oct. 4.	
Oct. 16	Buildings, etc.—North Little Rock, Ark.	Sept. 20
Oct. 16	Mechanical Equipment—Carville, La.	Sept. 20
Oct. 16	Buildings—Carville, La.	Sept. 20
Oct. 16	Jetty—Staten Island, N. Y.	Oct. 4
Oct. 16	Road—Arkansas	Oct. 4
Oct. 17	Dredging — Bridgeport, Conn.	Sept. 20
	Adv. Sept. 20 to Oct. 4.	
Oct. 17	Post Office—Dawson, Ga.	Sept. 20
Oct. 17	Radio Masts—Puget Sound, Wash.	Sept. 20
Oct. 17	—Discharge Pontoons—Rock Island, Ill.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 17	Dredging—Providence, R. I.	Oct. 4
Oct. 17	Water Supply Improvements—Annapolis, Md.	Oct. 4
Oct. 17	Distribution System, etc.—Pensacola, Fla.	Oct. 4
Oct. 18	Dwellings — Newburg, Ind.	Sept. 20
Oct. 18	Road—Florida	Sept. 27
Oct. 18	Extension—St. Louis, Mo.	Oct. 4
Oct. 20	Pontoons, etc.—Cincinnati, O.	Sept. 20
	Adv. Sept. 20 to Oct. 4.	
Oct. 20	Radio Tower — Ft. Clark, Tex.	Oct. 4
Oct. 22	Derricks—Louisville, Ky.	Oct. 4
	Adv. Oct. 4	
Oct. 26	Dredging, etc.—Port Chester, N. Y.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 26	Post Office—Clinton, S. C.	Oct. 4
Oct. 29	Dredging—New Rochelle, N. Y.	Oct. 4
	Adv. Oct. 4.	
Oct. 31	Repairing Jetty—Freeport, Tex.	Oct. 4
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
Nov. 1	Catamarans, etc.—Chicago, Ill.	Sept. 20
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	

MISCELLANEOUS

Oct. *9	Ornamental Lighting System —Bexley (Columbus P. O.), O.	Sept. 27
Oct. 9	Sand, Cement, etc.—New York, N. Y.	Oct. 4
Oct. 11	Greenhouses, etc.—New York, N. Y.	Oct. 4
Oct. 15	Gravel—Kountze, Tex.	Sept. 27
Oct. 16	Lighting System—Chino, Calif.	Oct. 4
Oct. 17	Levee—Ennis, Tex.	Oct. 4
Oct. 17	Tunnel—Phila., Pa.	Oct. 4
Oct. 23	—Protection Work—Shreveport, La.	Oct. 4
	Adv. Oct. 4.	
Oct. 23	Portland Cement—Portland, Ore.	Oct. 4
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Pa., New Brighton..Nov. 6 to vote on $200,000 bonds for filtration plant, 22nd and 1st Sts. H. H. Wohlwend, Boro. Bldg., engr.

Pa., Rochester—Boro. plans filtration plant. $150,000. J. P. Leaf, 290 West Park St., boro. engr.

W. Va., Fairmont—Nov. 6 to vote on $150,000 bond issue for filtration plant. S. S. Miller, Fairmont, engr.

W. Va., Keyser—Plans filtration plant. $175,000. E. V. Roring, mayor.

W. Va., Parkersburg—See "Streets and Roads."

Ky., Owensboro—Election in November to vote on $100,000 bond issue for extension to waterworks system. J. H. Hickman, mayor. Noted June 21.

Ky., Princeton—Plans waterworks system, filtration plant, etc. $60,000.

La., Coushatta—Plans waterworks. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

O., Cleveland—Having plans prepared laying mains in following streets: 7,599 lin. ft. 6 in. pipe in 24th, Milford, Melrose and Loretta Aves., Tibet and Tulane Rds. $17,481; 5,424 ft. 8 in. in Crestview Rd., Ardmore, 23rd. and Republic Aves., $15,-200. R. H. Simpson, city engr.

Wis., Hurley — Making plans waterworks, $37,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engr.

Wyo., Evansville—Election soon to vote on $45,000 bonds for new waterworks system. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Sept. 6.

Mo., Breckenridge—Oct. 9, to vote on $45,000 bonds for complete new waterworks system. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs. Noted Sept. 13.

Mo., Festus—Making preliminary plans waterworks, reservoir, tower and distributing system. To exceed $40,000. J. P. Davis, Jefferson City, engr.

Mo., Holden—Voted $68,000 bonds for doubling capacity of reservoir, replacing existing stand pipe with 100,000 gal. steel tank on 120 ft. tower, several miles of 6 and 8 in. mains, etc. Benham Eng. Co., Gamble Bldg., Kansas City, engrs. Noted Sept. 20.

Mo., Independence—Independence Waterworks Co. having preliminary plans prepared increasing capacity of reservoir, also new pipe line to Lee's Summit, and other extensions. $175,000. Private plans.

Mo., Marceline—Voted $20,000 for waterworks improvements. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, engrs. Noted Sept. 6.

Tex., Celina—Oct. 20 to vote on $65,000 bonds complete waterworks. Engineer not announced.

Tex., Dallas—City Com. soon takes bids 175 tons 12 in. and 50 tons 4 in. Class B. c.i. pipe, 12 ft. lengths, etc. E. A. Kingsley, city engr.

Okla., Holdenville — City voted $67,250 bonds for new settling basins, filters, filter equipment, pumping machinery, etc. C. E. Edge, Holdenville, engr.

Calif., Alameda—Making plans salt water system for fire protection. To exceed $25,000. C. E. Hickok, city mgr.

Calif., Livingston—Making plans water system. $25,000. A. L. Cowell, Merced, engr. Noted Aug. 30.

Calif., Monrovia—Oct. 23 to vote on $180,000 bonds for water system. L. P. Black, clk. Noted July 19.

Calif., Oroville—G. Wilkinson, Oroville, has been granted state permit for concrete dam, 35 ft. high, 275 ft. long on top, 50 ft. on bottom, 800 ft. tunnel, 20 x 20 ft., concrete lined, 6,000 ft. conduit, 500 ft. wide and 15 ft. deep, power house to develop 47,659 h.p., etc. $300,000.

Calif., Newport Beach—Plans water distributing system in Peninsula Dist. To exceed $25,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., Oakland—Plans extension of high pressure water system in down town section, to exceed $25,000. W. W. Harmon, city engr.

Waterworks (Continued)

Calif., Upland—Voted $224,000 bonds to purchase and improve present water system. E. C. Mehl, clk. Noted June 21.

BIDS DESIRED

N. Y., Brooklyn—Oct. 9, by N. J. Hayes, comr., Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Grace Court, Aves. M & Z, Old New Utrecht Ave., Clinton, Crown, Forrest, Lorraine, 76th, East 7th and West 2nd Sts., here.

N. Y., New York—Oct. 9, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Gates Pl., Grand Concourse, Andrews, Barnes, Boynton, Chatterton, Creger, Elder, Gildersleeve, Holland, Library, Morris, Radcliffe, Research, Stadium, Underhill and Watt Aves., Penfield, East 191st, East 215th and West 176th Sts.

N. J., Matawan — Oct. 16, by Boro Council, 150,000 gal. steel water tank on steel tower. W. A. Goff, 922 Stokes Ave., Collingswood, engr.; adv. E. N.-R. Oct. 4.

O., Cleveland—Oct. 24, at office Commissioner Purchases & Supplies, City Hall, filter and administration buildings, and 7 gate house superstructures for Div. Water. A. V. Ruggles, comr. water; adv. E. N.-R. Oct. 4.

Ind., Jasonville—City Council taking bids electrically operated pumping machinery for new waterworks, to cost $100,000. A. Simms, engr.

Ind., South Bend—Oct. 18, by Bd. Pub. Wks., water works station, reservoir and pumping machinery. J. W. Toyne, designing engr. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., consult. engrs. Noted Aug. 30.

Minn., Winona—Oct. 18, by Bd. Municipal Wks., City Hall, reaming out lower portion of 4 existing artesian wells. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.; adv. E. N.-R. Oct. 6.

Colo., Denver—Taking bids 2,600 ft. 42 in., 13,200 ft. 36 in. and 13,000 ft. 30 in. pipe, 24-42 in. gate valves, also quantity of smaller sized pipe and valves in addition to above, c.i. or other materials, $600,000. Quotations now being received on 390,000 ft. lumber for Ashland Reservoir, 760,000 ft. lumber for Capitol Hill Station. No formal call for bids on lumber item. Commission also approved following projects: new 10 m.g. pump at Capitol Hill station together with new roofs, outlets and sewers, also new line from station to 10th Ave. and Cooke St., new distributing mains East and North in Capitol Hill Dist. to reinforce low pressure distribution and add to pressure in high pressure districts; at Ashland reservoirs both basins will be relined, new roof on east basin, will also install new 8 m.g. electrically driven pump. B. Lowther, Shirley Annex, engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. mains in Impvt. Dist. 34, from Manson Co., The Arcade, $97,760.

Minn., St. Paul — H. W. Austin, city purch. agt., Sept. 25, c.i. valve and service connection boxes for Bureau of Water, (1) 200 top sections for gate boxes (2) 300 bottom sections for gate boxes, 4 in.-12-in., 4 ft. 1 in. long (3) 50 bottom sections for gate boxes 16 in.-24 in., 1 ft. 1½ in. long (4) 100 paving covers for gate boxes, from Crane Co. of Minnesota, 5th St. and Bway., and Cochran Sargent Co., 5th and Sibley Sts., each bid (1) $3.52 each (2) $3.41 each (3) $1.37 each (4) $0.89 each. Noted Sept. 27.

Tex., Ft. Worth—Laying 8-12 in. mains in Rosen Heights, Diamond Hill and Niles City, from H. W. Greenway, 214 Hemphill St., $38,824. Pipe purchased.

CONTRACTS AWARDED

N. J., Bordentown—State Bd. Educ., Trenton, addition to water system, 1,800 ft. 6 in. c.i. pipe, etc., at Bordentown Manual Training & Industrial School, here, to Suburban Eng. Co., 15 West 38th St., New York City, $9,600. Noted Sept. 6.

O., New Concord—M. W. Taylor, clk. Bd. Trustees 11,360 ft. 4-8 in. c.i. mains in Main St., to J. Clow & Sons, 544 South Franklin St., Chicago, $14,123; valves, to Ludlow Valve Mfg. Co., foot of Adams St., Troy, N. Y., $1,312; lead to Scioto Valley Supply Co., Long and 3rd Sts., Columbus, $864.

Ind., Evansville — Pile foundation for 6 m.g. addition to water filtration plant, to A. Phelps & Sons, Knoxville, Ia., $37,000. Noted Sept. 20.

Wis., Waupun—Circular concrete reservoir, 200,000 gal., to Blake Paving & Constr. Co., 816 College Ave., Appleton. Engrs. est. $15,000. Noted Aug. 30.

Mo., Edina—City Clerk, impounding reservoir, filter plant and 7 mi. new mains, to E. K. Ladd Constr. Co., 114 West 10th St., Kansas City, $34,228.

Minn., St. Paul—See "Miscellaneous."

S. D., Lemmon — To Pittsburgh-Des Moines Steel Co., 9th and Tuttle Sts., Des Moines, Ia., 24 x 35 steel standpipe, $5,900; to J. I. Case, Lemmon, deep well, $900. Noted June 28.

Tex., Ft. Worth—Pumps and other equipment for Arlington Heights booster station, to West & Womack, Dan Waggoner Bldg., $10,990.

Calif., Eureka—City furnishing f.o.b. Eureka, 12,500 ft. 2 in. standard black pipe, random lengths, to Mark-Lally Co., 2nd and Tehama Sts., San Francisco, $0.1688 per ft. Noted Sept. 6.

Ont., Fonthill—Will build reservoir, pumphouse and mains by day labor, Standpipe awarded to Horton Steel Wks., Bridgeburg, $7,500, pumps to Canadian Fairbanks-Morse Co. Total est. $35,000.

Ont., Walkerton—Rebuilding and improving waterworks system, stand pipe to Hunter Bridge & Boiler Co., Kincardine; gasoline engine and motor driven pumps to Goldie McCulloch Co., Galt. Total est. $30,000. Noted Sept. 13.

Sewers

PROPOSED WORK

La., Baton Rouge—Voted $325,000 bonds for sewers. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr. Noted Aug. 9.

La., Coushatta—Plans sanitary sewers, to exceed $25,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

O., Kenmore—Having plans prepared sewage disposal system, $40,000. D. Dowling, city engr. R. E. Garvin, Hanna Bldg., Cleveland, consult. engr. Noted June 28.

O., Zanesville—Plans laterals in newly proposed Southwestern Sewerage System. $300,000-$400,000. C. Spencer, City Hall, engr.

Mich., Detroit — Plans prepared 28,946 ft. of 10-24 in. vitr. crock sewers in Laterals 3884, 3885, 3886, 3887, 3889, 3890, 3891, 3893, 3967 and 4009. G. Jerome, city engr.

Mich., Lincoln Park (Wyandotte, P. O.)—Having plans prepared 50,000 ft. 10-24 in. vitr. crock lateral sewers. R. A. Murdock, 603 Free Press Bldg., Detroit, engr.

Wis., Milwaukee—City Sewerage Comn., 508 Market St., adopted 1924 budget. Work includes section of high level east sewer, $645,593; extension to Commerce St. sewer $113,323; Delaware Ave. sewer $135,424; Chicago Rd. sewer $162,278; intercepting regulators $19,751; revision of old Menomee sewer $15,000; completion of disposal plant $1,560,425. T. C. Hatton, c/o owner, engr.

Wis., Milwaukee—Metropolitan Sewerage Comn. of Milwaukee Co., 508 Market St., adopted 1924 budget. Work includes 3rd section of Main sewer to Cudahy $310,611; Oklahoma and Western Ave. sewer $318,104; 3rd section of Wauwatosa and West Allis sewer $345,230; Shorewood-Whitefish Bay sewer $13,386; Lake St. sewer $51,464; Menomonee Valley extension $418,543; Delaware Ave. extension $78,592; Natl. Ave. extension $212,803; Vliet St. and Spring Ave. sewer $113,174. T. C. Hatton, c/o owner, engr.

Kan., Burlington—Making preliminary plans new septic disposal tank for sewage, will also repair clear water well. $30,000. A. Jewell, Topeka, engr.

Kan., Hiawatha — Having preliminary plans prepared disposal plant. $25,000. Black & Veatch Interurban Bldg., Kansas City, Mo., engrs.

Mo., Breckenridge—Oct. 9, to vote on $35,000 bonds for sewerage system. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Marceline—Voted $55,000 bonds for sewers and disposal plant. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, engrs. Noted Sept. 6.

Tex., Park Place (Harrisburg P. O.)—Plans $25,000 bonds issue to supplement previous issue of $75,000 for disposal plant and sewers. W. N. Pierson, mayor.

Tex., Waco—Plans election to vote on $75,000 bonds 6, 8 and 10 in. sewer main extensions. V. G. Koch, city engr. Noted Sept. 6.

Okla., Lawton—Election Oct. 3 to vote on $40000 bonds for new sewage disposal plant and $15,000 bonds for new storm sewer, 2,500 ft. 36 in. segmental block, etc. E. M. Montain, city engr.

Okla., Tulsa—Election latter part of October to vote on $800,000 bonds for sanitary sewer extensions. C. Schultz, city engr.

Wash., Seattle—Bd. Pub. Wks. rejected bids opened Sept. 7, sanitary sewers in 32nd Ave. S. et al. $29,184. Will readvertise. J. D. Blackwell, city engr. Noted Sept. 27.

Calif., Carmel-By-The-Sea—Plans sewerage system for entire city. $100,000.

Calif., Newport Beach—Plans sewerage system in Peninsula Dist. To exceed $25,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., San Jacinto—Making plans sewerage system. To exceed $25,000. Bonds will probably be voted to finance project.

Ont., Hamilton—Takes bids about Oct. 15 sewers in Weis and Alexander Sts.; Newlands, Hope, Fairfield and Albany Aves. $65,000. W. L. McFaul, City Hall, engr.

Ont., London — Preparing plans storm water system, extensions in southern section of city and pumping station $500,000. Work will be done by day labor under direction of W. P. Near, city engr. Prices wanted on all materials and equipment.

Ont., St. Catharines—Plans 8 in. tile sewers in Thomas and Edmund Sts. $26,000. J. A. Pay, City Hall, engr.

BIDS DESIRED

N. Y., New York—See "Streets and Roads."

O., Berea—Oct. 22 (extended date), by village, vitr. sewer pipe. M. Knowles, Inc., Cleveland and Pittsburgh, engrs.; adv. E. N.-R. Oct. 4. Noted Sept. 13.

Wis., Fond du Lac—Oct. 10, by Bd. Pub. Wks., addition to sewage pumping plant, sewage ejector and additional machinery. G. H. Stanchfield, City Hall, engr.

Mo., St. Louis—Oct. 30, by Bd. Pub. Serv., 208 City Hall, 1,975 ft. 10-15 in. and 4.175 ft. 48 in. vitr. brick, laid in Portland cement or 2 ring segmental blocks, in Oakland Ave. $40,000. W. W. Horner, 300 City Hall, engr.

BIDS RECEIVED

O., Cleveland—City, Sept. 13, 1,020 ft. 6 ft. 6 in. to 8 ft. circular brick sewer, (Morgan Run Culvert) from Donnelly & Miller, 125 East 84th St., $74,662; 690 ft. of 4 ft. circular rein.-con. sewer, from O. J. Leach, Eddy Rd., $18,272. Noted Sept. 6.

O., Cuyahoga Heights (Cleveland, P. O.)—For 3,160 ft. 30-42 in. and 4,744 ft. 12-24 in. tile sewers in East 71st St. Sewer Dist., from Sprague & Burkhardt, 11811 Browning Ave., Cleveland, $57,492. Noted Sept. 6.

Colo., Denver—Constructing 10 mi. of 10-72 in. storm sewers in Washington Park Storm Sewer Dist. 3, from Western Paving Co., 309 International Trust Bldg., Denver, $231,066. Engrs. est. $285,370. Noted Sept. 13.

Calif., Centerville—Union Sanitary Dist., 12,519 lin. ft. 14 in., 1,393 lin.ft. 12 in., 17,972 lin. ft. 10 in., 30,186 lin. ft. 8 in. and 12,723 lin.ft. 6 in. vitr. sewer pipe, etc., from W. J. Tobin, 527 Santa Ray Ave., Oakland, approximately $68,500.

Calif., Long Beach—Bway. outfall sewer, from H. D. Churchill, 350 Merrick St., Los Angeles, approximately $66,500. Noted Sept. 6.

Calif., Los Angeles—See 'Streets and Roads."

Calif., San Francisco—City and San Francisco Co., sewers in 6th St. between Brannan and Townsend Sts., 633 lin.ft. 6 ft. circular rein.-con. sewer with portion of invert lined with vitr. brick and supported on piles, 19,200 lin. ft. piles, etc., from Healy-Tibbits Construction Co., 64 Pine St., $41,398.

CONTRACTS AWARDED

N. J., Plainfield—Common Council about 4,800 lin.ft. storm sewers, etc., to J. Miehle, 21 Hillcrest Terrace, East Orange, $23,303. Noted Sept. 6.

N. J., South River—For 18,000 ft. 8 and 12 in. vitr. sewers, etc., to J. Stefano & Co., South River, $40,860.

O., Cleveland—Cuyahoga Co., Impvt. 33, Sect. A., 9,850 ft. 8-10 in. and 9,850 ft. 12-48 in. vitr. clay pipe, to Gallagher & Burke, 1228 Bonnieview Ave., $144,291. Noted Sept. 27.

Mich., Lincoln Park (Wyandotte, P. O.)—Constructing 3,000 ft. 18-24 in. vitr. crock sewers in Sects. 1, 2 and 3 sewer arms, to Rennis & Dibble, 11331 Colonial Ave., Detroit, $25,000.

Kan., Coffeyville — See "Streets and Roads."

Mo., Versailles—Complete lateral sewers, to Woodward Constr. Co., Ponca City, Okla., $25,364.

Sewers (Continued)

Tex., Houston—Concrete and tile sewers in Woodland Heights, to C. K. Horton, Box 1025, $88,000.

Calif., Los Angeles—See "Streets and Roads."

Que., St. Therese — Constructing 2 x 3 brick and 12 in. tile sewers to O. Filion & Bros., 2985 St. Denis St., Montreal, $110,000. Noted Sept. 27.

Ont., Ford—Building sewers in district south of Grand Trunk Ry. tracks, one section to Merlo, Merlo & Ray, Ford, $111,000, other section to Chick Contg. Co., McDougall Ave., Windsor, $92,500.

Waste Disposal

PROPOSED WORK

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, rejected bids Aug. 28, 42 x 75 ft. brick and concrete incinerator, 36 ft. high, 150 ft. chimney. Noted Sept. 6.

Ore., Portland—Plans garbage incinerator. $30,000. O. Laurgaard, city engr.

Bridges

PROPOSED WORK

Ky., Bowling Green—Louisville & Nashville R.R. Co., 10th and Bway., Louisville, plans 426 ft. steel, double track bridge over Barren River, here. $200,000. W. H. Courtney, ch. engr.

O., Akron — Plans ⅛ mi. bridge over Cuyahoga River from West Tallmadge Ave. at West Hill to North Hill residential section. $50,000. E. A. Kemmler, Delaware Bldg., engr.

Tex., Brady—McCulloch Co. making plans bridges and culverts on State Highway 10, from here to Brown Co. line. $25,000. E. A. Burrows, Brady, engr.

Tex., Ft. Bend—Richmond Co. soon takes bids 1,200 ft. steel bridge over Brazos River, 3 spans, rein.-con. pillars. $225,000. C. H. Kendall, co. engr.

Tex., Victoria—See "Streets and Roads."

Kan., Winfield—Making preliminary plans 3 span concrete and steel bridge on Madison Ave. $40,000-$50,000. W. S. Ruggles, Winfield, engr.

Ore., Rainier—State of Washington and Oregon plan bridge over Columbia River between here and Longview (Wash.) Two plans presented by H. Nunn, state engr. Oregon Hy. Dept., are under consideration. One calls for suspension bridge with two 400 ft. spans, channel 1,500 ft. long, $1,639,352; other for 5 spans aggregating 2,500 ft., $2,679,000. Clearance on both plans 150 ft. Noted Mar. 1.

Calif., Los Angeles—Pacific Electric Ry. Co., Pacific Electric Bldg., had plans prepared 460 ft. trestle railway bridge, 12 ft. wide, over Alamitos Bay. Company Eng. Dept. in charge.

Calif., Monrovia—See "Miscellaneous."

BIDS DESIRED

New Jersey—Oct. 15, by State Hy. Comn., Trenton, bridges and culvert in Lawrence Twp., also bridge, etc., in Princeton Twp., Mercer Co. J. L. Vogel, 772 Broad St., Newark, engr.; adv. E. N.-R. Oct. 4.

Md., Annapolis—Oct. 2, by Comrs. Anne Arundel Co., 20 ft. span of 18 in. concrete-encased I-beams, resting on 2 concrete wing abutments, rein.-con. floor slab, on County Rd. between Governor's Bridge and Riverview. $35,000.

Alabama—Oct. 23, by State Hy. Dept., Montgomery, 900 ft. of bridges on Montgomery-Selma Rd., Lowndes Co., Federal Aid Project 139, alternate bids on creosoted timber and concrete. W. S. Keller, state highway engr.

Alabama—Oct. 30, at office of State Hy. Dept., Montgomery, constructing substructure and approaches for bridge over Alabama River near Reeses Ferry, Birmingham-Montgomery Highway, substructure includes 4,101 cu.yd. concrete, and 78,900 lb. steel; alternate bids on approaches (1) 3,287 cu.yd. concrete, 496,687 lb. steel (2) 343,220 ft. treated timber and 11,360 ft. treated timber piling. W. S. Keller, state highway engr.

Tennessee—Oct. 19, by Tennessee Dept. Hys. & Pub. Wks., Nashville, .02 mi. concrete bridge over Roaring River, State Aid Project 135, Jackson Co.; 75 ft. concrete bridge over Manchester Pike, State Aid Project 134, Rutherford Co. J. G. Creveling, Nashville, highway comr.

Ohio—See "Streets and Roads."

Ohio—Oct. 16, by Dept. Highways and Pub. Wks., Columbus, approaches to bridge on Sect. "A" Ripley-Hillsboro Rd., Brown Co. $3,329, bridge on same road $13,196; bridge on Sect. "P-2" Logan-New Lexington Rd., Hocking Co. $8,604; Sect. "B" Logan-Lancaster Rd. Hocking Co. $5,951; Sect. "B" Pomeroy-Jackson Rd., Meigs Co. $10,135; Sect. "P" Ohio River Rd., Monroe Co. $11,366, Sect. "C" Zanesville-McConnellsville Rd., Muskingum Co., $8,003, Sect. "E" New Philadelphia-Uhrichsville Rd., Tuscarawas Co. $26,181, Sects. " and G" New Philadelphia-Uhrichsville Rd., Tuscarawas Co. $25,961, Sect. "K" Wooster-Canal Dover Rd., Tuscarawas Co. $16,252; bridge and approaches on 0.127 mi. Hamilton-Eaton Rd., Butler Co., $27,336; concrete viaduct on 0.17 mi. Sects. "L and M" Mansfield-Galion Rd., Richland Co., $41,648. A. V. Donaheus, dir. highways.

Ill., Libertyville—Oct. 13 at office C. E. Russell, supt. highways, Lake Co. (Waukegan) improvement and relocation Rockland Rd., incl. rein.-con. bridge, east of here; adv. E.N.-R. Oct. 4. Noted Aug. 2.

Kan., Phillipsburg — Oct. 26, by Clerk Phillips Co., 140 ft. bridge, one 80 span, with two 30 ft. approach spans, 148.7 cu.yd. rein.-con., 141.6 cu.yd. concrete, 25,100 lb. reinforcing and 90,513 lb. structural steel, etc., 2½ ft. west of here, Federal Aid Project 166, Sect. B. C. E. Freeman, co. eng.

BIDS RECEIVED

New Jersey—State Hy. Comn., Trenton, Sept. 24, concrete encased I-beam bridge, concrete abutments of two 40 ft. 7⅝ in. spans for 30 ft. roadway, etc., also concrete encased I-beam bridge with concrete abutments of two 48 ft. spans for 30 ft. roadway, etc., over Pequannock River, on Route 8, Sect. 4-A, Passaic and Morris Counties, and concrete slab bridge of one 12 ft. span for 30 ft. roadway, over Creek to Pequannock River on above road, in townships of Rockaway and West Milford, Passaic Co., from T. Sheahan, South Potomac St., Hagerstown, Md., $104,728; structural steel work for two 73 ft. span bridge, over Crosswicks Creek, Burlington and Mercer Counties, from Phoenix Bridge Co., Phoenixville, Pa., $23,900. Noted Sept. 6.

Virginia—See "Streets and Roads."

Michigan—State Hy. Dept., Lansing, three 50 ft. concrete girder Bridges 020604, 020605 and 020606, Alger Co., from G. E. Warden Co., Eau Claire, Wis., $26,069. Noted Sept. 13.

O., Cleveland—Cuyahoga Co., Sept. 19, steel frame work for bridge over Hillside Rd., 363,000 lb. steel, from E. M. Scully, 1431 Eastwood Ave., Columbus, $29,200. Engrs. est. $31,750.

Minnesota — State Hy. Dept., St. Paul, Sept. 26, Bridge 3458, State Project 1-01, Federal Aid Project 282, at Beaver Bay, one 300 ft. steel arch span, from L. Grund, Lake City, $33,300. Noted Sept. 13.

Calif., Los Angeles—Harbor Comn., concrete viaduct and ramp for Harbor Blvd., from Clinton Constr. Co., Stock Exch. Bldg., $131,600.

CONTRACT AWARDED

Pa., York—F. S. Bartenschlager, controller York Co., to G. A. and F. M. Wagman, Dallastown, four 65 ft. rein.-con. arch bridges, two at Graybills, $14,900, and two at Spring Grove $15,718; to W. Drawbaugh Dover, three 40 ft. rein.-con. spans at Katzs Mill $13,900 and one 50 ft. rein.-con. span at Kralltown, $5,980; to C. M. Hess, Dillsbury, one 40 ft. rein.-con. span, $6,681. Noted Sept. 13.

Mich., Adrian—State Hy. Dept., Lansing, two 50 ft. concrete girder Bridges 460103 and 460104, to Smith & Nichols, Hastings, $24,671. Noted Sept. 27.

Ohio—See "Streets and Roads."

Ohio — Dept. Highways and Pub. Pks., Columbus, concrete through arch bridge on Sect. "A" Delphos-Wapakoneta Rd., Auglaize Co., to Stout & Stout, Stoutsville, $27,744; Dry Run bridge on Bellefontaine-Wapakoneta Rd., bridge on Sect. "Blackhoof Creek" of above road, also bridge on Sect. "C" Piqua-St. Marys Rd., all in Auglaize Co., to W. L. Hastings, Wapakoneta, $3,865, $2,907 and $4,335 respectively; concrete bridge on Sect. "G," also one on Sect. "P-2" Logan-New Lexington Rd., Hocking Co., to C. A. Lunsford, Logan, $2,538 and $1,511 respectively; bridge on Sect. "D" Sidney-Wapakoneta Rd., Shelby Co., to Elsas-Myer Co., Anna, $6,767; concrete culvert on Sect. "A" Ohio River Rd., Washington Co., to S. A. Palmer, Marietta, $7,087. Noted Sept. 20.

Wis., Green Bay—Kewaunee, Green Bay & Western Ry., Washington St., Green Bay and Chicago & Northwestern Ry., 226 West Jackson Blvd., Chicago, 230 ft. steel draw span over Fox River, to Wisconsin Bridge & Iron Co., North Milwaukee.

Ia., Greenfield — Adair Co., to F. W. Kempe, Greenfield, 49 rein.-con. culverts and extensions, and 1 I beam bridge, $24,400 and $9,143 respectively; to A. Olson Constr. Co., Waterloo, 1 pony truss and 1 high truss bridge $25,300. Noted Sept. 20.

Minn., St. Paul—See "Miscellaneous."

Tex., Canadian — Hemphill Co. concrete girder bridge over Washita River, 14 spans each 24 ft. 6 in., to Austin Bros. Bridge Co., Coombs St., Dallas, $34,631. Noted Aug. 23.

Wash., Omak—Comrs. Okanogan Co. (Okanogan), 408 ft. concrete bridge, 20 ft. roadway, 6 ft. sidewalks, over Okanogan River, here, also removing present structure, to Union Bridge Co., Central Bldg., Seattle, $80,000. Noted Sept. 13.

Ore., Portland—Improving East 33rd St. from south line of Halsey St. to south line of Bway., to Lindstrum & Fiegenson, Worcester Bldg., rein.-con. viaduct, $31,324, 6,000 cu.yd. embankment $0.70, 4,150 sq.ft. concrete sidewalk $0.20, 1,610 cu.yd. 7 in. concrete pavement $2.25, etc., total $41,925. Engrs. est. $43,492. Noted July 12.

Dams

PROPOSED WORK

Wis., Lone Rock—Wisconsin Power, Light & Heat Co., Gay Bldg., Madison, plans power dam across Wisconsin River, here. $25,000. Engineer not selected.

Wis., Wauzeka—See "Industrial Works."

Calif., Oroville—See "Waterworks."

Railways

PROPOSED WORK

North Carolina — High Point, Thomasville & Denton Ry., High Point, purchased Carolina and Yadkin River Ry., and plans to re-equip road and lay heavier rails. Address High Point Chamber of Commerce.

North Carolina—See "Industrial Works" under Ashville.

Kentucky—See "Miscellaneous."

Illinois—Wabash Ry. Co., Railway Exch. Bldg., St. Louis, Mo., plans 2.5 mi. spur from main line at Granite City to St. Louis Coke and Chemical plant. $65,000. A. O. Cunningham, ch. engr.

BIDS DESIRED

Texas—E. M. Wood, contractor of Royse City and Nacogdoches, desires to sub-let 14 mi. railroad grading 18,000-30,000 yd. per mi.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Syracuse—Plans improving Furnace Brook, incl. construction of walls and widening channel to put water shed in condition. $125,000. T. H. Mather, city engr.

La., Baton Rouge—Voted $325,000 bonds for drainage work. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr.

O., Warren—City election in November to vote on $300,000 bonds for straightening course of Mahoning River from Summit to South Sts., about 1 mi. Engineer not announced.

Wis., Fremont—Waupaca Co. Drainage Bd. making plans 31,000 cu.yd. earth excav. and open ditch draining, also 1½ mi. 8-12 in. drain tile in Dist. 7, town of Little Wolf $25,000. L. C. Schindler, 721 Clark St., Appleton, engr.

Wis., Fond du Lac—Fond du Lac Co. Drainage Bd. making plans open ditch tile drainage and 6-14 in. vitr. tile drain in Lamartine D. D. 1. $30,000. L. M. Schindler, 721 Clark St. Appleton, Engr.

Ark., Pine Bluff—Consart D. D. plans system of main and lateral drainage ditches, levees, etc. $100,000. F. Bennett, Citizens Bank Bldg., engr.

Tex., Harlingen — Cameron Co. having plans prepared dredging main canal between arroyo and pumping plant in Cameron Water Impvt. Dist. 1. C. P. Bobo, Harlingen, mgr. of district. $90,000.

Okla., Muskogee — Verdigris Drainage Wagoner Co. having surveys made drainage and bridges, for 42,000 acres Verdigris River Valley north of here. $275,000. T. P. Clouts, 402 Metropolitan Bldg., engr.

Wash., Yakima—Plans eliminating open irrigation ditches by constructing concrete pipe lines. $54,700. C. F. Wilson, city engr.

Calif., Newhope (Walnut Grove P. O.)—Newhope D. D. plans election to vote on $150,000 bonds for drainage improvements.

Calif., Yuba City—Recl. Dist. 1660 had plans prepared for 90 mi. canals. J. C. Boyd, Forum Bldg., Sacramento, engr.

Excavation, Drainage, Irrigation (Continued)

Ont., Grand Bend — Stephen and McGillivray Twps. Councils, Huron Co., having plans prepared dredge cut 7 mi. long and drainage work. $100,000. F. W. Farncombe, Dominion Savings Bldg., London, engr.

BIDS DESIRED

N. Y., New York—Oct. 8 by J. H. Delaney, comr. Docks, Pier "A." North River, dredging between West 97th and West 99th Sts., Manhattan. Contr. 1799.

Miss., Yazoo City—Oct. 4, by Silver Creek D. D. of Yazoo, Humphreys and Sharkey Counties, at office of Barbour & Henry, attorneys, Yazoo City, constructing 1,250,000 cu.yd. excav. in drainage channels, having base widths from 6-22 ft. J. T. Montgomery, pres. bd. comrs.

Minn., Granite Falls—Oct. 19, by Yellow Medicine and Lyon Counties, Judicial Ditch 10, Sects. 1, 2, 3, 4, 5 and 6, 1,581,407 cu.yd. excav., etc., $180,280; Sects. 7, 8, 9 and 10, 379,991 ft. 6-28 in. tile, etc., $202,214. Former bids rejected. E. W. Youngdale, Granite Falls, engr. Noted Sept. 13.

Calif., Byron—Oct. 15 by G. A. Howard, secy. Byron-Bethany Irrigation Dist., Byron, for 1 horizontal centrifugal pump, steel discharge pipe, two 14 in. gate valves, electric motor, irrigation ditches, wooden flood gates, 2 concrete retaining walls, enlarging pumping building, etc.

BIDS RECEIVED

Calif., Los Angeles—Harbor Comn., Sept. 14, dredging slip at Berth 230, 700,000 cu.yd., from San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $0.1344 per cu.yd. Noted Sept. 6.

CONTRACTS AWARDED

Mo., Kirksville—C. E. Jacoby Eng. Co., engrs., Shukert Bldg., Kansas City, 5.5 mi. main ditches, clearing 20 acres and draining 3,500 acres, 209,150 cu.yd. excav., to J. H. Boyce Sons Co., 140 North 41st St., Omaha, Neb., $0.112 per yd., total $23,425, for Beashear D. D. Noted Sept. 13.

Calif., Los Angeles—Harbor Comn., 700,000 cu.yd. dredging at Berth 230, to San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $94,080. Noted Sept. 6.

Streets and Roads

PROPOSED WORK

N. J., Trenton — Mercer Co. plans new River Rd., and Sullivan Way; rebuild Robbins-Yardville Rd. and Whitehead Rd.; pave Main St. Pennington. H. F. Harris, Court House, engr.

Pa., Ebensburg — Comrs. Cambria Co. plan paving 12,800 ft. Allegheny Twn. Rd. starting at Bakers Lane, Loretto and extending toward Chest Springs, 16 ft. rein.-con. $75,000.

Md., Baltimore — Paving Comn. plans paving Glenoak and Norman Aves., Wilcox, Poole and 36th Sts., Dorchester, Grantley and Copley Rds., with 6 in. concrete; Curtain and Aiken Sts. with 7 in. concrete; 36th and Sycamore Sts. with 6 in. concrete or 4 in. vitr. brick blocks on 4 in. concrete. R. K. Compton, chn. and consult. engr.

W. Va., Beckley—Slab Fork Dist., Raleigh Co., election Oct. 16 to vote on $390,000 bond issue for roads. W. T. Campbell, Beckley, engr.

W. Va., Parkersburg—Election soon to vote on $300,000 bond issue for paving Market St., et al., and building filtration plant. T. V. Dunbar, Parkersburg, engr.

W. Va., Wayne—Wayne Co. takes bids about Dec. 1, grading and paving 10 mi. roads, 18 ft., in Union Dist., $194,000. H. O. Wiles, Wayne, engr.

N. C., Troy — Comrs. Montgomery Co. soon take bids grading, topsoiling, etc., 7 mi. Blaine-Chandlers Grove Rd. $30,000. W. G. Smitherman, chn. L. V. Edwards, Winston-Salem, engr.

Ga., Waynesboro—Plans paving various streets. Will issue $50,000 bonds.

Alabama—State Hy. Dept., Montgomery, plans grading and surfacing with 9 in. gravel, 9.487 mi. road from Georgianna to Conecuh Co. line, Federal Aid Project 143. $104,897. W. S. Keller, Montgomery, engr.

Alabama—State Hy. Dept., Montgomery, plans grading and surfacing 3.818 mi. Garden City-Warrior Rd. Federal Aid Project 126. Blount Co. $106,000. W. S. Keller, state highway engr.

Miss., Tupelo—Grading and paving with refined asphalt 125,000 sq.yd. various streets. $160,000.

La., Baton Rouge—Voted $600,000 bonds for street improvements and $35,000 for opening street. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr. Noted Aug. 9.

La., Coushatta — Plans paving various streets, to exceed $25,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Tennessee—Tennessee Dept. Hys. & Pub. Wks., Nashville, having surveys made 8.1 mi. highway from Clinton to Knox Co. line, Anderson Co.; 8 mi. from Knox Co. line to Lenoir City, Louden Co.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, having surveys made constructing 13 mi. highway from McMinnville to Rock Island, 18 ft. Warren Co. J. G. Creveling, highway comr.

Tenn., Jasper—Marion Co. making surveys 10 mi. State Highway between here and Whitwell, 16 ft., probably limestone base. $100,000 recently voted. State aid project under Tennessee Dept. Hys. & Pub. Wks., Nashville. J. G. Creveling, Nashville, hy. comr. Noted July 19.

Tenn., Livingston—Overton Co. having surveys made constructing 30 mi. road from Crawford to Clay Co. line. $300,000.

Ohio — Dept. Highways and Pub. Wks., Columbus, rejected bids Sept. 14, grading, bridging and paving 1.54 mi. Sect. "A1" Fremont-Port Clinton Rd., Sandusky Co., rein.-con., also 3.249 mi. Sect. "L" New Philadelphia-West Lafayette Rd., Tuscarawas Co. Noted Sept. 20.

O., Akron—Plans grading and paving about 1 mi. West Tallmadge St. $175,000. E. A. Kemmler, Delaware Bldg., engr.

O., Columbus—Plans to construct Olentangy Blvd. from Broad to Sandusky Sts., north along river to Dodridge St., 50 ft. wide, also lighting system and park improvements. $1,000,000. R. H. Simpson, city engr.

O., East Liverpool—Plans widening and repaving 1.25 mi. Avondale St., 40 ft., $50,000-$60,000; grading and paving 1 mi. Cadamus St., $40,000, and ½ mi. Rural Lane, 30 ft., $29,000, all brick. J. George, Genl. Del., engr.

O., Lisbon—Columbiana Co. plans resurfacing 1 mi. East Liverpool-Wellsville Rd., $40,000, and about 2 mi. Youngstown-East Liverpool Rd., 20 ft., $35,000, macadam. L. C. Kirk, Co. Bldg., engr.

O., Youngstown—Plans improving about ½ mi. Rosedale Ave., 40 ft., brick, $45,000; widening ½ mi. West Federal St., $50,000. I. Turner, city engr.

Michigan—State Hy. Dept., Lansing, rejected bids Sept. 19, grading and surfacing 1.956 mi. State Trunk Line Rd. 12-38, Dickinson Co. Noted Sept. 27.

Michigan—State Hy. Dept., Lansing, rejected bids Sept. 19, grading and surfacing 5.319 mi. Federal Aid Project 69, Sects. C and D, Livingston and Ingham Counties, 28,978 cu.yd. excav., 61,767 sq.yd. concrete. Noted Sept. 27.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 7¼ mi. State Trunk Line Rd. 16-3, Eaton Co., F. F. Rogers, state comr.

Mich., Detroit — Plans prepared 101,700 sq.yd. 3½ in. sheet asphalt on 8 in. concrete on Glynn Court, Alwine Lane, Covington Dr., Manderson, Merton, Strathmore and Sherbourne Rds., Pilgrim, Park Grove, Rochester, Nevada, Marlborough, Holmur, 2nd, Grand, Dalrymple, Lodi and Knodell Aves., $612,330. G. Jerome, city engr.

Ill., Quincy—Supervs. Adams Co. appropriated $105,00 for hard surfaced roads and maintenance of roads, incl. $25,000 for right of way of State Highway Route 36. County and State share cost.

Wis., Madison — Making plans rein.-con. paving, curbing and guttering, etc., 6 blocks of Jenifer St. and Commercial Ave., 30 ft. $25,000. E. E. Parker, City Hall, engr.

Ia., Marshalltown — Marshall Co. soon takes bids gravel surfacing 8.25 mi. Primary Rd. 14, 18 ft., $25,000. D. C. Elder, co. engr.

Kan., Salina—Making preliminary plans grading and surfacing with concrete, brick or asphalt, curbing and guttering, etc., 5,800 ft. Sunset Dr., University, Prescott, Morrison, 11th, Putnam, Spruce, Mulberry, Front, Ellsworth and 13th Sts., average width 30 ft. $55,000-$60,000.

Kan., Wichita — Plans concrete paving, curbing and guttering 28 blocks 15th, 10th, Wichita, Hiram, Chautauqua, Coolidge, Ellis, Gilbert, Franklin, Lewis, Maple, St. Clair and Parker Sts. and alleys, 26-36 ft.; paving with asphaltic concrete, etc., 15 blocks, 15th, Washington, Elizabeth, Bluff, Yale, Estelle, Exposition, Market and Glenn Sts., 26 ft.; brick block paving, etc., 1 block alley between Main and Water Sts., 16 ft. $200,000. P. L. Brockway, city engr.

Minn., Duluth—Plans to expend $1,200,000 during 1924 for street improvements. Takes bids about January paving 3 mi. London Rd., 36 ft., concrete; 1 mi. extension to East 4th St., gravel; 2 mi. connection between center of city and Miller Trunk Rd.; concrete paving 3 mi. Boulevard, 24 ft. J. Wilson, city engr.

Mo., Hannibal — Making preliminary plans grading, curbing, guttering and concrete paving 7,177 sq.yd. North and South 6th, South 8th, South 9th, Delanayaven, Lemon and South 7th Sts. $21,500-$25,000. W. R. Gettler, City Hall, engr.

Mo., Kennett—Dunklin Co. making plans paving 30,000 sq.yd. various streets, conconrete. H. Phillips Eng. Co., Bertig Bldg., Paragould, Ark., engrs.

Ark., Ft. Smith—Making preliminary plans grading and paving with rein.-con., asphalt or brick 8 blocks of South 23rd, G and H Sts. $25,000. W. H. Evans, Ft. Smith, engr.

Tex., Alice—Jim Wells Co. making surveys grading and rein.-con. paving 29 mi. State Highway 9A, 18 ft. $1,237,500. L. W. Scheide Mantel, co. engr.

Tex., Anderson—Grimes Co. election Oct. 20 to vote on $150,000 bonds, highway improvements. R. M. West, Navasota, co. judge. Engineer not selected.

Tex., Angleton—Brazoria Co. election Oct. 20 to vote on $350,000 bonds, grading and shell surfacing highway in West Columbia Rd. Dist. Address J. T. Loggins, co. judge.

Tex., Angleton—Brazoria Co. soon takes bids shell surfacing 8.1 mi. road from Bastrop Bayou to Oyster Creek Bayou, $98,000; 3.12 mi. State Highway 19, $33,570; 6 mi. State Highway 19, $51,000; all 16 ft. E. N. Gustafson, co. engr.

Tex., Austin—Travis Co. election Oct. 25, to vote on bonds grading (where necessary) and paving with gravel, macadam, bituminous macadam and concrete, Highways 2, 20, and 20A and lateral roads, 16 and 18 ft. $1,140,500. O. Leonard, co. engr.

Tex., Baird—Callahan Co. plans paving with concrete, bituminous concrete or bituminous macadam, 35 mi. Bankhead Highway, 18 ft. $600,000 bonds recently voted. V. B. Gilbert, co. judge. Noted Aug. 30.

Tex., Ballinger — Runnells Co. making plans graveling 9.25 mi. Ballinger-Winters Highway, Sect. State Highway 30, 18 ft. $70,000. J. E. Pirie, Ballinger, engr.

Tex., Centerville—Leon Co. election Oct. 26, to vote on $35,000 bonds grading, etc., various roads. W. I. Lacy, co. judge.

Tex., Corpus Christi—Nueces Co. takes bids latter part October gravel surfacing and 1 in. bituminous topping 10.1 mi. Corpus Christi-Bishop Rd., 18 ft. $230,000. C. E. Cocke, co. engr.

Tex., Edinburg—Hidalgo Co. plans election to vote on $108,000 bonds for hardsurfacing 14 mi. road starting at Weslaco and running north, 18 ft.

Tex., Eldorado—Schleicher Co. making plans grading and graveling 8 mi. State Highway 4; south of here, 18 ft. $65,000. J. L. Neil, Eldorado, engr.

Tex., Floresville — Wilson Co. making plans paving State Highway 22 B. $297,500 Federal aid, $99,834 State aid. L. W. S. Mantel, Floresville, engr.

Tex., Groveton — Trinity Co. making plans bituminous topping 19 mi. State Highway 19, 18 ft. $450,000. W. J. Kelly, Trinity, engr.

Tex., Houston—Making plans permanent paving, curbing and guttering Cotton Ave. from Texas to Wyoming Sts. $25,000. J. C. McVea, city engr.

Tex., Linden—Cass Co. making plans paving 6 mi. State Highway 1, near Atlanta, 18 ft., bituminous macadam. $130,000. T. E. Hess, 310 Medical Arts Bldg., Dallas, engr.

Tex., Menard—Menard Co. voted $60,000 bonds constructing various roads. J. D. Scruggs, co. judge. Noted Aug. 9.

Tex., Novice — Coleman Co. defeated $200,000 bonds improving roads in Precinct 4. W. E. Dickerson, co. engr. Noted Sept. 6.

Tex., Palestine — Anderson Co. election Oct. 20, to vote on $150,000 bonds, grading, gravel and macadam surfacing roads in Plantersville Rd. Dist. E. W. Davis, co. engr.

Tex., Pearsall—Frio Co. plans grading and gravel surfacing State Highway 2, Rd. Dist. 4, 16 ft. $55,000 bonds voted. R. E. Killmer, co. engr.

Tex., Seguin — Guadalupe Co. making plans bituminous topping 8 mi. State Highway 3, 18 ft. $130,000. S. C. McCarty, Seguin, engr.

Streets & Roads (Continued)

Tex., Victoria—Victoria Co. plans election to vote on $375,000 bond issue for permanent paving and bridging highways. P. P. Putney, co. judge. Engineer not selected.

Tex., Waco—Making plans widening and paving 350 ft. 7th St., from Austin to Washington Sts., 58 ft. $25,000. V. G. Koch, city engr.

Okla., Marlow — Rejected bids grading and paving 18 blocks Main St. and Bway. Will readvertise soon. $73,000. V. V. Long & Co., 1300 Colcord St., Oklahoma City, engr. Noted Sept. 13.

Okla., Pawhuska—Plans grading and paving 5 blocks Lynn Ave., 7,100 sq.yd. asphalt, etc. $36,000.

Okla., Perry—Plans grading and paving 7th and 9th Sts., 14,200 sq.yd. concrete. $60,000. C. A. Wood, Stillwater, engr.

Okla., Sapulpa—Plans grading and paving 15 blocks in residential district, 16,000 sq.yd. concrete, 7,200 lin.ft. curbing and 5,100 cu.yd. excav. $75,000. F. E. Lawrence, Sapulpa, engr.

Nevada—State Hy. Dept., Carson City, rejected bids grading, concrete paving and building culverts between 1st and Aultman Sts. and east city limits of Ely, Project 70, White Pine 2-D-1. Noted Sept. 13.

Wash., Seattle—Had plans prepared and takes bids about Nov. 24, paving 4 mi. Youngstown Ave. S., $324,000; grading and paving 3 mi. Avalon Way, $362,000; 3 mi. Columbian Way, $364,000. J. D. Blackwell, city engr.

California—State Hy. Dept., Sacramento, having surveys made 11 mi. Truckee-Hinton Rd. and 6 mi. road from Floriston to Nevada State Line, Nevada Co. R. M. Morton, state highway engr.

California—State Hy. Comn., Sacramento, received no bids Sept. 17 surfacing 11.1 mi. road between 2 mi. south of Weaverville and Tom Long Gulch, 17,200 cu.yd. gravel or broken stone. Noted Sept. 6.

Calif., Marysville—Yuba Co. plans paving 7 mi. Arboga Rd. to Plumas Lake, and grading and gravel surfacing 5.5 mi. of above road from Plumas Lake to Bear River. To exceed $25,000. L. B. Crook, co. surv.

Calif., Newport Beach—Plans street improvements in Peninsula Dist. To exceed $25,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., Pacific Grove — Plans paving 18 blocks Central Ave., to exceed $25,000. H. D. Severance, city engr.

Calif., Redwood City—San Mateo Co., had plans prepared improving Rd. Dist. 2, 16,000 cu.yd. excav., 542,900 sq.ft. 1½ in. warrenite on 4 in. concrete, 5,400 lin.ft. 4 in. vitr. sewers, etc. G. A. Kneese, co. surv.

Calif., San Francisco—Had plans prepared grading, concrete paving and building sewers in Wilde Ave., San Bruno to Delta Sts., 7,100 cu.yd. cut, 19,200 sq.ft. concrete pavement, 71,255 sq.ft. asphaltic concrete pavement, etc. To exceed $35,000. M. M. O'Shaughnessy, city engr.

Ont., Hamilton—Plans new pavements on Young, Stinson and Delaware Aves. $90,000. W. L. McFaul, City Hall, engr.

BIDS DESIRED

Rhode Island—Oct. 17, by State Bd. Pub. Wks., Providence, paving 6.11 mi. road, bituminous macadam, Contrs. 2310 and 2311; adv. E. N.-R. Oct. 4.

N. Y., Brooklyn—Oct. 10, by E. Riegelmann, boro pres., Boro Hall, repaving Empire Blvd., Saratoga and 12th Aves., North 7th, 79th, 99th and 80th Sts., sheet asphalt on concrete, North 7th and Union Sts., grade 1 granite on 6 in. concrete; grading, curbing and flagging 40th St.; curbing and flagging 80th and 81st Sts.

N. Y., Brooklyn—Oct. 11, by Park Bd., Municipal Bldg., New York, grading, sheet asphalt paving, etc. main roadway of Eastern Parkway from Albany to Ralph Aves., here. F. D. Gallatin, pres.

N. Y., New York—Oct. 11, by J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving 26th, East 31st, East 33rd, East 49th, 73rd and 148th Sts.; widening and repaving 35th St., granite block on concrete.

N. Y., New York—Oct. 9 by H. Bruckner, pres. Bronx, 3rd and Tremont Aves., asphalt paving Valentine Ave., Oak Terrace, Faile and East 204th St.; bituminous concrete paving Sherman Ave. and East 178th St.; grading, curbing, etc. Montgomery Ave. and Purdy St.; sewers in Grand Blvd. and East 158th St.; concrete culvert across Ludlow Ave. at Taylor Ave.

N. Y., St. George—Oct. 9, by J. A. Lynch, pres. Richmond Boro, Boro Hall, concrete sidewalks on both sides of Amboy Rd., Curtis and Butler Aves., west side of Pelton and Nicholas Aves., east side of Richmond Ave., Gray St. and Amboy Rd.; concrete curbing, resetting bluestone and concrete curbs, laying vitr. brick gutters, etc. on Elliott Ave.; repaving Sea and Richmond Aves., bituminous concrete.

New Jersey—Oct. 22, by State Hy. Dept., Trenton, paving Route 8, Sect. 2, Montclair to Verona, Essex Co., rein.-con. and sheet asphalt. A. L. Grover, secy.; adv. E. N.-R. Oct. 4.

N. J., Alpha—Oct. 24, by Bd. Freeholders Warren Co. (Belvidere) paving Alpha Boro Rd., here. H. W. Vetter, Belvidere, co. engr.; adv. E. N.-R. Oct. 4.

N. J., East Orange—Oct. 8, about 20,500 sq.ft. 4 and 5 ft. concrete sidewalks, on Davis Pl., Ampere Parkway, Everett, Charles and Oak Sts., Laurel, Tremont, Grand and Freeman Aves. L. E. Rowley, city clk.

N. J., Plainsboro—Oct. 12, by Plainsboro Twp. Com., Plainsboro School Bldg., constructing 22,400 sq.yd. Plainsboro-Cranbury Neck-Princeton Junction Rd. Sincerbeaux & Moore, Mechanic Bldg., Trenton, engrs.

Pa., Reading—Oct. 10, by City Council, 8,700 sq.yd. rein.-con. road connecting Maiden Creek pumping station with Center Turnpike, at Ontelaunee.

Maryland—Oct. 9, by State Rds. Comn., Baltimore, paving 0.65 mi. state highway in Anne Arundel Co., vitr. brick, Contr. AA-35. J. N. Mackall, chn.; adv. E. N.-R. Oct. 4.

Md., Baltimore—Oct. 10, by Bd. Awards, grading streets listed in Contr. 247-OA, 19,200 cu.yd. embankment and 15,000 cu.yd. excav. $28,000. R. K. Compton, 214 East Lexington St., chn. and consult. engr. of Paving Comn.

W. Va., Fayetteville—Oct. 16, by Fayette Co., grading and paving with concrete or asphalt 4 mi. Montgomery-Deepwater Rd., Project F K 40, 18 ft. $120,000. H. R. Anderson, Fayetteville, engr.

W. Va., Huntington—Oct. 8, resurfacing about 0.8 mi. 8th St., 4th and 3rd Aves., 30 ft., concrete or brick. $25,000. A. B. Maupin, city engr.

W. Va., Parkersburg — Oct. 9, paving about 4 mi. Market, 17th, 20th, 15th, 13th, Andrew, Lulu, Liberty, 16th, Latrobe, 25th, Wood and Laird Sts., 16-20 ft., plain concrete. $200,000. J. V. Dunbar, city engr. Noted July 19.

W. Va., West Union—Oct. 13, by Doddridge Co., grading etc. about 1 mi. road from Northwestern Turnpike to Cabin Run (Central Dist.), also about 1 mi. Bluestone-Fall Run Rd. (West Union Dist.), both 18 ft. $50,000.

Fla., Inverness—Oct. 9, by Citrus Co. 64,000 cu.yd. grading and 160,000 sq.yd. paving. E. V. Camp, Jacksonville, engr.

Fla., Tavares—Oct. 15, by Comrs. Lake Co., sand clay surfacing 10.75 mi. Rd. No. 3, Group B, $32,250; 12.18 mi. road Group D, $36,500; 14.5 mi. Rd. 1B and 2 in Group B, $43,000; 10.08 mi. road Group C, $30,000; 14.55 mi. road Group E, $43,500. G. E. Heller, Tavares, engr. Noted Aug. 23.

Miss., New Albany—Oct. 23, by Union Co Courthouse, grading and gravel surfacing 8.812 mi. Federal Aid Project 122, 18 ft. $68,842. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Tennessee—Oct. 19, by Tennessee Dept. Highways, Nashville, bituminous macadam surfacing 13 mi. State Aid Highway 132, 16 ft., Knox Co., 3.3 mi. State Aid Project 133, 16 ft., Jefferson Co., 11 mi. State Aid Project 137, 14 ft., Marion Co., road from Maryville to Knox Co. line, State Aid Project, 141, 16 ft., Blount Co., 13½ mi. Federal Aid Projects 24 and 72, 16 ft., Marion Co.; grading 19 mi. State Aid Project 140, 20 ft., Meigs Co.; grading, gravel and chert surfacing 11.86 mi. Federal Aid Project 99, 16 ft., Wayne Co. J. G. Creveling, Nashville, highway comr.

Ohio—Oct. 16, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 60.887 mi. roads in Adams, Allen, Ashtabula, Cuyahoga, Fairfield, Greene, Hamilton, Jefferson, Lorain, Medina, Richland, Trumbull, Tuscarawas and Williams Counties; grading 8.771 mi. roads in Mercer and Williams Counties. A. V. Donaheys, dir. highways.

O., Barberton — Oct. 10, by A. Baylor, serv. dir., brick paving 1.5 mi. Hopocan Ave., 40 ft. $40,000.

Michigan—Oct. 10, by State Hy. Dept., Lansing, grading and surfacing 5.421 mi. State Trunk Line Rd. 40-6, Sect. B, Van Buren Co., 37,332 cu.yd. excav., 51,109 sq. yd. gravel. F. F. Rogers, state comr.

Michigan—Oct. 17, by State Hy. Dept., Lansing, grading and surfacing 6.304 mi. State Trunk Line Rd. 55-10, Roscommon Co., 46,136 cu.yd. excav., 59,174 sq.yd. gravel. F. F. Rogers, state comr.

Ill., Libertyville—See "Bridges."

Ia., Waterloo—Oct. 16 by Auditor Black Hawk Co., paving Primary Rd. 40, north and south across county and between here and Hudson. Iowa Hy. Comn., Ames, engrs.

Minn., Red Wing—Oct. 9, by C. H. Meyer, aud. Goodhue Co., 5.2 mi. Job 2401, 93,553 cu.yd. excav., 11 monolithic culverts, 478 cu.yd. concrete; 2 mi. Job 2402, 43,951 cu.yd. excav., 200 ft. wooden pile and deck span bridge. $30,000. J. A. Prior, co. engr.

Minn., St. Paul—Oct. 9, by H. W. Austin, city purch. agt., paving Lexington Ave., 12,070 sq.yd. sheet asphalt, etc., $33,000; Minnehaha St. between Lexington and Fairview Aves., 23,008 sq.yd. 3½ in. creosoted wood blocks, 2,114 sq.yd. sheet asphalt, etc., $95,000; Minnehaha St. between Fairview and Prior Aves., 2,302 sq.yd. 3½ in. creosoted wood block, 1,057 sq.yd. vertical fibre brick. G. M. Shepard, city engr.

Tex., Center—Oct. 15, by O. H. Polley, mayor, paving various streets, 40,000 sq.yd. 6 in. concrete, 10,000 sq.yd. iron gravel base, with asphalt treatment. $125,000. Titus & Dillon, Center, engrs.

Tex., Houston—City Com. taking bids paving, (bituminous type), curbing and guttering, etc. Reisner Ave. and Buffalo Dr., to exceed $25,000. J. C. McVea, city engr.

Tex., Palestine—Oct. 10, by T. M. Campbell, Jr., aud. Anderson Co., grading, gravel and clay surfacing and bridging 6 mi. Elkhart-River City Rd., 16 ft. $50,000. E. W. Davis, co. engr.

Washington—Nov. 6, by J. Allen, state highway engr., Olympia, extending present Asotin-Anatone Highway, Asotin Co., 4 mi.; grading and gravel surfacing 2.3 mi. North Bank Highway, Skamania Co., 2.9 mi. Permanent Highway 9, Skagit Co., 11.7 mi. Inland Empire Highway, Walla Walla Co.; grading and surfacing with crushed gravel 6.7 mi. Pend O'Reille Highway, Pend O'Reille Co.; grading and surfacing with crushed rock or gravel 12.2 mi. North Central Highway, Lincoln Co.

Calif., San Francisco—Oct. 17, by Dept. Pub. Wks., City Hall, curbing, paving and laying sewers in Buchanan St., 22,091 cu.yd. cut, 4,364 sq.ft. brick and 7,715 sq.ft. asphaltic concrete pavement, etc. To exceed $30,000. M. M. O'Shaughnessy, city engr. Noted Jan. 11.

Quebec—Oct. 20, by J. L. Boulanger deputy minister Dept. Rds., Quebec, graveling 121,632 ft. St. Hyacinthe-Melbourne Highway, 18 ft., in St. Joseph, St. Hyacinthe le Confesceur, St. Liboire, St. Ephrem d'Upton, St. Andre d'Acton, Acton Vale and St. Christine Parishes. G. Henry, c/o Dept. Rds., Quebec, engr.

BIDS RECEIVED

N. Y., Brooklyn—F. D. Gallatin, pres. Park Bd., Municipal Bldg., New York, Sept. 27, grading, curbing, paving with asphalt on crete, etc., main roadway Eastern Parkway, from Cranford Co., 52 9th St., $123,715. Noted Sept. 20.

N. Y., Brooklyn—E. Riegelmann, pres. Brooklyn Boro, Boro Hall, grading, curbing, flagging and constructing ramps and steps on (1) Stillwell Ave. (2) West 12th, West 19th, West 31st and West 36th Sts. (3) West 15th, West 16th and West 24th Sts. (4) West 27th, West 28th, West 29th, West 35th and West 37th Sts., from J. G. Guinan Contg. Co., 2314 Gravesend Ave. (1) $96,661 (2) $221,589 (3) $146,130 (4) $167,293. Noted Sept. 20.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Sept. 25, grading and otherwise improving Jamaica Bay Blvd., from Patrick McGovern, Inc., 50 East 42nd St., New York. $200,082. Noted Sept. 20.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Sept. 25, repaving Jackson Ave. sheet asphalt on concrete, from Uvalde Asphalt Paving Co., 1 Bway., New York, $133,610. Noted Sept. 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Graham Ave., and paving with permanent asphalt on concrete, Ditmars Ave., from Uvalde Asphalt Paving Co., 1 Bway., New York, $26,200 and $38,800 respectively. Noted Sept. 20.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Sept. 27, repaving with sheet asphalt on concrete (1) East 18th St. (2) 19th St. (3) 58th St. (4) East 67th St. (5) East 81st St. (6) 83rd St. (7) 90th St. (8) 98th St.; repaving with 5 in. granite block on concrete (8) 138th St., From Sicilian Asphalt Paving Co., 41 Park Row, (1) $45,789; Uvalde Asphalt Paving Co., 1 Bway., (2) $15,509 (3) $13,745 (4) $9,523 (5) $19,143; Cleveland Trinidad Paving Co., Flushing, (6) $10,602; Brusstar Constr. Co., Harlem River and 150th St., (7) $36,647 (8) $11,088; Burnside Contg. Co., 270 Burnside Ave., (9) $19,929.

N. Y., New York—G. A. Whalen, comr. Dept. Plant & Structures, Municipal Bldg. Sept. 25, reconstructing pavement, curbs etc., on Manhattan approach of Williams-

Streets and Roads (Continued)

burg Bridge, from Sicilian Asphalt Paving Co., 41 Park Row, $41,962. Noted Sept. 27.

N. J., Asbury Park — State Hy. Dept., Trenton, Sept. 24, paving 21,956 sq.yd. Main St., here, Monmouth Co., sheet asphalt, from J. F. Burke, 309 Park Ave., Plainfield, 90 , engrs. est. ($115,616). Noted Sept. 6.

N. J., Haddonfield—For 2,420 lin.ft. concrete curbing, 1,440 sq.yd. concrete gutter, 11,320 sq.ft. concrete sidewalk, 4,880 sq.yd. rein.-con., etc., from W. Eisenberg, Camden, $29,356, Engrs. est. $36,000.

Maryland—State Rds. Comn., Baltimore, concrete surfacing 1.99 mi. roads in Frederick Co., Contr. F-62, from Thomas, Bennett & Hunter, Westminster, $60,816. Noted Sept. 20.

Virginia — State Hy. Comn., Richmond, paving with concrete 5.99 mi. Project F-260, Hanover and Henrico Counties, from Hurgess & Dorrier, Scottsville, $275,348, 6.4 mi. Project F-180-A, Northampton Co., from Phillips & Neal, Hurlock, Md., $205,023; paving with bituminous macadam 3.2 mi. Project S-142-D, Appomattox Co., from Ford & Harvey, Lynchburg, $105,859, 1.1 mi. Project S-330, Wise Co., from W. H. Meadows, Coeburn, $57,078, 7.4 mi. Project S-297, Albemarle Co., from Burgess & Atkisson, Scottsville, $338,328; topsoiling 4.2 mi. Project S-172-B, Buckingham Co., from Perkins & Barnes, Blackstone, $17,022; grading 9.5 mi. Project S-306, Russell Co., from Snead & St. Martin, Norton, $156,263; graveling 7.1 mi. Project S-319, Isle of Wight Co., from Battershill & Goode, Virgilina, $138,704; 141 ft. steel and rein.-con. bridge over south fork Roanoke River, near Elliston, Project S-342, Montgomery Co., from R. W. Curtis, Lynchburg, $13,016; 32 ft. rein.-con. bridge over Creek near Chilhowie, Project S-334, Smyth Co., from Luten Bridge Co., Knoxville, Tenn., $5,639. Noted Aug. 31.

Miss., Carrollton—Carroll Co. gravel surfacing 8.047 mi. Federal Aid Project 148, 16 ft., from McElwrath & Rogers, Grenada, $116,977. Noted Aug. 30.

La., New Orleans — Comn. Council received more than 500 bids from contractors for paving and subsurface draining 46 streets included in 1924 paving program. Details later. Noted Aug. 9.

Kentucky—State Hy. Dept., Frankfort, Sept. 26, constructing and surfacing 6.502 mi. Mt. Sterling-Owingsville Rd., 18 ft., Federal Aid Project 98, Montgomery Co., concrete, and 6.297 mi. Owingsville-Mt. Sterling Rd., 18 ft., State Project 47, Sect. A, Bath Co., from Gradison Constr. Co., 701 1st Natl. Bank Bldg., Cincinnati, O., $220,190 and $269,763 respectively; 11 mi. Louisville-Paducah Rd., 16 ft., State Project 8, Sect. D, Hancock Co., from Corum Bros., Madisonville, $69,184; 14.421 mi. Owenton-Carrollton Rd., 14 ft., State Project 59, Sect. A, Owen Co., from Muir & Welch, Nicholasville, crushed limestone $320,456, Kentucky Road Oil Co., Frankfort, oil $17,789; 14.57 mi. Whitley City-Somerset Rd., 16 ft., State Project 22, Sect. D, McCreary Co., from Connolly Constr. Co., Somerset, $479,289, surface treating same road from Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, oil $20,140; constructing 10.7 mi. Georgetown-Cynthiana Rd., 14 ft., State Project 58½, Harrison Co., waterbound macadam, from G. W. Vanderen, Cynthiana, $59,086; grading, etc., 11.509 mi. Pineville-Harlan Rd., 24 and 28 ft., State Project 6, Sect. A, Bell Co., from J. S. Tusk Co., Knoxville, $227,567; 0.333 mi. Marion-Princeton Rd., 24 and 28 ft., State Project 10, Sect. B, Crittenden and Caldwell Counties, from Tusk Constr. Co., Knoxville, $4,585; 5.067 mi. Whitesburg-Hazard Rd., 24 and 28 ft., State Project 4, Sect. A, Letcher Co., from Codell Constr. Co., Winchester, $139,484. Noted Sept. 13.

O., Akron—Bd. Pub. Serv. curbing and paving (1) Brown St. (2) North Main St. (3) Glendale Ave. with (a) standard brick, cement fill, 6 in. base (b) standard brick, asphalt fill, 6 in. base (c) sheet asphalt, brick gutter, Trinidad asphalt fill, 8 in. base (d) sheet asphalt, brick gutter, Texaco asphalt fill, 8 in. base (e) sheet asphalt, brick gutter, Mexican asphalt fill 8 in. base (f) asphalt willite, brick gutter, Trinidad asphalt fill, 8 in. base (g) asphalt willite, brick gutter, Texaco asphalt fill, 8 in. base (h) asphalt willite, brick gutter, Mexican asphalt fill, 8 in. base (i) sheet asphalt, brick gutter, Trinidad asphalt fill, 7 in. base (j) sheet asphalt, Texaco asphalt fill, 7 in. base (k) sheet asphalt, brick gutter, Mexican asphalt fill, 7 in. base (l) asphalt willite, brick gutter, Trinidad asphalt fill, 7 in. base (m) asphalt willite, brick gutter, Texaco asphalt fill, 7 in. base (n) asphalt willite, brick gutter, Mexican asphalt fill, 7 in. base from T. E. McShaffrey Constr. Co., 171 South Forge St., (1a) $285,825 (1b) $290,005 (1c) $276,975 (1d) $271,905 (1f) $282,045 (1g) $276,975 (2c) $148,985 (2d) $146,465 (2f) $151,505 (2g) $148,985 (3a) $65,341 (3b) $66,177 (3i) $62,538 (3j) $61,692 (3l) $63,384 (3m) $62,538; McAlonan Bros., 197 West Buchtel Ave. (2a) $170,538 (2b) $172,558 (3a) $64,481 (3b) $65,317. Noted Sept. 13.

O., Cleveland—Grading, curbing and paving (1) West 3rd St. (2) Braddock Ave. (3) East 115th St. (1-3 inclusive) involve 7,230 sq.yd. asphalt on concrete, etc. (4) East 9th St. from Lakeside to Prospect Aves. (5) East 9th St. from Prospect to Woodland Aves. (6) Rosecliff Rd. (4-6 inclusive) involve 7,290 cu.yd. earth excav., 1,990 sq.yd. vitr. brick, 11,970 sq.yd. asphalt, 13,960 sq. yd. concrete base, etc., from Cleveland Trinidad Paving Co., The Arcade, (1) $12,917 (4) $69,149 (5) $50,672; H. G. Herring, Pavers Exch., (2) $7,896; Bentley Bros., Union Bldg., (3) $15,252; Gould & Maybach, 16311 Sarenec Rd., (6) $12,607. Noted Sept. 6.

O., Cleveland—Grading and paving Seine Court and West 41st St., from Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., $3,050 and $14,199 respectively; Hood Ave. and West 23rd St., from W. E. McHugh, West 73rd St. and Wheeling & Lake Erie R.R., $20,350 and $14,793 respectively; West 88th St. from Highway Constr. Co., 903 Lorain County Bank Bldg., Elyria, $17,762; Parkview Ave. from A. M. Pejsa Paving Co., 3161 Derbyshire Rd., $27,258.

Tex., Alpine—Brewster Co. grading, surfacing with gravel and caliche 15.7 mi. State Highway 12, 18 ft., from Womack Constr. Co., Sherman, $72,119, engrs. est. $88,635 incl. engineering and contingencies; 8.53 mi. State Highway 12, 18 ft., from Mitchell Constr. Co., Abilene, $37,517, alternate $38,927. Noted Sept. 6.

Tex., Conroe—Montgomery Co. grading and surfacing with local gravel 7.92 mi. State Highway 19, 16 ft., from Brown & Root, Georgetown, $25,084; engrs. est. $32,000; grading and surfacing with shipped gravel 14.21 mi. State Highway 19, 16 ft., from J. D. George, Lufkin, $151,831, engrs. est. $160,000. Noted Sept. 6.

Tex., Mt. Pleasant — Titus Co. grading and gravel surfacing 1.91 mi. State Highway 35, 16 ft., and 4.13 mi. State Highway 1-A, 12 ft., from J. D. George and C. C. Kerr, Lufkin, $19,411 and $34,088 respectively, engrs. est. $30,000 and $61,854 respectively. Gravel to be furnished by county.

Nevada—State Hy. Dept., Carson City, grading, building culverts, placing selected material surface and building concrete and steel overhead railroad crossing between Keystone and East City limits of Ely, Projects 25 and 70, White Pine 2-C-3, from Kroft & Bundy, Ogden, Utah, $81,936. Noted Sept. 13.

California—State Hy. Comn., Sacramento, gravel surfacing 12.7 mi. road east of Chester and 3 mi. east of Westwood, 19,850 cu.yd. gravel or broken store surface, from T. H. and M. C. Polk, Chico, $3.19 per cu.yd., total $63,322. Engrs. est. $67,490. Noted Sept. 6.

Calif., Glendale—Improving Colorado St., from Heuser-Packard Co., and C. Thompson, Loew State Bldg., Los Angeles, 538,898 sq.ft. grading $0.06 per sq.ft., 19,473 sq.ft. gutter $0.25, 519,516 sq.ft. 1½ in. National surface on 4 in. asphaltic concrete $0.23, 23,452 lin.ft. concrete curb $0.50, 5,558 sq. ft. walks $0.17, etc., total $215,786. Noted Sept. 13.

Calif., Los Angeles—Grading, paving and building storm and sanitary sewers in Childs Ave. between Los Feliz Blvd. and Scotland St., from R. N. Nikcevich, P. O. Box 4, Long Beach, grading (lump sum) $48,582,580 ft. 6 in. concrete pavement $0.235, 4,750 ft. bituminous pavement $0.15, 28,856 lin.ft. curb $0.66, 59,011 ft. cement walk $0.21, storm drains (lump sum) $94,000, sanitary sewer (lump sum) $59,000, 12,120 ft. house sewers $1.75, etc.

Calif., Los Angeles—Los Angeles Co., grading, paving, etc., 21 mi. Palmdale-Pallett Creek Rd., 46,389 cu.yd. rock and 97,800 cu.yd. earth excav., 110,924 lin.ft. shaping roadbed, 76,483 sq.yd. disintegrated granite pavement, 100,293 sq.yd. 6 in. asphaltic concrete, 5,158 lin.ft. 15-48 in. corrugated culvert pipe, etc., from Southwest Paving Co., Washington Bldg., $460,000.

Calif., San Diego—Improving Maryland St. from Madison to Van Buren Sts., (1) 73,693 sq.ft. 1½ in. Warrenite on 4 in. cement concrete (2) 31,174 sq.ft. 1½ in. Warrenite on 2½ in. black base (3) 200.9 sq.ft. cement concrete sidewalk (4) 297.5 lin.ft. cement concrete curb, from California Constr. Co., Union Bldg., (1) $0.25 (2) $0.21 (3) $0.25 (4) $0.80, etc., total $25,393; G. R. Daley, 4430 Boundary St., (1) $0.245 (2) $0.235 (3) $0.24 (4) $0.75, etc., total $25,818.

Calif., Santa Cruz—Santa Cruz Co. improving Marks and Slaughter House Rds., et al., 938 cu.yd. earth and 4,555 cu.yd. rock excav., 1,358 lin.ft. 10-30 in. corrugated pipe, etc. from J. L. Conner, P. O. Box 565, $27,694.

Que., Montreal — Asphalt pavements on 4,700 sq.yd. Fabre, 9,500 sq.yd. Marquette and 4,100 sq.yd. Garnier Sts., from Quinlan, Robertson & Janin, Ltd., 50 Notre Dame St. W., $22,615, $45,745 and $20,225 respectively; 4,550 sq.yd. Parthenais Ave., from B. Brault, Ltd., 2855 Rosemount Blvd., $18,052; concrete sidewalks on 2,240 sq.yd. 9th Ave. and 2,500 sq.yd. Hector St., from F. Lapan, 601 Lacordaire St., $8,719 and $11,180 respectively; 3,250 sq.yd. 8th and 1,340 sq.yd. 5th Aves., from Leger & Lamoureaux, St. Denis Bldg., $12,470 and $5,180 respectively; 1,200 sq.yd. Lajeunesse St., from Rondou, Corlier & Co., 3506 Christophe Colomb St., $7,295. Noted Sept. 6.

CONTRACT AWARDED

Connecticut—State Hy. Dept., Hartford, resurfacing and repairing 2 mi. highway in Simsbury and 2 mi. in Hazardville, 18 ft., bituminous macadam, to Immick Co., State St., Meriden, Engrs. est. $60,000.

N. J., Newton—Bd. Freeholders Sussex Co. graveling 1 mi. Fredon-Stillwater Rd., and portion Middleville Rd., to Richards & Gaston, 110 South Bridge St., $39,226. Noted Sept. 6.

N. J., Newark — T. L. Raymond, dir. Dept. Streets and Pub. Impvts., City Hall, to A. Milmoe, 83 Littleton Ave., asphalt paving Port Newark Development and oblong granite block pavng Commerce St., $214,975 and $41,518 respectvely.

N. J., Point Pleasant Beach—Constructing concrete pavement and curbs on Arnold and Bay Aves., also storm drains and appurtenances in Railroad Sq., Cincinnati and Arnold Aves., to F. Van Roden, 154 Boiling Spring Ave., East Rutherford, $46,554 Noted Aug. 30.

Pennsylvania—State Hy. Dept., Harrisburg, 16,926 sq.yd. Route 149 Berks Co., to Ambler-Davis Co., Harrison Bldg., Phila., $71,070, 10,060 sq.yd. Route 138 Lancaster Co., to Swanger Fackler Constr. Co., 2nd and Canal Sts., Lebanon, $43,580, 9,820 sq.yd. Application 2557 Northampton Co., to General Paving Co., B & B Bldg., Allentown, $42,352, 4,009 sq.yd. Route 52 Somerset Co., to C. J. Newman & Co., Boswell, $22,010, 14,441 sq.yd. Application 2002 York Co., to W. C. Guncheon & Co., Masonic Bldg., Harrisburg, 57,602, all foregoing rein.-con.; 16,052 sq.yd. asphalt and 6,549 sq.yd. rein.-con. on Route 131 Delaware Co., to Highway Constr. Co., Phila., $100,074; 1,170 sq.yd. vitr. brick and 3,450 sq. yd. rein.-con. on Route 117, Fayette Co., to J. I. Dick, Scottdale, $37,742. Noted Sept. 20.

Pa., New Castle—Paving Park Ave. with concrete to Woods & Golder Co., New Castle, $25,009.

Pa., Pittsburgh—Grading paving and curbing Westmoreland St., to Booth & Flinn, Ltd., 1942 Forbes St., $32,087; repaving Rosedale St., to T. Cronin Co., South 18th St., $26,925.

Pa., Waynesburg—Comrs. Greene Co., 2 mi. concrete road from here to Spraggs, to Reed & Moore, Waynesburg, $108,729.

W. Va., Huntington—Paving with brick on concrete 7 mi. 7th Ave. and 4th St., to A. Trainor, 1128 9th Ave., $25,103.

N. C., Thomasville—Bitulithic paving 40,000 sq.yd. streets, to R. J. Lassiter & Co., Citizens Bank Bldg., Raleigh, $75,000.

S. C., Aiken—Comrs. Aiken Co. construction 8.2 mi. sand clay road between survey stations 1108-87 and 1544-55 near Monetta, State Route 39, to T. E. Hook, New Brookland, $22,970. Noted Aug. 23.

S. C., Dillon—Comrs. Dillon Co., 6.9 mi. sand clay road between here and North Carolina line, State Route 23, Federal Aid Project 209, to T. E. Hook, New Brookland, $36,362. Noted Aug. 23.

Alabama—State Hy. Dept., Montgomery, grading and surfacing with gravel, 9 in. loose, 9.765 mi. road from Riderwood to Mississippi State line, Federal Aid Project 134, Choctaw Co., to M. H. Gardiner, 1502 18th St., Columbus, Ga., $193,865.

Miss., Canton—To Lawrence Constr. Co., Canton, 100,000 sq.ft. Kentucky rock on 6 in. concrete 2.59 per sq.yd., excav. $0.60 per cu.yd., curb and gutters $0.90 per lin. ft., etc.

Ky., Middlesboro—Rock asphalt paving East Cumberland Ave. and portion Fitzpatrick Ave., to Humbard Constr. Co., Knoxville. Engrs. est. $30,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 0.864 mi. Sect. "F-1" Lima-Spencerville Rd., bituminous macadam asphalt, Allen Co., to Agerter & Scott, Lima, $19,501; 3.437 mi. Sect. "N-1" "N-3" "Maumee," Toledo-Napoleon Rd., 3.437 mi. extra width Toledo-Napoleon Rd., 1.4164 mi. Toledo-Napoleon Rd., part of "Maumee," and 1,464 mi. Toledo-Napoleon Rd., part of "Maumee," Lucas Co., sheet asphalt, to Dorsey Constr. Co.,

Streets and Roads (Continued)

Findlay, $186,055, $112,254, $80,077 and $61,440 respectively; 0.734 mi. Sect. "Covington" Piqua-Covington Rd., and extra width 0.734 mi. Sect. "Covington" Piqua-Covington Rd., Miami Co., plain concrete, to Wapakoneta Cement Block Co., Wapakoneta, $19,512 and $20,519 respectively; 0.75 mi. Sect. "K-2" McConnellsville-Caldwell Rd., Morgan Co., asphalt macadam, to E. H. Cliffton, Eaglesport, $31,175; 1.596 mi. Sect. "P" Cleveland-Massillon Rd., Stark Co., brick incl. brick, to W. E. Burk & Sons, Akron, $77,671. Noted Sept. 20.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 3 mi. Sect. "M" Barnesville-Bellaire Rd., Belmont Co., bituminous macadam tar, to H. F. Dougherty, Steubenville, $100,433; 2.93 mi. Sect. "P-2" Cincinnati-West Union Rd., Brown Co., waterbound macadam, to Craig & Jordan, Blanchester, $14,156; 6,122 mi. Sect. "Q" Cincinnati-West Union Rd., Brown Co., waterbound macadam, to Bashford & Day, Peebles, $181,851; 3.17 mi. Sects. "D-J-L-2" Archbold-Fayette Rd., Fulton Co., waterbound macadam, to La Boiteaux & Hayes, Toledo, $22,670; 0.626 mi. Sects. "H-G-J-K" Cleveland-Meadville Rd., Geauga Co., concrete and gravel, to J. A. Stein, Niles, $12,846; 5.287 mi. Sect. "B-1" Toledo-Napoleon Rd., Kentucky rock asphalt, and 0.65 mi. Sect. "Napoleon" Toledo-Napoleon Rd., rein.-con., both Henry Co., to A. Langenderfer, Toledo, $119,744 and $20,899 respectively; 2.494 mi. Sect. "A" Germantown-Middletown Rd., Montgomery Co., rein.-con., to Bigler Bros., Middletown, $60,491; 2.849 mi. Sect. "B" Portsmouth-Jackson Rd., bituminous macadam, tar, and 0.681 mi. Sect. "C" of above road, brick, both Scioto Co., to Mountain & Cloran, Ironton, $91,453 and $30,539 respectively; 1.561 mi. Sects. "C and D-1" Massillon-Wooster Rd., Stark Co., brick, to G. Hoadley, Canton, $60,857; 0.215 mi. Sect. "E" Coshocton-Mt. Vernon Rd., and 0.393 mi. Sect. "A" Coshocton-Plainfield-Cambridge Rd., both Coshocton Co., rein.-con., to McCleary & McGregor, West Lafayette, $6,185 and $10,666 respectively; 0.912 mi. Sect. "Bloomingburg" Washington-London Rd., Fayette Co., brick on macadam, to W. H. Ringwold, Chillicothe, $42,128; 2.367 mi. Sect. "G-1" Cadiz-Carrollton Rd., Harrison Co., bituminous macadam, to Billiter & Oliver Bros., Cincinnati, $75,240; 2.508 mi. Sect. "B" Youngstown-East Liverpool Rd., Mahoning Co., bituminous macadam, tar, to G. A. Gialdini, Youngstown, $48,448; 2.158 mi. Sect. "L-2" McConnellsville-New Lexington Rd., Morgan Co., asphaltic macadam, to N. B. Koffroth, Richwood, $55,349; 1.09 mi. Sect. "A" Greenville-New Paris Rd., Preble Co., Kentucky rock asphalt, to H. W. Curry, Eaton, $31,720; 1.712 mi. Sect. "B" Fremont-Republic Rd., Sandusky Co., tar macadam, to N. B. Putnam, Van Wert, $43,838; 2.01 mi. Sect. "A" Fremont-Republic Rd., Seneca Co., tar macadam, to Putnam & Shindeldecker, Van Wert, $43,419; 1.49 mi. Sect. "I," 2.7 mi. Sect. "J," 3.44 mi. Sect. "K," 1.7 mi. Sect. "L" and 1.39 mi. Sect. "M" Cleveland-Massillon Rd., Summit Co., brick and rein.-con., to McArthur Constr. Co., Kenton, $66,625, $97,610, $139,745, $62,059 and $65,987 respectively; grading and placing loose limestone on 0.208 mi. Sect. "H" Marysville-Marion Rd., Union Co., to Bashford & Day, Peebles, $143,611; grading, etc., 4.368 mi. Sect. "A" and 5.475 mi. Sect. "E" Toledo-Grand Rapids Rd., Wood Co., to W. G. Reimund, Holgate, $30,595 and $35,759 respectively; grading and brick paving 1.203 mi. Sect. "I" Akron-Wooster Rd., Wayne Co., to Holmes Constr. Co., Wooster, $50,423; resurfacing Sects. "F-1" and "E-3" Bowling Green-Findlay Rd., Wood Co., and paving 3.127 mi. Sect. "E" Savannah-Vermillion Rd., Huron Co., both Kentucky rock asphalt, to J. W. McDowell, Ottawa, $19,486 and $30,655 respectively; concrete curbing 1 mi. Sect. "L" Bucyrus-Marion Rd., Crawford Co., to O. C. Morrow, Crestline, $4,577. Noted Sept. 20.

O., Canton—Paving with asphalt 0.5 mi. Troy Pl., N.W. 30 ft., and 0.5 mi. 17th St. N.W., 50 ft., to Burd Constr. Co., 1043 Spring Ave. N.E., $30,968 and $41,574 respectively. Engrs. est. $32,000 and $45,000 respectively.

O., Canton—Stark Co., improving .596 mi. Cleveland-Massillon Rd., 20 ft., brick, to W. E. Burke & Son, Akron, $77,671. Engrs. est. $70,699.

O., Elyria—Paving about 1 mi. North Ridge River Rd., 40 ft., brick, to Patterson Constr. Co., Lorain, $37,824. Engrs. est. $40,000.

O., Marion—Marion Co., grading and resurfacing 4.25 mi. Sects. A, B, C and D Richland Rd. 132 and portion of Columbus-Sandusky Rd. I. C. H. 4, to F. F. Walton & Co., Upper Sandusky, $26,323, engrs. est. $29,000, 2.85 mi. Sects. E and F Richland Rd. 132, to D. L. Brady, Marion, $25,340, $30,000, 26,987 yd. Sect. A. Caledonia Northern Rd., to Molloy and Seckel, Marion, $28,942, $30,000, all 20 ft., 5 in. macadam.

Michigan—State Hy. Dept., Lansing, grading and surfacing 9.8 mi. Federal Aid Project 105, Sect. A, Iron Co., to J. Long, Iron River, 1,637 cu.yd. excav. $0.70, 93,429 sq.yd. one course gravel Class A, $0.53, etc., total $66,051.

Wis., Milwaukee—Dept. Pub. Wks. paving etc., to Czerwinski Constr. Co., 378 16th Ave., 7,180 sq.yd. concrete, etc. American, Illinois, Indiana and 10th Aves. $32,480, 6,818 sq.ft. cement walks 2nd Ave. $2,216; to A. E. Retzlaff, 948 4th St., 3,412 sq.yd. concrete pavement, etc. Booth St., $12,717; to Badger Constr. Co., 97 Wisconsin St., 3,802 sq.yd. asphalt, etc. Clarke, Dakota and 46th Sts., $21,922, 4,024 sq.yd. asphaltic-concrete Vliet St., $8,264; to Schwerin Bros., 50 Lee St., 2,703 sq.yd. concrete in alleys $8,099; to J. Bluhm & Sons, 1298 Achilles St., 6,482 sq.yd. concrete, etc. alleys, $22,923. Noted Sept. 20.

Wis., Milwaukee—Paving, etc., 3,097 sq.yd. Delaware Ave. and Holton St., asphalt, to Badger Constr. Co., 97 Wisconsin St., $12,056; 1,439 sq.ft. cement walks West 24th St., to F. Schomann, 770 28th St., $681; 1,795 sq.yd. concrete in various alleys, to J. Bluhm & Sons, 1298 Achilles Pl., $5,058; 1,674 sq.yd. concrete in various alleys, to Bodeman Constr. Co., 691 48th St., $5,954; 1,481 sq.yd. concrete in alley, to Milwaukee General Constr. Co., 427 Mitchell St., Milwaukee, $4,512.

Ia., Oskaloosa—Grading, paving, curbing etc., to McCarthy Impvt. Co., 802 Kahl Bldg., Davenport, 7,121 sq.yd. pavement $2.84, 5,492 lin.ft. concrete curb and gutter $0.84, grading $0.70 per cu.yd. Noted Sept. 13.

Minnesota—State Hy. Dept., St. Paul, Sept. 26, 18 mi. State Project 6-39, Sect. 1, Federal Aid Project 332, 190,000 cu.yd. excav., Div. A, to M. Barrett, St. Cloud, $32,719, Div. B to S. Enebak, Warren, $29,788; 27 mi. State Project 4-27, Federal Aid Project 318, 344,000 cu.yd. excav., to D Ryan, Marshall, $0.30 per cu.yd.; 13 mi. State Project 2-24, Federal Aid Project 129, 20,500 cu.yd. gravel surfacing to Stevens Bros., Piedmont Bldg., St. Paul, $46,580, 16 mi. State Project 23-22, Federal Aid Project 243, 18,700 cu.yd. gravel surfacing, to C. Beyer, Willmar, $21,790. Noted Sept. 6.

Minn., Le Sueur Center—Le Sueur Co., Job 2303, State Rd. 5, 80,105 cu.yd. earth, 1,857 cu.yd. loose rock and 2,348 cu.yd. solid rock excav., 194,978 cu.yd. overhaul etc., to J. Sampson, Faribault, $26,000; 245 cu.yd. concrete culverts to Northfield Iron Co., Northfield. Noted Sept. 6.

Kan., Coffeyville — Paving, etc., various streets involving 46,300 sq.yd. pavement, 25,356 lin.ft. combination curb and gutter, 18,000 cu.yd. earth excav., 3,425 lin.ft. 36 and 48 in. storm sewer, 4,182 lin.ft. 18-24 in salt glazed clay pipe, etc., to C. Stanton, 6th and Kiowa Sts., Leavenworth, $210,826 Engrs. est. $200,000.

Kan., Ft. Scott — Bourbon Co. concrete paving, curbing, guttering and grading Federal Aid Project 117, through Bronson, 9,427 lin.ft. concrete curb and gutter, 16,295 sq.yd. concrete, 4,940 cu.yd. earth excav., to Harrison Eng. Constr. Corp., Ellicott Sq., Buffalo, N. Y., $54,520. Noted Sept. 20.

South Dakota—State Hy. Dept., Pierre, improving roads **(F. A. P. 150 A, Fall River, means Federal Aid Project 150 Sect. A, Fall River Co.)** grading 4.29 mi. F. A. P. 150 A, Fall River to S. L. Smith, Henry, Neb., $50,403, 7.57 mi. F. A. P. 148 Dewey, to Stevens Bros., St. Paul, Minn., $37,000; rein.-con. bridges and culverts on F. A. P. 115 A, Minnehaha and F. A. P. 159, Fall River to H. Pickus Constr. Co., 309 Mass Bldg., Sioux City, Ia., $18,133 and $43,566 respectively, State Aid Project 79 Jackson, to E. B. Davis, Kadoka, $4,725, F. A. P. 148 Dewey to W. C. Lippert, Timber Lake, $6,086; graveling 9.85 mi. F. A. P. 126 Kingsbury and 13.1 mi. F. A. P. 61 A, Brule, to C. J. Wheelock, Pierre, $15,757 and $20,757, 22 mi. F. A. P. 16 and 154, Hughes and 16 mi. F. A. P. 156 Hughes and Hyde, to Wagner & Erling, Sioux Falls, $38,160 and $34,940 respectively; 13.57 mi. F. A. P. 65 Yankton, and 5.95 mi. F. A. P. 97 Clay to Stevens Bros., St. Paul, Minn., $26,990 and $10,681 respectively; 7.13 mi. F. A. P. 49, Pennington to Linton Bridge Constr. Co., Linton, $7,077, 13.27 mi. F. A. P. 88, A, Meade, to H. Pickus Constr. Co., 309 Mass Bldg., Sioux City, Ia., $25,349; 8 mi. F. A. P. 102 Lincoln, to C. H. Bierknes Constr. Co., Sioux Falls, $11,509; 13.77 mi. F. A. P. 115, Minnehaha, to Atkinson Paving Co., Brookings, $18,231; 12 mi. F. A. P. 153, Union to W. R. Larson, Sioux Falls, $47,049.

Mo., St. Louis—To Granite Bituminous Paving Co., Ry. Exch. Bldg., grading and surfacing with bitulithic on concrete, 8,775 sq.yd. California Ave., $47,273, 6,950 sq.yd. Thomas Ave., $41,003, 7,810 sq.yd. Dayton Ave., $46,017, 6,945 sq.yd. Dickson St., $42,702; to Brighton Contg. Co., 3115 McRee Ave., removing brick and resurfacing with refined asphalt 9,225 sq.yd. Hamilton St., $35,986; to W. Hoffner, 715 South Vandeventer St., grading and surfacing with cut granite blocks 4,410 sq.yd. Madison St., $37,512. Noted Sept. 20.

Ark., Little Rock—Resurfacing various city park roads, 24,000 sq.yd. asphalt, to T. F. Conley Constr. Co., Little Rock. Engrs. est. $36,000.

Tex., Abilene—Bitulithic paving on black base, curbing and guttering 6 blocks Mulberry St., to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $2.50, to exceed $25,000. Noted May 17.

Tex., Austin — Travis Co. grading and bridging 7.92 mi. State Highway 20 A, 24 ft., to H. J. Evans, 500 West 15th St., Austin, $39,619. Engrs. est. $38,473 incl 10% for engineering and contingencies. Noted Sept. 20.

Tex., Corsicana—Paving, etc. 10,000 sq.yd. various streets 2½ in. brick on 4 in. concrete, asphalt filler, to Panhandle Constr. Co., Lubbock, $3.46.

Tex., Honey Grove—Concrete paving [illegible] mi. East Market St., 27 ft., to J. C. Field Co., Denison, $30,000. Noted Sept. 6.

Tex., Houston—Asphalt paving Waugh Dr., from Buffalo Bayou to Westheimer Rd., to Smith Bros., Sumpter Bldg. Dallas, $100,087. Noted Sept. 20.

Tex., Houston—Paving Bissoner St. from Main to Graustark Sts., bituminous, $25,000. J. C. McVea, city engr.

Okla., Sapulpa—Grading and paving [illegible] blocks, 15,100 sq.yd. concrete, 6,800 lin.ft. curbing, 4,800 cu.yd. excav., to Klenglesmith Constr. Co., Drumright, $62,535.

Okla., Sapulpa—Grading and paving with 6 in. concrete 10 blocks, to D. McMasters Sapulpa, $59,502. Noted Sept. 13.

Colorado — State Hy. Dept., Denver, gravel surfacing 5.372 mi. Federal Aid Project 240, Eagle Co., to A. L. Hackett, Gypsum, $66,178, engrs. est. $67,371; gravel surfacing and bridging 0.377 mi. Federal Aid Project 241, Delta Co., to Winterburn & Lumsden, Grand Junction, $99,310, engrs. est. $118,490; grading and gravel surfacing 4.545 mi. Federal Aid Project 245A, Bent Co., to W. A. Coit & Son, Las Animas, $42,786, engrs. est. $44,911, mountain grading 5.621 mi. Federal Aid Project 224, Park Co., to M. J. Kenney, 512 Mack Blk., Denver, $54,347, engrs. est. $62,970; paving 2.463 mi. Federal Aid 252, Larimer Co., F. C. Dreher, Cooper Bldg., Denver, $84,677, engrs. est. $90,612; warrenite bitulithic paving 2.998 mi. Federal Aid Project 2-R, Las Animas Co., to Strang-Mackey Extension Co., Trinidad, $110,850, engrs. est. $104,618. Noted Sept. 20.

Nevada—State Hy. Dept., Carson City, to Strange & Vallandingham, Salt Lake City, Utah, grading, building culverts and surfacing with concrete, Project 81, between West city limits of Elko and 13th St., Elko 1-A, Contr. 88, $38,139; to Tieslau Bros., Berkeley, Calif., grading and gravel surfacing, Project 4, 3 mi. north of Holbrook and 2 mi. north of Carters, Douglas 3-B, Contr. 89, $63,276.

Wash., Seattle — Bd. Pub. Wks., to Fiorito Bros., 3950 6th St. N.W., paving East 61st St. et al., 8,050 sq.yd. 6 in. concrete, 4,360 lin.ft. concrete and 635 lin.ft. asphaltic concrete curbing, 2,000 cu.yd earth excav., $25,223, engrs. est. $24,806; 5th Ave. N.W. and 65th St., 8,340 sq.yd. 6 in. concrete, 3,830 lin.ft. concrete and 790 ft. asphaltic concrete curbing, $25,481, engrs est. $25,145. Noted Sept. 27.

Calif., Arcata—Improving 7th, 9th and H Sts., etc., to Mercer-Fraser Co., Eureka, 81,870 sq.ft. grading at $0.035, 27,935 ft. 5 in. asphaltic concrete $0.225, 42,000 sq.ft. warrenite bitulithic on 4 in. asphaltic concrete $0.225, etc., total $27,000. Noted Sept. 27.

Calif., Eureka — To Mercer-Fraser Co., Eureka, improving H St., 476,556 sq.ft. grading, 476,556 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, etc., and Fairfield St., 160,990 sq.ft. grading, 160,990 sq.ft. 1½ in. warrenite bitulithic on 2 in. asphaltic concrete, etc., $142,375 and $35,250 respectively. Noted Sept. 20.

Calif., Ft. Bragg — Improving Redwood and Laurel Sts., etc., 264,290 sq.ft. grading, 206,507 ft. 3½ in. asphaltic concrete, 57,720 sq.ft. 4½ in. asphaltic concrete, etc., to J. A. Costello, 1083 Shotwell St., San Francisco, $64,060. Noted Sept. 20.

Calif., Los Angeles—Grading, curbing and paving 5th St. between Beacon and Pacific Aves., to Griffith Co., Ry. Bldg., grading (lump sum) $140,000, 104,762 sq.ft. asphalt pavement $0.25, 10,467 sq.ft. cement concrete pavement $0.25, 197,487 sq.ft. bituminous base $0.24, 13,403 lin.ft. curb $0.70, 13,417 sq.ft. gutter $0.28, storm drains complete $31,500, sanitary sewers

Streets and Roads (Continued)

complete $10,500, 5,817 ft. house sewers $1.50, etc., total approximately $285,000.

Calif., Los Angeles—Los Angeles Co., grading, curbing, paving, etc. Clayton Ave. between Mayview and Myra Sts., to W. D. McCray, Amer. Bank Bldg., grading (lump sum) $27,000, 189,484 sq.ft. concrete pavement $0.245, 17,525 ft. curb $0.65, storm drain $1,000, etc., total approximately $88,000.

Calif., Martinez—Contra Costa Co., improving Div. 36 of county highway system, 3,800 cu.yd. embankment, 2,090 cu.yd. concrete, to Galbraith & Janes, Yuba City, $34,065. Noted Sept. 20.

Calif., Marysville—Yuba Co. graveling 3.5 mi. Woodruff School Rd., to L. A. Williams, Marysville, $2.10 cu.yd. Noted Sept. 27.

Calif., San Diego—San Diego Co. to G. R. Daley, 4430 Boundary St., paving 224,387 sq.ft. Adams Ave. in Normal Heights, 4 in. decomposed granite foundation, 5 in. cement concrete base, 1½ in. Topeka top, $.314, total $74,367; to H. G. Feraud, Detwiler Bldg., Los Angeles, paving Edgemore Rd., Marlborough, Kensington and Terrace Drives, etc., 4 in. Willite, $74,500. Noted Sept. 27.

Calif., Stockton—San Joaquin Co., improving Lower Sacramento Rd., 1,000 cu.yd. grading, 300 ton gravel, 2,700 ton asphaltic concrete, etc., to Clark & Henery Constr. Co., 38 South Sutter St., $24,270. Noted Sept. 20.

Que., Montreal—Will build 12,012 ft. asphalt pavements, 30-81 ft., on St. George Etienne Cartier Sq., Duvenay, St. James, Darling and Notre Dame Sts., $232,380, 6,009 ft. concrete sidewalks, 5-13 ft., on Sir George Etienne Cartier Sq., St. Ambroise and St. James Sts., $43,696, by day labor. Noted Aug. 30.

Que., Montreal—To Quinlan, Robertson & Janin Ltd., 50 Notre Dame St. W., asphalt pavements on 3,100 sq.yd. Old Orchard Ave. and 13,940 sq.yd. Clarke St., $11,005 and $60,044 respectively; to Sicily Asphaltum Paving Co., 60 St. Viateur St., 7,785 sq.yd. Marquette, 2,700 sq.yd. Cuviller and 1,160 sq.yd. Hutchison Sts., $34,081, $16,626 and $8,409 respectively; to Duranceau & Duranceau, 127 Hamilton St., concrete sidewalks on 1,080 sq.yd. Moreau, 500 sq.yd. St. James and 1,200 sq.yd. Hamilton Sts., $5,778, $6,885 and $7,512 respectively.

Que., St. Lambert—Paving 14,000 sq.yd. asphalt road to Quinlan, Robertson & Janin, Ltd., 50 Notre Dame St. W., Montreal, $2.10 per sq.yd., total $29,400.

Industrial Works

PROPOSED WORK

Conn., Hartford—Hartford Floor Co., 218 State St., plans 5 story warehouse, brick and steel, plain foundation, Front St. $95,000. Engineer and architect not selected.

Conn., Manchester—Buck & Sheldon, archts. and engrs., 60 Prospect St., Hartford, making plans 3 story warehouse, brick, plain foundation, here. $80,000. Owners name withheld.

N. Y., Buffalo—H. Ford, Highland Park (Detroit P. O.), Mich., plans to purchase 40 acre site here for assembling plant. To exceed $500,000.

N. Y., North Tonawanda — Tonawanda Power Co., Sweeney Bldg., having plans prepared for supply station and transformer at River Rd. and Somer St. 50,000. F. S. Wahl, supt.

Pa., Pittsburgh—Comrs. Allegheny Co., Court House, having plans prepared 2 story and basement, 70 x 330 ft. workhouse at Parkview near here. $200,000. Private plans.

Pa., Pittsburgh—J. Eichleay Jr. Co., 45 South 20th St., having plans prepared 6 story and basement warehouse, South 20th and Wharton Sts. $700,000. Private plans.

Va., Graham—Bluestone Fur Mfg. Corp. plans 2 story, 70 x 270 ft. factory. $200,000. Private plans.

Va., Richmond—W. T. Rowliegh Co., c/o W. J. Treodlean, vice. pres., 101 Liberty Ave., Freeport, having plans prepared by J. R. and E. J. Law, 1st Central Bldg., Madison, Wis., 2 story, 80 x 165 ft., warehouse and garage, brick, rein.-con. and stone plain foundation, here. $150,000.

W. Va., Huntington—Emmons-Hawkins Hardware Co., 1028 3rd Ave., plans 6-8 story, 190 x 210 ft. warehouse and office, 7th Ave. and 5th St. Architect not selected.

N. C., Ashville—N. W. Gennett Lumber Co. acquired 6,000 acre timber land in Madison Co. and will build mill and 9 mi. logging road.

N. C., Charlotte — Pyramid Motor Co., 403 North Tryon St., plans 3 story, 70 x 200 ft., concrete and steel garage. $75,000. Architect not selected.

N. C., Winston-Salem—S. C. Park and others plan 2 story, 60 x 100 ft. mica mill. $75,000.

S. C., Spartanburg—Lockwood-Greene & Co., 24 Federal Bldg., Boston, Mass., having plans prepared by their Charlotte, N. C., office, (Piedmont Bldg.), 2 story and basement, 134 x 174 ft. cotton mill and 2 story, 60 x 80 ft. picker building, brick and timber, plain foundation, here, $100,000. Will probably do work by day labor.

Ala., Birmingham—St. Louis-San Francisco R.R. Co., St. Louis, Mo. plans 2 story, 90 x 400 ft., brick freight station, here. R. C. Stephens, St. Louis, Mo., archt.

La., Baton Rouge—City voted $45,000 bonds for abbatoirs. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr.

Tenn., Pulaski — Amer. Cigar Co. soon takes bids factory. $50,000. Noted Aug. 16.

Ky., Lexington—University of Kentucky plans central heating plant for all University buildings. $250,000.

Ky., Louisville — Belknap Hardware & Mfg. Co., 2nd and Washington Sts., plans 8 story, 120 x 150 ft., rein.-con. warehouse, on river between 1st and 2nd Sts. $750,000.

Ky., Louisville—Louisville Petroleum Refining Co., Inter Southern Bldg., plans oil refinery, 2,500 bbl. capacity in West End. $300,000.

O., Bettes Corners (near Akron) — Anaconda Copper Mining Co., Akron, plans four 2 story factcory buildings, here, $500,000.

O., Cleveland—City c/o E. L. Myers, dir. Pub. Utilities, City Hall, plans brick, steel and concrete addition to light plant, etc., East 53rd St. $3,000,000. C. G. Beckwith, City Hall, engr.

O., Cleveland—Cleveland Electric Illuminating Co., Illuminating Bldg., plans generating plant addition, Avon Lake. $10,000,000. E. G. Cook, Illuminating Bldg., engr.

O., Cleveland — Fisher Bros. Co., 2323 Lakeside Ave., having preliminary plans prepared by W. S. Lougee, 500 Marshall Bldg., 2 story, brick, steel and concrete bakery, 2328 Lakeside Ave. $75,000.

O., Cleveland — Miller-Becker Co., 6411 Central Ave., had plans prepared by A. F. Janowitz, Standard Theatre Bldg., 2 story and basement, 60 x 128 ft., brick, steel and concrete garage, East 63rd St. and Central Ave. $60,000.

O., Galion—Galion Iron & Mfg. Co. plans 1 story, 50 x 160 ft. foundry. $50,000. A. Jones, Market Bldg., engr.

O., Steubenville—F. Scott having plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., Cleveland, 2 story and basement, brick, steel and concrete garage and service station, here. $100,000.

Ind., Jeffersonville—Colgate & Co., 105 Hudson St., Jersey City, N. J., plans converting old Indiana Reformatory building into factory. $100,000.

Mich., Detroit—Columbia Motor Co., 6501 Mack Ave., having plans prepared 1 story, rein.-con., brick and steel addition to factory, plain foundation, Charlevoix Ave. $100,000. Private plans.

Wis., Delavan—A. Schumacher had plans prepared by H. C. Hengels, 445 Milwaukee St., Milwaukee, 2 story and basement, 36 x 68 ft. and 20 x 62 ft., brick and concrete garage, plain foundation. $50,000.

Wis., Elcho — C. W. Fish Lumber Co. plans to rebuild 2 story, factory, brick, plain foundation, recently destroyed by fire. $75,000. Engineer and architect not selected.

Wis., Elkhorn—G. A. Van Velzer, Williams Bay, plans 2 story and basement, garage and repair shop, brick, rein.-con. and stone plain foundation, Wisconsin St. $40,000. Engineer and architect not selected.

Wis., Madison—Madison Medical Assn., c/o R. S. Ingersoll, Lakeside St., plans 2 story, 45 x 100 ft., boiler house, laundry and garage, brick, rein.-con. and steel, plain foundation. $50,000. Engineer and architect not seleeted.

Wis., Markesan—W. Dehn, having plans prepared 1 story, 50 x 90 ft., garage and repair shop, brick and tile, plain foundation. $40,000. Private plans.

Wis., Milwaukee—Hoyer Eng. Co., 281 Grove St., plans 1 story, 60 x 100 ft. machine shop, brick and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., New Lisbon—F. J. Bunker plans 2 story, garage and repair shop, brick and rein.-con., plain foundation. $40,000. Engineer and architect not selected.

Wis., New London—Wisconsin Cabinet & Panel Co. having plans prepared 2 story, 90 x 250 ft., brick, rein.-con. and steel warehouse, plain foundation. $50,000. Private plans.

Wis., Spring Valley—Pierce Auto Co. having plans prepared by J. M. Katts, Spring Valley, 1 story and basement, 50 x 75 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000.

Wis., Wauzeka—Kickapoo River Power Co., c/o E. E. Dillon, engr., Washington Bldg., Madison, making plans brick and steel hydro-electric power plant and dam, transmission line and sub stations. $50,000.

Minn., Minneapolis—Franklin Co-operative Creamery Assn., 2108 Washington Ave. N., having plans prepared by C. B. Stravs, 1043 Security Bldg., 2½ story 100 x 150 ft. barn, brick and concrete, 26th St. and 23rd Ave. S. $60,000.

Minn., St. Paul — Ford Motor Co., St. Paul, and Highland Park, Mich., having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., and Stone & Webster, 147 Milk St., Boston, Mass., 1 story, 606 x 1726 automobile plant, brick and rein.-con., here.

Tex., Austin—State Bd. of Control, Austin, having plans prepared by C. H. Page & Bros., Austin Natl. Bank, brick and concrete warehouse. $60,000.

Tex., Dallas—V. Jacoby, c/o Felton & Morgan, 111 Field St. plans 2 story, brick warehouse, Elm and Market Sts. $40,000-$50,000. Engineer and architect not announced.

Tex., Ft. Worth—Percy Garrett Motor Co., 1107 Commerce St., making plans 2 story, brick and concrete garage, plain foundation. Engineer and architect not announced.

Tex., Jacksonville—Hall Fdry. & Machine Co. plans to rebuild brick and concrete foundry, recently destroyed by fire. $50,000. Engineer and architect not announced.

Calif., Cudahy—Zellerbach Paper Co., 220 South Los Angeles St., Los Angeles, plans paper mill, here. $1,000,000-$1,500,000.

Calif., Glendale — Rogers Una-Drive Truck Corp., Los Angeles, having plans prepared by Austin Co., archts, Bartlett Bldg., Los Angeles, 1 story, 70 x 390 ft., factory, Colorado St., here. $200,000.

Calif., Long Beach—Cooper Arms Apartments having plans prepared by Curlett & Beelman, 408 Union Bank Bldg., 3 story, 100 x 150 ft., brick garage, Ocean Ave. $150,000.

Calif., Los Angeles—E. M. Fowler, 628 Metropolitan Bldg., is head of company which is having plans prepared by M. H. Merrill & Co., archts., 50 State St., Boston, Mass., 400 x 800 ft., cotton mill, brick, Valley Blvd.

Calif., Los Angeles—Roth Cigar Co., 445 South Los Angeles St., had plans prepared by O. M. Warner, Stimson Bldg., 2 story garage, brick, 16th and Bonnie Brey St. $40,000.

Calif., Madera—Central California Ice Co., Mono and P Sts., plans ice plant on 50 x 100 ft. site, E St. $40,000.

Calif., Madera—A. J. Etter et al., 409 North D St., plans ice plant, capacity 15 tons daily, 4th and E Sts. $40,000.

Calif., National City—Atchison, Topeka & Santa Fe R.R. Co., 6th and Main Sts., Los Angeles, preparing plans for new creosoting plant, here. $100,000.

Calif., Oroville—See "Waterworks."

Calif., San Francisco—Western Pacific R.R., Mills Bldg., had plans prepared 1 story warehouse, concrete, Vermont and 15th Sts. To exceed $75,000. J. W. Williams, ch. engr.

Calif., San Pedro—L. J. Harris, 1939 Gaffney St., had plans prepared by A. G. Bailey, Junior Orpheum Bldg., Los Angeles, 1 story, 50 x 150 ft. garage, brick and concrete, 13th and San Pedro Sts., here.

Que., Montreal—R. H. Blumenthal and S. Hart, 4183 Sherbrooke St. W., plans 10 story, 85 x 171 ft. plant, Mayor St. $425,000. Engineer and architect not announced.

Ont., Walkerville — Berry Bros. Inc., Walker Rd., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, Mich., 3 story and basement, 60 x 100 ft. rein.-con. and brick addition to factory, plain foundation, Walker Rd. $60,000.

BIDS DESIRED

N. Y., Astoria — Oct. 8, by Polachek Bronze & Iron Co., 480 Hancock St., rein.-con., brick and steel plant addition, plain foundation. $120,000. J. M. Berlinger, 469 7th Ave., New York City, archt. and engr.

N. J., Kearny (Arlington, P. O.)—Western Electric Co., 195 Bway., New York City, will build power plant and cable building, here. Work will be done by separate contracts under supervision of owners engineers. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York City, archts. Noted May 17.

Pa., Phila.—A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., taking bids and opens same about Oct. 10, 1 story, 400 x 920 ft. brick and steel plant, plain foundation, 63rd St., here, for Ford Motor Co., Highland Park (Detroit, P. O.) Noted Aug. 30.

Pa., Phila.—C. W. Rudisill, c/o Nelson-Pedley Co., 1615 Spruce St., taking bids 2 story, 130 x 156 ft. rein.-con., brick and steel garage, plain foundation, 55th and Sansom Sts. $200,000. Private plans.

Industrial Works (Continued)

N. C., Andrews—Oct. 24, by Mayor and Aldermen, hydro-electric plant, transmission line, dam, etc. Ludlow Engineers, Winston-Salem, engrs.; adv. E.N.-R. Oct. 6.

O., Cleveland—R. C. Patton and R. T. Hisey, 536 Engineers Bldg., taking bids 1 story, 45 x 280 ft. garage, brick and steel, East 82nd St. and Crawford Rd. $60,000. L. Skolnik, 6th St. Clair Bldg., archt. Noted Sept. 27.

O., Mansfield—Natl. Ice Co. taking bids 1 story, 41 x 60 ft. plant, brick, steel and concrete. $40,000. A. C. Bishop & Co., 830 Guardian Bldg., Cleveland, archt.

Mich., Jackson—H. L. Mead, archt., Grand Rapids, taking bids and opens same about Oct. 5, 5 story and basement, 72 x 132 ft. brick and steel addition to factory, plain foundation, for Michigan Seating Co., Jackson.

Mich., River Rouge—Oct. 10, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 1 story, 94 x 1,320 ft., 100 x 420 ft., 100 x 620 ft. and 100 x 420 ft. rein.-con., brick and steel plant, for Ford Motor Co., Highland Park, Detroit P. ( ) Noted June 21.

Ill., Chicago—L. G. Hallberg & Co., archts., 116 South Michigan Ave., receiving bids 4 story, 160 x 250 ft. factory addition, fireproof, Rockwell St., and Diversey Parkway, for Vassar Swiss Underwear Co., 2545 Diversey Parkway. $250,000.

Ill., Chicago—M. Leviton & Co., archts., 123 West Madison St., receiving bids 1 story, 125 x 127 ft. garage and store, fireproof, 921-35 North California Ave., for S. Skobel, c/o architects. $60,000.

Ill., Maywood—Ulrich & Esch, 815 North 2nd St., taking informal bids 1 story, 57 x 100 ft. garage, rein.-con., brick and stone, 5th St. $40,000. J. A. Chicar, 8 north 5th St., archt.

Wis., Milwaukee—Leiser & Holst, archts., 105 Wells St., taking bids and will open same about Oct. 8, 2 story and basement, 42 x 75 ft., rein.-con. and brick plant, plain foundation, Garfield Ave., for Milwaukee Boiled Ham Co., 901 Holton St. $50,000. Noted Aug. 2.

Minn., Bemidji—Oct. 13, by Blue Valley Creamery Co., 700 South Clinton St., Chicago, 2 story and basement, 60 x 128 ft. creamery, brick, steel and tile, here. $40,000. Fisher & Jackson, Bemidji, archts. and engrs.

Mo., St. Louis—N. B. Howard, Arcade Bldg., taking bids 2 story, 106 x 124 ft. steel and tile garage. $130,000.

Calif., Hollywood—R. H. Orr, archt., Corporation Bldg., Los Angeles, taking bids 2 story, 30 x 90 ft., concrete laundry, for Hollywood Hospital, 1322 North Vermont Street.

Calif., Los Angeles—Baldwin Motor Co., 1201 South Figueroa St., will build 4 story and basement, 75 x 200 ft. garage, rein.-con., South Figueroa St., by separate contracts under supervision of W. D. Lee, archt., Sun Bldg. Noted Sept. 13.

Calif., Los Angeles — L. R. Lurie, 315 Montgomery St., San Francisco, taking bids 2 story and basement, rein.-con., auto stage terminal, 6th and Los Angeles Sts. $200,000. Noted Sept. 13.

Calif., Oakland—Victor Talking Machine Co., Front and Cooper Sts., Camden, N. J., will build 1 and 2 story, brick and concrete factory, 78th Ave., here, by separate contracts under supervision W. Knoles, archt., Central Bank Bldg. Noted June 7.

Calif., San Francisco—D. A. Riedy, archt., Pacific Bldg., receiving bids 1 story, factory, rein.-con., 8th and Heron Sts., for M. J. Price, Flood Bldg., $45,000.

BIDS RECEIVED

Calif., San Francisco — Great Western Smelting and Refining Wks., 75 Folsom St., 1 story, 137 x 237 ft. foundry, steel, concrete and corrugated iron, Spear and Folsom Sts., general contract, from Hayes-Oser Co., Call Bldg., $50,000; steel work from Western Iron Wks., 141 Beale St. Noted Aug. 30.

CONTRACT AWARDED

Mass., Holyoke—Judd Paper Co., Race St., 3 story and basement, 90 x 100 ft brick and timber plant with concrete and steel boiler room and garage, Race St., to Casper Ranger Constr. Co., 20 Bond St. Archts. est. $125,000. Noted Apr. 26.

Conn., Hartford—Hanson Whitney Mfg. Co., 169 Bartholomew Ave., 2 story, 50 x 80 ft. factory, brick and steel, plain foundation Bartholomew Ave., to R. G. Bent Co., 118 Asylum St. Archts. est. $40,000.

Conn., New Britain—P. and F. Corbin Co., Park St., altering 3 story factory, brick, plain foundation, Park St., to W. H. Allen Co., Hungerford Court. Archts. est. $60,000.

Conn., New Haven—Connecticut Co., 22 Church St., 1 story, 68 x 208 ft. garage and machine shop, brick, concrete and steel, plain foundation, Grand Ave., to C. A. Sibley, Inc., 902 Chapel St. Archts. est. $60,000.

Conn., South Manchester — H. Stephens, 161 Center St., 1 story (ultimately 3 story) 60 x 90 ft. garage, brick, plain foundation, Center and Knox Sts., to G. W. Schieiber & Sons, South Manchester. Archts. est. $40,000. Noted Sept. 13.

Conn., Stamford—H. H. Noack, Forest St., 2 story, 40 x 125 ft. garage, brick and steel, plain foundation. East Main St., to Vuono Constr. Co., Bank Bldg. Archts. est. $60,000.

N. Y., Brooklyn—Kenmore Building Corp. c/o M. Courland, archt. and engr., 389 5th Ave., New York, will build 2 story garage, brick, steel and stone, Tillary St., here, by day labor. $50,000.

N. Y., Brooklyn—G. Merceca c/o C. P. Cannella, archt. and engr., 1163 Herkimer St., will build 1 story garage, brick, steel and stone, Norwood Ave., by day labor. $45,000.

N. Y., Brooklyn—C. Modica c/o T. Goldstone, archt. and engr., 50 Graham Ave., will build 1 story garage, brick, steel and stone, East 29th St., by day labor. $75,000.

N. Y., Buffalo—Amer. Lithographing Co., 571 Amherst St., 1 and 2 story, 340 x 400 ft., rein.-con. and brick plant, Amherst St., to Harding & Crea, White Bldg., to exceed $200,000. Noted Aug. 23.

N. Y., New York—H. Hoffman, c/o H. A. Koelble, archt. and engr., 114 East 28th St., 4 story garage, rein.-con., brick and steel, Mt. Eden Ave., to A. Niewenhous Inc., 412 8th Ave. Archts. est. $80,000.

Pa., Phila.—R. W. Hartnett Co., 1010 Race St., 3 story and basement, 49 x 93 ft. factory, 1025-1027 Cherry St., to Gill & Co., Otis Bldg., $50,000. Noted Aug. 30.

Pa., Johnstown—Penn Pub. Serv. Co., 535 Vine St., 2 story, 56 x 106 ft. garage, Find St., to Wilson Constr. Co., Johnstown Trust Bldg. Engrs. est. $70,000. Noted Aug. 30.

La., New Orleans—Front Realty Co., 623 South Front St., 2 story, 98 x 118 ft. brick warehouse, to L. F. Favret, Louisiana Bldg. $40,000. Letellier & Philips Paper Co., lessee.

La., Shreveport — W. H. Booth, c/o Jones, Roessel, Olschner & Weiner, archts., Ardis Bldg., 2 story, 80 x 294 ft. concrete and brick warehouse, Texas and Van Loan Sts., to W. H. Werner, Commercial Natl. Bank Bldg., $108,352.

Mich., Iron River—Peninsular Power Co., 102 North Carroll St., Madison, Wis., will build 1½ story, 48 x 142 ft. rein.-con., brick and steel warehouse, plain foundation, by day labor. $50,000. Mead & Seastone, Journal Bldg., Madison, engrs. Noted Aug. 30.

O., Cleveland—Hildebrant Provision Co., 3616 Clark Ave., 2 story and basement, 52 x 124 ft. factory, brick and steel, 3616 Clark Ave., to W. F. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $80,000.

O., Cleveland — P. Matzinger, archt., Caxton Bldg., 1 story, 88 x 124 ft., brick and steel factory, 6600 Sideway Ave., to Murton Bros., 9710 Vineyard Ave., for Cleveland Refrigerator Co. Archts. est. $50,000. Noted Sept. 13.

Ind., Indianapolis — S. Binghams Sons Co., 2 story and basement, 50 x 200 ft. factory, fireproof, Alabama and Merrill Sts., to F. O. Johnson, 4856 Christiana Ave., Chicago. Archts. est. $100,000.

Ill., Chicago—Goss Printing Co., 1538 South Faulina St., 4 story, 92 x 100 ft. printing plant addition, fireproof, Wood and 15th Sts., to J. W. Snyder Co., 116 South Michigan Ave. Archts. est. $250,000. Noted Sept. 13.

Ill., Chicago—Madison Realty Co., 123 West Madison St., 1 story and balcony, 75 x 110 ft., auto sales and service station, rein.-con. brick and steel, 2482-86 Milwaukee St., to H. M. Zeman Building Co., 38 South Dearborn St. Archts. est. $100,000.

Ill., Chicago — Western Wet Wash Laundry Co., 337 North Austin St., 1 story, 80 x 150 ft. laundry, rein.-con., brick and steel, Lake St. near Long St., to Neslo, Wagstad, Carlson Co., 1743 North Crawford Ave. Archts. est. $50,000.

Wis., Arlington—Arlington Canning Co., subsidiary of Cambria Canning Co., Cambria, will build 2 story, 60 x 100 ft., factory and 2 story, 60 x 150 ft. warehouse, brick and timber, plain foundation, by day labor. $50,000. Private plans.

Wis., Denmark—Dufleck Bros. will build 2 story, 62 x 104 ft., brick and timber factory, plain foundation, by day labor. $50,000. W. E. Reynolds, Roosevelt St., Green Bay, archt.

Wis., Hartford—W. B. Place & Co. will build 3 story, 40 x 82 ft., brick and steel warehouse, plain foundation, by day labor, steel, to C. Hennecke Co., 1353 North Pierce St.; Milwaukee. Archts. est. $40,000.

Wis., Portage—E. Weinke, 2 story, 50 x 70 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to H Kutzke, Portage. Archts. est. $40,000. Noted Aug. 16.

Wis., Milwaukee — Lemm Electric Co., 3324 Fond du Lac Ave., 2 story, 34 x 80 ft. battery service station, brick and concrete, plain foundation, to Brun Constr. Co., 387 Clinton St. Archts. est. $40,000.

Wis., Stratford—Stratford Canning Co., c/o F. J. Mielke, Ripon, will build 2 story, 48 x 100 ft. main building, 2 story, 60 x 128 ft. warehouse and 34 x 40 ft. power house, brick and timber, plain foundation, by day labor, here. $60,000. Private plans. Noted Sept. 27.

Minn., Minneapolis—Ralston Purina Co., 8th and Gratiot Sts., St. Louis, Mo., 5 story, 39 x 55 x 70 ft. warehouse, rein.-con., 3831-3837 Hiawatha Ave., here, general contract to Pike & Cook, 416 South 5th St. Total $40,000.

Mo., St. Louis—W. E. Rhodes, 715 Chestnut St. will build, 1 story and basement, 50 x 100 ft. rein.-con., brick and stone garage, Easton St., by day labor. $40,000. Rhodes & Clark, 6240 Delmar Blvd., archts.

Mo., St. Louis—Wabash Ry. Co., Ry. Exch. Bldg., addition to repair shop, 7th St., to T. B. Smith, Decatur, Ill. Engrs est. $175,000.

Ark., Osceola—Brown & Billings Co. will build 2 story, brick, stone, slow combustion type, ice plant, plain foundation, by day labor. $50,000. F. G. Proutt, Rand Bldg., Memphis, Tenn., engr. and archt.

Tex., Ft. Worth — Edrington Investment Co., 13th and Lamar Sts., 2 story, concrete garage, plain foundation, to Butcher & Sweeney, 806 Taylor St., $115,000.

Tex., Ft. Worth—Texas Steel Mills will build mill, South Hemphill St., by day labor. $80,000. J. F. Foster, supt. constr. and genl. mgr.

Wash., Seattle—Seattle Ice Cream Co., 4th and Atlantic Sts., 2 story, 120 x 186 ft. factory and office, rein.-con., 4th and Atlantic Sts., to Grant Smith Co., Henry Bldg., $150,000. Archts. est. $150,500.

Calif., Alhambra — Southern California Edison Co., 306 West 3rd St., Los Angeles, will build warehouse, shops, sheds, etc., here, by day labor and sub contracts. $500,000-$600,000. Private plans.

Calif., Fresno—Independent Paper Stock Co., 3035 Butler St., 1 story, hollow tile and concrete factory and warehouse, to K. E. Parker Co., Clunie Bldg., San Francisco, $40,000.

Calif., Los Angeles—California Milling Co., c/o Hamm & Grant, Inc., archts., Ferguson Bldg., will build 5 story mill and 2 warehouse, both rein.-con., 55th and Alameda Sts., by day labor. $150,000. Noted July 19.

Calif., Los Angeles—Gibson & Goodspeed, 2 story, 62 x 225 ft., rein.-con. garage, Selma Ave., to R. I. Edward Building Co., 6330 Hollywood Blvd., $50,000. Noted Oct. 4.

Calif., Los Angeles—Mission Candy Co., 1 and 2 story, 50 x 153 ft. factory, rein.-con., Santa Monica Blvd., to R. I. Edward Building Co., 6330 Hollywood Blvd., $60,000.

Calif., Los Angeles—Steel frame shed for Municipal Pier 1, to Austin Co., Bartlett Bldg. $88,600.

Calif., Modesto—W. D. Miller, 1016 G St., 1 story, 80 x 100 ft., auto service building, brick, 11th and G Sts., to Wieland & Wieland, 1002 H St., $40,000. Shaw Motor Co., lessee.

Calif., San Francisco—Otis Elevator Co., 2300 Stockton St., 2 story shop and office, rein.-con., Beach and Grant Aves., to P. J. Walker Co., Sharon Bldg., $350,000.

Calif., San Francisco—W. H. Sullivan, Inc., Alexander Bldg., 2 story, concrete warehouse and office, Bryant St. near 5th, to G. Wagner, 251 Kearney St. $40,000. Pennzoil Co., Monadnock Bldg., lessee.

Buildings

PROPOSED WORK

Conn., Bridgeport—Store—D. M. Read Co., 1102 Main St., having plans prepared by J. W. Northrop, 211 State St., 6 story brick and fireproof, Broad and John Sts. $1,000,000. Monks & Johnson, 99 Chauncy St., Boston, associated archts. Noted Aug. 2.

Buildings (Continued)

Conn., Hartford—Apartment—D. Marra, 27 Kilbourne St., having revised plans prepared by J. E. Marchetti, 721 Main St., 3 story, 60 x 190 ft., Retreat Ave. $175,000. Former bids rejected. Noted May 17.

Conn., Meriden — Hotel — Matis Hotel, Pratt St., having plans prepared by D. A. Guerriero, 1029 Main St., Hartford, 4 story, 50 x 90 ft., brick and steel, plain foundation, Pratt St. $150,000.

Conn., New Britain—Synagogue—Children of Israel, Inc., c/o J. Birnbaum, pres., 64 Grand St., plans 3 story, brick and steel, plain foundation. $150,000. Engineer and architect not selected.

N. Y., New York — Bank — Bank of Europe, 1429 1st Ave., soon lets contract 3 story, brick, steel and stone, 1stAve. $200,000. T. M. James Co., 342 Madison Ave., archts. and engrs.

N. Y., New York—Musical Art—J. A. Coles, c/o G. Nordham, archt. and engr., 18 West 34th St., soon takes bids 5 story, brick, steel, and stone, West 39th St. $300,000.

N. Y., New York—Office—Childs Co., 200 5th Ave., having plans prepared by Severance & Van Alen, archts. and engrs., 36 West 34th St., 12 story, brick, steel and stone, Bway. and 30th St $300,000.

N. Y., Rochester—Church and Office—Baptist Church Building Comn. plans 9 story church and office building. $2,000,000. C. Wunder, 12 Franklin St., pastor. C. Trayer, and Gordon & Kaelber, Sibley Blk., archts.

N. J., Clinton—High School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation. $800,000. E. Sibley, Bluff Rd., Palisade, archt.

N. J., Orange—High School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation. $800,000. E. Sibley, Bluff Rd., Palisade, archt.

Pa., Palmerton—High School—City plans new high school to be called Stephen S. Palmer High School. $300,000. New Jersey Zinc Co. of Pennsylvania will pay ½ of cost. Engineer and architect not announced.

W. Va., Huntington — Exchange and office—Chesapeake & Potomac Telephone Co., 418 10th St., plans 3 story, 80 x 200 ft.

W. Va., Huntington—High School—Bd. Educ. soon takes bids Lincoln Jr. High School, 2 story and basement, 100 x 130 ft., brick, tile, stone and steel, 25th St. and 10th Ave. $150,000. R. M. Bates, Jr., 416 11th St., archt. Noted Aug. 30.

W. Va., Morgantown—Lodge—B.P.O.E. Lodge 411 having plans prepared by E. B. Lee, Chamber Commerce Bldg., Pittsburgh, Pa., 80 x 100 ft. $200,000.

N. C., Charlotte—Club and Office—Charlotte Elks Club, 306 West Trade St., having plans prepared by L. L. Hunter, archt., Kinney Bldg., 7 story, 62 x 200 ft., steel and concrete. $200,000.

N. C., Raleigh—High School—Will sell $300,000 bonds for High School on Benneham Sq. H. F. Strygley, supt.

S C., Anderson—Office—F. I. Jones & Bros., Starr, plan 7 story, fireproof. $150,000. Casey & Fank, Anderson, archts.

Fla., Daytona—Business—F. N. Conrad and Associates plan 10 story, 79 x 300 ft., Beach St. $200,000. Engineer and architect not announced.

Ala., Tuscaloosa — Bank — Merchants Bank & Trust Co. having plans prepared by D. O. Whilldin, Tuscaloosa, 10 story, rein.-con., brick and steel, concrete foundation, Broad St. and Greensboro Ave. $350,000.

Tenn., Chattanooga—Theatre—Tennessee Enterprise Co., 719 Market St., having plans prepared by C. W. and G. L. Rapp, 190 North State St., Chicago, for theatre. $260,000.

Tenn., Memphis — Church — East End Christian Church had plans prepared by A. F. Hansen, McCall Bldg., 2 story, 136 x 190 ft., brick and stone, McLean and Peabody Sts. $150,000.

Tenn., Memphis — Hospital — Southern Methodists had plans prepared (1st unit) new hospital, Union and Eastmoreland Sts. $300,000. W. F. Schulz, Chamber Commerce Bldg., engr.

Tenn., Memphis—Hotel—H. S. Adler having plans prepared by Hanker & Cairns, Scimitar Bldg., 6 story, on Linden Ave. $250,000.

Tenn., Nashvile — Apartment-Hotel — Prickett & Thomas, Stahlman Bldg., plan 7 story, 60 x 150 ft., 7th and Cedar Sts. $150,000.

Tenn., Nashville — College — Methodist Episcopal Convention, Lambuth Bldg., raising $500,000 for Scaritt College. Engineer or architect not selected.

Ky., Frankfort—High School—Bd. Educ. plans new high school. $150,000. F. L. Packard, Hayden Bldg., Columbus, O., archt.

Ky., Louisville—Club—Pendennis Club, 324 Walnut St., having plans prepared by B. B. Davis, Archt., Norton Bldg., 2 story addition incl. laundry. $150,000. Noted April 12.

O., Celina—High School—City election in November to vote on $150,000 bonds for high school. Engineer and architect not announced.

O., Cleveland—Apartment—J. Dolinsky, 2210 East 69th St., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, brick and timber, Hampshire Rd. $150,000.

O., Cleveland—Apartment—J. Goldman and A. Wasserman, 11108 Kinsman Rd., had plans prepared 4 story, 46 x 138 ft., brick and timber, Euclid Ave. near East 40th St. $250,000. Private plans.

O., Cleveland—Apartment—S. Koslen, 1077 East 97th St., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, on lot 65 x 200 ft., brick and steel, Crawford Rd. $200,000.

O., Cleveland—Commercial and Apartment—H. Caplan, 3264 East 123rd St., having plans prepared by M. Weis, 617 Union Bldg., 2 story and basement, brick and timber, Coventry and Hampshire Rds. $150,000.

O., Cleveland—Commercial—Private Investment Co., c/o S. Miller of Independent Towel Supply Co., 1822 Central Ave., having plans prepared by Christian, Schwarzenberg & Gaede, 1900 Euclid Ave., 2 story and basement, brick, steel and concrete, 1841 Prospect Ave. $200,000. Noted Sept. 6.

O., East Cleveland (Cleveland P. O.)—Apartment—L. Duchon, 3045 Essex Rd., Cleveland, having plans prepared by A. F. Janowitz, 811 Prospect Ave., Cleveland, 4 story and basement, 65 x 165 ft., brick, Superior and Belmar Rds., here. $250,000.

O., Warren—High School—Election in November to vote on $900,000 bonds for high school, Elm and Atlantic Sts. Engineer and architect not announced. Noted Sept. 13.

O., Youngstown — Club — St. Brendons Parish, West Side, plans 100 x 300 ft. club. $200,000. R. A. Souse, 1693 Mahoning Ave., secy. Architect not announced.

O., Zanesville—Church—St. John's Evangelical Lutheran Church, c/o W. L. Dowler, pastor, Cleveland, having preliminary plans prepared by J. W. C. Corbusier, B. F. Keith Bldg., Cleveland, 1 and 2 story, brick, steel and stone, here. $150,000.

Mich., Detroit—Theatre—Imperial Theatre Co., c/o C. W. Brandt, archt., 1114 Kresge Bldg., having plans prepared 2 story, 140 x 160 ft. rein.-con., steel and brick, foundation, Gratiot and May Aves. $150,000.

Ill., Belleville—High School—School Bd. plans 2 story and basement, rein.-con., brick and stone annex to Belleville Twp. High School, Rock Rd., here. $160,000. Architect not selected.

Ill., Chicago—Apartment—M. Holpuch, c/o R. Huszagh, archt., 72 West Washington St., plans three 3 story, 330 x 600 ft. (total dimensions), fireproof, Drexel Ave. from 52nd to 53rd Sts. $2,000,000.

Ill., Chicago—Apartment-Hotel—Flanders Apartment Hotel Corp., c/o A. S. Hecht, archt., 155 North Clark St., plans 146 x 275 ft., fireproof, Bway. and Buena St. $2,000,000.

Ill., Chicago—Hospital—Lakeside Hospital, 3410 Rhodes St., plans 4 and 5 story and basement, rein.-con., brick and steel, Rhodes and 34th St. $200,000. Hall, Lawrence, Rippel & Ratchcliffe, 123 West Madison St., archts.

Ill., Maywood—Apartment, Office and Store—H. H. Block, 8 North 5th St., having preliminary plans prepared by J. A. Chicaro, 8 North 5th St., 3 story and basement, 79 x 122 ft., rein.-con., brick and stone, 9th St. $175,000.

Wis., Appleton — Church and Sunday School—First Methodist Congregation, c/o J. Holmes, pastor, 737 Lawrence St., had plans prepared by Childs & Smith, 64 East Van Buren St., Chicago, 2 story and basement, stone and concrete, plain foundation. $250,000.

Wis., Berlin—Grade School—School Bd. having plans prepared by Ashby, Ashby & Schulze, archts., 1511 West Jackson Blvd., Chicago, 2 story and basement, 100 x 142 ft., brick, tile and concrete, plain foundation. Noted July 26.

Wis., Marinette—Store—Lauermann Bros. Co., Dunlap Sq., having plans prepared by D. Hubert, Spies Bldg., Menominee, Mich., 3 story and basement, 60 x 120 ft., brick and concrete addition, plain foundation. $150,000.

Wis., Milwaukee—University—University of Wisconsin, Madison, having plans prepared by A. Peabody, Capitol, Madison, 4 story, brick, rein.-con. and steel addition, plain foundation, here. $150,000.

Wis., River Falls—School—Bd. Educ. having plans prepared by Jacobson & Jacobson, 125 Auditorium Bldg., Minneapolis, Minn., 3 story and basement, rein.-con., brick, tile and stone. $150,000.

Ia., Ft. Dodge—Hospital—St. Josephs Mercy Hospital having plans prepared by W. Steele, 502 United Bank Bldg., Sioux City, for hospital addition, here. $150,000. Noted Apr. 5.

Minn., St. Paul—School—Summit School, 655 Holly Ave., having plans prepared by C. H. Johnston, 715 Capital Bank Bldg., 2 story and basement, rein.-con., brick and tile, Holly Ave. and Dunlap St. $175,000.

Kan., Chanute—Memorial, etc.—City having preliminary plans prepared 2 story and basement, auditorium and memorial, brick, concrete and stone, plain foundation. $200,000. Private plans.

Kan., Ottawa—High School—Oct. 30, to vote on $250,000 bonds, brick, rein.-con. and stone. Private plans.

Kan. Emporia—High School—Bd. Educ. having preliminary plans prepared by J. H. Felt & Co., 800 Grand Ave. Temple, Kansas City, 2 story and basement, rein.-con., brick, stone and tile. $175,000.

Kan., Hutchinson—Grade and High School—Bd. Educ. takes bids about Nov. 2, 2 story, 122 x 156 ft., grade school, also 60 x 110 ft. addition to Sherman Junior High School, both rein.-con. and brick, plain foundation. $150,000. Smith & English, Hutchinson, archts. for former. Mann & Gerow, Hutchinson, archts. for latter.

Neb., Columbus—High School—Election soon to vote on $400,000 bond issue for high school. Architect not selected.

Mo., St. Louis—Office—Grand-Franklin Realty Co., Grand and Franklin Aves., having preliminary plans prepared by C. W. Martin, archt. and engr., Syndicate Trust Bldg., 10 story and basement, 103 x 170 ft. rein.-con., brick, steel and stone, Grand Blvd. $750,000.

Mo., Sedalia—High School—Bd. Educ. taking bids 3 story, 185 x 190 ft. rein.-con., brick and stone. $375,000. T. W. Bast, Sedalia, archt. W. B. Ittner, 911 Locust St., St. Louis, associated archt. Noted Aug. 16.

Tex., Dallas — School — M. B. Bogarte, Swiss and Peake Sts., plans preparatory school. $150,000. Engineer and architect not selected.

Tex., Medina Lake—Hotel and Clubhouse—Seutter & Simons, archts., Moore Bldg., San Antonio, preparing plans 2 story, stone and rein.-con., concrete pile foundation, here. $150,000. Owner's name withheld.

Okla., Claremore—Sanitarium and Bath House—Claremore Bath & Sanitarium Co. having plans prepared by H. C. Swechbe, archt., Claremore, 3 story, 120 x 140 ft., brick and concrete, plain foundation, Sequoyah St. $200,000.

Wash., Seattle—Apartment—H. H. Riley, archt., Arcade Bldg., takes bids about Nov. 24. 10 story, 52 x 108 ft., rein.-con. and steel, 4th and Blanchard Sts., for Wolverton Hotel Holding Corp., Arcade Bldg. $400,000.

Wash., Seattle—Lodge—Fraternal Order of Eagles, Lodge 1, 7th and Pine Sts., having plans prepared by H. Bittman, Securities Bldg., and takes bids early in January. 3 story, 120 x 175 ft., concrete, steel and terra cotta. $1,000,000.

Wash., Seattle—Medical—Metropolitan Bldg. Co., Henry Bldg., having plans prepared by Howells & Albertson, Henry Bldg., 6 story, concrete, brick and steel, 4th and Seneca Sts. $1,250,000.

Wash., Tacoma—Schools—Election Oct. 18, to vote on $2,400,000 school bonds. Former issued invalidated by Supreme Court decision. Noted May 31.

Calif., Berkeley — Hall — B. Maybeck, archt., Lick Bldg., San Francisco, receiving preliminary estimates on rein.-con. and stone, on campus of University of California, here. $300,000.

Calif., Catalina—Hospital—H. Gross, 936 South Alvarado St., Los Angeles, head of syndicate which plans hospital, fireproof, on Catalina Island. To exceed $850,000.

Calif., Covina—Schools—Covina Union High School Dist. to vote on $200,000 bonds for high school buildings.

Buildings (Continued)

Calif., Los Angeles—Apartment—A. C. Blumenthal et al, Loew State Bldg., having plans prepared by K. MacDonald, Brack-Shops Bldg., 12 story, 115 x 200 ft rein.-con., Hollywood Blvd. Noted June 28.

Calif., Los Angeles — Apartment — Hilliard Bros. c/o J. H. Roberts, archt., Marine Bank Bldg., Long Beach, having plans prepared 5 story and basement, brick and steel, West 3rd St., to exceed **$150,000.**

Calif., Los Angeles—Hotel—W. W. Paden, et al, Story Bldg., having plans prepared by L. L. Smith, Byrne Bldg., approximately 12 story and basement, rein.-con., South Main St. To exceed $750,000.

Calif., Los Angeles—Bank and Office—Guaranty Building and Loan Assn., 6364 Hollywood Blvd., having plans prepared by J. C. Austin, Detwiler Bldg., 13 story, 75 x 150 ft., bank and office building, Hollywood Blvd. and Ivar St.

Calif., Los Angeles—Bank and Office—Hellman Commercial Trust and Savings Bank, 601 South Main St., having plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 12 story, 75 x 150 ft., steel and concrete, Hollywood Blvd.

Calif., Los Angeles—Church—A. C. Martin, archt., Higgins Bldg., receiving bids rein.-con. and brick church, Adams and Figueroa Sts., for St. Vincents Church, 1887 South Grand Ave. To exceed $200,000. Noted Aug. 23.

Calif., Los Angeles—Hotel—L. L. Jones, archt., Grosse Bldg., receiving bids 4 story and basement, 50 x 165 ft., brick, West 10th St., for A. Thomas, c/o archt.

Calif., Los Angeles — Office — Insurance Exchange Building Co. having plans prepared by Curlett & Beelman, archts., Union Bank Bldg., 13 story and basement, 90 x 160 ft., rein.-con. and steel, 9th and Olive Sts. $1,000,000.

Calif., Los Angeles—Office—Local capitalists having plans prepared by Neher & Hasenberger, archts., 209 Marsh-Strong Bldg., 13 story, 100 x 155 ft., brick and stone, 823 South Spring St. $1,050,000.

Calif., Los Angeles—Office and Bank—Hellman Trust and Savings Bank having plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 12 story, 57 x 150 ft., rein.-con. and steel, Hollywood Blvd. and Cherokee Ave. $500,000.

Calif., Los Angeles—Office and Salesroom—A. C. Blumenthal, et al., Loew State Bldg., having plans prepared by K. MacDonald, Brack-Shops Bldg., 14 story and basement, rein.-con., Bway. near 9th St. To exceed $500,000.

Calif., Los Angeles—Store—Platt Music Co., 622 South Bway., having plans prepared by Milwaukee Building Co., Wright-Callendar Bldg. 8 story fireproof, Hollywood Blvd., to exceed $300,000.

Calif., Los Angeles—Store and Apartment—Interests represented by E. Grupp, 1614 Hudson St., plan 6 story, Hollywood Blvd. $250,000.

Calif., Los Angeles—Store and Apartment—Serranon Realty Syndicate, c/o F. F. Rasche, archt., 5652 Hollywood Blvd., having plans prepared, 4 story, brick, Santa Monica Blvd. $150,000.

Calif., Los Angeles—Store and Loft—A. C. Blumenthal, et al., Loew State Bldg., having plans prepared by K. Macdonald, Brack-Shops Bldg., 9 story and basement, 100 x 150 ft., rein.-con., Bway. $500,000. Western Costume Co., 1200 West 8th St., lessee. Noted Aug. 16.

Calif., Los Angeles—Store and Loft—R. Wurlitzer Co., 605 West 7th St., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 12 story and basement, rein.-con. and steel, Bway. near 8th St., to exceed $800,000.

Calif., Los Angeles—Store and Office—Cahn-McCabe & Co., 716 South Spring St., having plans prepared by Norton & Wallis, Pacific Finance Bldg., 13 story and basement, 60 x 150 ft., brick and steel, 7th and Spring Sts.

Calif., Riverside—Studio—Moving Picture Interests, in which M. P. Waite, Story Bldg., Los Angeles, is interested, plan complete motion picture studio. $1,000,000.

Calif., San Jose—Lodge—C. Werner, archt., Santa Fe Bldg., San Francisco, receiving bids 2 story and basement, rein.-con., 3rd and James Sts., here, for Scottish Rite Temple Assn. of San Jose. $200,000.

Calif., Santa Monica — Schools — Junior High School Dist. having plans prepared by Allison & Allison, Hibernian Bldg., Los Angeles, manual arts and domestic arts buildings, auditorium, etc. **$200,000.** Noted Aug. 30.

Ont., London—City Hall—City takes bids about Oct. 15, 2 story and basement, 100 x 300 ft. rein.-con., steel and stone, Dundas St. $600,000. W. S. Pavey, Standard Bank Bldg., archt.

BIDS DESIRED

Conn., New London — Business — C. H. Klinck, 219 Bank St., receiving bids and opens same about Oct. 6, 3 story, 70 x 80 ft., brick and steel, plain foundation, Bank St. $150,000. Bilderbeck & Langdon, Inc., Barrows Bldg., archts. Noted May 31.

N. Y., Brooklyn—Schools—Oct. 16, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 210, Rochester Ave. from Park to Prospect Places; P. S. 205, 20th Ave. from 67th to 68th Sts. Noted April 5.

N. Y., New York — Apartment — A. Campagna, 200 West 72nd St., will build 15 story, Riverside Dr. and 89th St. $5,000,000. Work will be done by separate contracts. R. Candela, 200 West 72nd St., archt. and engr.

N. Y., New York—Arsenal—Oct. 11, by Park Bd., Municipal Bldg., general contract for altering arsenal in Central Park, near 5th Ave. opposite East 64th St. F. D. Gallatin, pres.

N. Y., West Haverstraw—Solaria—Oct. 10, by G. Blagden, pres. Bd. Managers, New York State Orthopedic Hospital for Children, construction, heating, sanitary and electric work, for completion of Quadrangle Solaria at hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Oct. 4.

N. J., Clifton—High School—Oct. 17, by Bd. Educ., 4 story, brick, marble and concrete, Main Ave., $525,000. D. W. Ganly, secy. Lee & Hewitt, 152 Market St., Paterson, archts. and engrs. Noted Aug. 9.

N. J., Leonia—School—Oct. 16, by Bd. Educ., brick, steel and stone, plain foundation. $200,000. E. Sibley, Bluff Rd., Palisade, archt. Noted Feb. 8.

N. J., Madison—High School—Oct. 23, by Bd. Educ., 60 x 280 ft., brick, steel and stone, plain foundation. $250,000. Guilbert & Bettelle, 2 Lombardy St., Newark, archts. and engrs.

N. J., Montclair—Schools—Oct. 16, by Bd. Educ. additions to Mt. Hebron and Glenfield Public Schools. Starrett & Van Vleck, 8 West 40th St., New York City, archts. Noted Sept. 20.

Pa., Johnstown—School—Oct. 22, by W. C. Wehn, secy. School Dist., Swank Bldg., 3 story and basement, 90 x 120 ft. concrete, brick and steel, Hudson St. $150,000. J. E. Adams, Nemo Bldg., archt. Noted Sept. 6.

Pa., Phila. — Bank — Oct. 8, by Chelten Trust Co., 5614 Germantown Ave., 2 story and basement, 33 x 72 ft. brick and steel, plain foundation, Broad and Louden Sts. $150,000. Harris & Richards, Drexel Bldg., archts.

W. Va., Maggie—Hospital—Nov. 30, by State Bd. Control, Charleston, 3 story and basement, 45 x 201 ft. concrete and brick, here. P. A. Davis, 3rd and Dunlap St., Phila., archt.

O., Cleveland—Apartment—Rothenberg & Bralosky, 2388 Ontario St., taking bids 3 story and basement, 52 x 130 ft., brick and timber, Cornell Rd. $150,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland — Commercial and Apartments—L. H. Katz, Republic Bldg., taking bids and opens same about Oct. 12, 4 story, 88 x 165 ft., brick and timber, Taylor Rd. and Euclid Ave. $200,000. A. F. Janowitz, Standard Theatre Bldg., archt.

O., Lakewood (Cleveland P. O.)—High School—Oct. 13, by Bd. Educ., 1456 Warren Rd., 2 story, 27 room, brick, steel and concrete, Hilliard Rd. $430,000. C. W. Hopkinson, Rose Bldg., Cleveland, archt.

Ind., Indianapolis—Schools—Oct. 8, by Bd. School Comrs., 150 North Meridian St., Schools 23, 30 and 76, $98,380, $130,964 and $232,021 respectively. Bass, Knowlton & Co., 312 North Meridian St., E. E. Dunlap, 11th and Delaware Sts., and C. H. Byfield, 923 Peoples Bank Bldg., archts. on respective schools.

Ind., Indianapolis—Schools—Oct. 15, by Bd. School Comrs., 150 North Meridian St., Schools 38 and 67, $182,352 and $207,964 respectively. E. E. Dunlap, 11th and Delaware Sts., and Kopf & Woolling, 403 Pythian Bldg., archts. on respective schools.

Mich., Ann Arbor—School—Oct. 23, by Bd. Educ., 3 story and basement, rein.-con., brick and steel, plain foundation, Lincoln Ave. $200,000. Dahl-Stedman Co., Lumber Exch. Bldg., Chicago, archt.

Mich., Springwells—School—Oct. 18, by F. Oehmke, secy. Bd. Educ., 2 story and basement, 86 x 160 ft. rein.-con., brick and steel, plain foundation, Warren and Blesser Aves. $170,000. H. J. Keou[illegible] 3440 Cass Ave., Detroit, engr. Noted S[illegible] 13.

Ill., Chicago—Apartment—A[illegible] Klewer, archt., 220 South Michigan Ave., receiving bids 3 story, 75 x 125 ft., rein.-con., brick and steel, Kedzie and Sunnyside Sts., for A. and E. Newman, c/o architect. $150,000.

Ill., Chicago—Apartment—G. W. Prassas, 111 West Washington St., receiving bids 3 story, 90 x 125 ft., fireproof, Melrose St. near Campbell St. $150,000. [illegible] J. Jensen, 4815 North Crawford St., archt.

Ill., Chicago—Apartment—W. M. Tannenbaum, c/o Leichenko & Esser, archts., 3[illegible] South Dearborn St., receiving bids 3 story, 116 x 169 ft., fireproof, Park Ave. near Garfield Park. $250,000. M. Leviton & Co., 123 West Madison St., associated archts.

Ill., Chicago—Store, Office, Apartment—M. Leviton & Co., archts., 123 West Madison St., receiving bids 3 story, 100 x 1[illegible] ft., fireproof, Madison and Ken[illegible] Sts., for W. Zucker, c/o architects. $200,000.

Ill., Evanston—Apartment—H. Robinson, 3648 West Polk St., Chicago, receiving bids 3 story and basement, 100 x 180 ft., rein.-con., brick and steel, Forest Ave. near Main St., here. $200,000. R. F. France, 155 North Clark St., Chicago, archt.

Ia., Dubuque—Koenigsberg & Weisfeld, archts., 155 North Clark St., Chicago, receiving bids 3 story, 100 x 163 ft., auto sales and service building, rein.-con., brick and steel, here, for Balsky Motor Co., 6th and Iowa Sts., $200,000.

Kan., St. Francis—Court House—Oct. 23, by Cheyenne Co., 3 story and basement, 60 x 110 ft., brick, rein.-con. and stone, plain foundation. $150,000. T. W. Williamson, 312 Central Natl. Bank, Topeka, archt.

Mo., Nevada—High School—Oct. 15, by C. A. Smith, archt., 602 Finance Bldg., Kansas City, 3 story and basement, 64 x 12[illegible] ft. rein.-con., brick and stone, for Bd. Educ., to exceed $150,000.

Tex., Ft. Worth—Dormitory—Oct. 12, by Masonic Orphans Home, c/o H. M. Greene Co., archts., North Texas Bldg., Dallas, brick, concrete and stone, plain foundation. $175,000. Noted July 26.

BIDS RECEIVED

Conn., Hamden—Town Hall—Town, 2 story, brick, stone and steel, plain foundation, Dixwell Ave., from M. J. Gibbud Co. 100 Water St., New Haven, $175,480. Archts. est. $160,000.

N. Y., New York—Hospital—B. S. Coler, comr. Dept. Pub. Welfare, Municipal Bldg., Sept. 28, general contract and electrical work reparing and altering west wing and west toilet tower, main building, Metropolitan Hospital, Welfare Island, from Lever Constr. Co., Inc., 132 West 43rd St. $124,869. Noted Sept. 20.

Minn., Winona—School—State Bd. Control, St. Paul, Sept. 25, 3 story and basement, 200 x 210 ft. school with power plant basement, rein.-con., brick and tile at State Teachers College, here, from I. N. Salyers, Estherville, Ia., $430,507. Noted Sept. 27.

Tex., Arlington — Home — Eastern Star Lodge, 3 story, rein.-con., steel, brick, tile and marble, concrete pile foundation, from Christman & Nesbit, Dallas, $169,999. Noted Sept. 13.

Calif., Los Angeles—School—Bd. Educ., 3 story, rein.-con., 16th St., general contract from Macdonald & Kahn, Douglas Bldg., $244,076; heating from L. Z. Brown, 4320 Melrose Ave., $37,917. Noted Aug. 30.

CONTRACTS AWARDED

Mass., Allston (Boston P. O.)—Apartment—J. S. McLean, 160 Allston St., 3 story, 89 x 181 ft., brick and steel, plain foundation, Commonwealth Ave., to Capobianco Constr. Co., 46 Cornhill, Boston. Archts. est. $150,000.

Mass., Springfield—Temple—McClintock & Craig, archts., 33 Lyman St., 4 story, 180 x 300 ft., brick and steel, to A. E. Stephens Co. 145 State St., for Springfield Masonic Assn., State and Main Sts. $1,000,000. Noted July 26.

Conn., Hartford—Church—Church of St. Ann, 50 x 150 ft., brick and terra cotta, plain foundation, Park St., to Hayes Constr. Co., Court St., New Britain. Archts. est. $165,000. Noted Aug. 30.

Conn., New Haven—Parish House—Trinity Church Parish, c/o C. S. Palmer, archt., 114 Whitney Ave., 3 story and basement, 150 x 200 ft., brick, stone and steel, plain foundation, Church and Wall Sts., to Dwight Constr. Co., 69 Church St. Archts. est. $350,000. Noted Mar. 22.

N. Y., Buffalo—Office—Tri-State Realty **Co.,** Bramson Bldg., Main and Eagle Sts., converting old Iroquois Hotel, Main St.,

Buildings (Continued)

into office building, to Miller Land Co., Main and Eagle Sts., to exceed $300,000.

N. Y., Kew Gardens (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, P. S. 99, Kew Gardens Rd. from 82nd to 83rd Aves., here, to G. F. Driscoll, 115 Schermerhorn St., Brooklyn, $364,990. Noted Aug. 16.

N. Y., New York—Apartment—Finkelstein & Schwartz, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, Pinehurst Ave. and 176th St., by day labor. $175,000.

N. Y., New York—Apartment—Lozner & Padula Inc., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, Andrews Ave., by day labor. $300,000.

N. Y., New York—High School—Bd. Educ., 500 Park Ave., James Monroe High School, Boynton Ave. and 172nd St., to Willetts Constr. Co., 280 Madison Ave., Proposal A. $2,057,000. Noted Sept. 13.

N. Y., New York—Home—Hebrew Orphan Asylum, Amsterdam Ave., alterations to existing building and new addition, to H. H. Oddie Inc., 130 East 44th St. Archts. est. $300,000.

N. Y., New York—Loft—Rathmuk Realty Co., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build 20 story, 100 x 150 ft., brick, steel and stone, 8th Ave., by day labor. $2,500,000.

N. Y., New York—Loft—J. Tishman & Sons, 280 Madison Ave., will build 14 story, brick, steel and stone, West 39th St., by day labor. $700,000. Schwartz & Gross, 347 5th Ave., archts.

N. Y., New York—Theatre—Orpheum Theatre Circuit, Palace Theatre Bldg., 1564 Bway., 3 story, 100 x 140 ft., brick, steel and stone, 302 West 45th St., to H. H. Oddie, Inc., 130 East 44th St. Archts. est. $400,000.

N. Y., Richmond Hill—School—Bd. Educ., 500 Park Ave., New York, P. S. 108, brick, steel and stone, Suwanee Ave. and 108th St., here, to P. Cleary, 115 Marion St., Brooklyn, Proposal A, $879,300. Noted Sept. 27.

Pa., St. Clair—Bank and Office—St. Clair State Bank, 3 story and basement, here, to G. H. Keefer, Mt. Carmel, cost plus basis. Archts. est. $150,000.

Pa., Pittsburgh — Apartment — Terrace Court Apartment Co., three 3 story and basement, 200 x 210 ft., Shady and Douglas Sts., to H. Miller & Sons, 2565 5th Ave. Archts. est. $300,000. Noted Sept. 20.

Pa., Ridgeway—High School—Bd. Educ., 2 story, part basement, 61 x 152 ft., to Hyde Murphy Co., Ridgeway. Archts. est. $160,000. Noted Aug. 9.

N. C., Morganton—Hospital—State Hospital for Insane, 3 additions, one 1 story and two 2½ story, concrete and brick, to McDevitt-Fleming Co., First Natl. Bank Bldg., Chattanooga, Tenn. $225,000. Noted June 1.

N. C., Newton—Court House—Catawba Co., 2 story and basement, 60 x 140 ft., rein.-con. and stone, to J. J. Strand, Southern Pines, $165,516. Noted Aug. 23.

Ky., Lyndon—Home—Kentucky Childrens Home Society, 1086 Baxter St., Louisville, hospital, boiler house and detention wards, brick, here, to Frey Planing Mill Co., 418 East Breckenridge St., Louisville. Archts. est. $150,000. Noted Sept. 20.

Ky., Louisville—Apartment—T. Bohannan, Realty Bldg., 4 story, 66 x 126 ft., incl. gasoline filling station, 3rd and Oak Sts., to Shrader Bros. Building Co., 1003 West Jefferson St. Est. cost $150,000. Noted June 1.

Ky., Louisville — Apartment — F. E. Reeser, 1122 Rowan St., 3 story 100 x 200 ft., 3rd St. and Park Ave., to W. Reeser, 1338 South 3rd St. $150,000. Noted June 1.

O., Ashtabula—High School—Bd. Educ. 2 story, brick, to Willing Bros. Co., Bellevue $206,000.

O., Athens—High and Grade School—Bd. Educ. 2 story, 80 x 127 ft. and 60 x 132 ft., brick and steel, Hollister and Big Greens Run School Dists., to L. O. Heidrick, Columbus.

O., Cleveland—Apartment—Adler Bros., Temblett Ave., 4 story, 100 x 138 ft., brick and timber, Lake Ave., to B. Winner, East 116th St. Archts. est. $200,000. Noted July 12.

O., Cleveland — Commercial and Apartment—A. L. and C. Freeman, 10829 Earle Ave., 4 story, 36 x 132 ft., brick and timber, Euclid Ave., to J. Kuskin, 4715 Outhwaite Ave. Archts. est. $150,000. Noted Aug. 30.

O., Findlay—High School—Bd. Educ., 2 story and basement, brick and concrete, to Orr & Miller, Lima, $217,900. Noted Sept. 6.

O., Oakwood (Dayton P. O.)—School—Bd. Educ., 2 story and basement, 125 x 300 ft., brick and concrete, to Willing Bros., Bellevue, $300,000. Noted Aug. 30.

Mich., Flint—Nurses Home—Bd. Managers Hurley Hospital, 3 story and basement, rein.-con., brick and steel, plain foundation, Patrick and Prospect Sts., to H. L. Vanderhorst, Flint, $400,000.

Ill., Chicago—Administration—La Salle Extension University, 4045 South Michigan Ave., 3 story, 140 x 150 ft., fireproof, Michigan Ave. and 41st St., to H. Janisch & Co., 1813 Winona Ave. Archts. est. $300,000.

Ill., Oak Park—Store—S. Koenigsberg, 155 North Clark St., Chicago, 4 story, 70 x 95 ft., fireproof, Lake and Marion Sts., here, to D. Stone, 1237 North Hoyne Ave., Chicago. Archts. est. $250,000.

Wis., Milwaukee—Home—St. Johns Home of Old Ladies, 640 Cass St., 3 story and basement, 100 x 103 ft., brick and concrete, plain foundation, to P. Riesens Sons, 1018 Humboldt Ave. $150,000. Noted Aug. 30.

Ia., Council Bluffs — High School — Bd. Educ., 3 story and basement, rein.-con., brick and stone, to J. Hansen, 803 Ave. F, $180,403. Noted Apr. 5.

N. D., Fargo—Store—Herbst Dept. Store, 16 Bway., 4 story and basement, 36 x 100 ft. rein.-con., brick and tile, general contract to Meinecke & Johnson, 11 Bway. Total cost $225,000. Noted Mar. 22.

Mo., Kirksville—Hotel—Kirksville Hotel Co., 4 story and basement, rein.-con., brick and stone, to C. L. McKim, Kirksville, $130,730.

Tex., Houston—Hospital—City and Harris Co. 4 story and basement, brick, stone and concrete, plain foundation, to Russell Brown Co., Carter Bldg., Houston, $182,000. Noted Sept. 13.

Calif., Hollywood—Church—First Presbyterian Church, 1760 North Gower St., brick and concrete, to Simpson Constr. Co., Bank of Italy Bldg., Los Angeles, $200,000. Noted Aug. 23.

Calif., Los Angeles—Office—Sun Realty Co., 12 story and basement, 86 x 160 ft., rein.-con., 9th and Olive Sts., to Macdonald & Kahn, Loew State Bldg., Los Angeles. $850,000.

Calif., Los Angeles—Office and Loft—F. W. Johnson, 14 story, 90 x 110 ft., rein.-con., 7th and Los Angeles Sts., to Edwards, Wildey & Dixon Co., Black Bldg., $450,000. Noted July 26.

Calif., Los Angeles—Store and Loft—Martz Estate, c/o J. and D. Parkinson, archts., Title Insurance Bldg., 4 story and basement, rein.-con., brick and steel, 7th St., to Edwards, Wildey & Dixon, Black Bldg., $150,000.

Calif., Oakland—Office—C. W. McCall, archt., Central Bldg., 7 story and basement, rein.-con., physicians office building, 17th St. between Bway. and Franklin St., to C. W. Heyer, Jr., Mills Bldg., San Francisco, $350,000. Owner's name withheld.

Calif., Oakland—Store—C. J. Heeseman, Washington and 15th Sts., 4 story, rein.-con., Clay and 13th Sts., to E. T. Leiter & Son, 3601 West St., $150,000. Noted Sept. 27.

Calif., San Diego—Army and Navy Y. M. C. A., concrete and steel, on full block fronting Bway., to Campbell Building Co., Security Bank Bldg., $550,000. Noted Sept. 20.

Calif., San Francisco—Office—See "Industrial Works."

Calif., Santa Monica—Hotel—Miramar Hotel Co., 4 story, 80 x 286 ft., rein.-con. and brick, to Butleben Bros., 609 I. W. Hellman Bldg., Los Angeles, $325,000.

Calif., Stockton—Church—First Christian Church, masonry church, to H. W. Johnson, 121 Lexington Ave., Los Angeles, $150,000.

Federal Government Work

PROPOSED WORK

N. Y., Waterloo — Post Office — Treas. Dept., Wash., D. C., rejected bids for U. S. Post Office, here. Noted Sept. 13.

Pa., Phila.—Fill—Spec. 4919—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans filling back channel at Naval Hospital, here.

Md., Annapolis—Shore Protection—Spec. 4917—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans shore protection at Tower 5, here.

D. C., Anacostia—Workroom, etc.—Spec. 4915—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans workroom and laundry, here.

D. C., Wash.—Court House—U. S. Government, c/o D. Lynn, supt. in charge of U. S. Capitol, is having sketches made by F. G. Pierson, Washington Loan & Trust Bldg., for new 3 story, stone, District Court House, on site of present Court House, Missouri Ave., N. W. $400,000.

D. C., Wash.—Mooring Masts—Spec. 4916—Bureau Yards & Docks, Navy Dept., plans mooring masts at Quantanamo, Cuba, Fort Worth, Tex., and San Diego, Calif.

Va., Quantico—Remodeling—Spec. 4912—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans remodeling officers quarters at Marine Corps Base, here.

N. C., Cape Hatteras—Operating Building, etc.—Spec. 4914—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans operating building and improvements, here.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, plans to purchase 500 pieces 12 ft., 500 pieces 16 ft., 1,200 pieces 20 ft. and 400 pieces 22 ft. (all 2 x 12 in.) No. 1 common yellow pine f.o.b. Addison.

Ill., Great Lakes—Rebuilding Laundry—Spec. 4918—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans rebuilding laundry, here.

Utah, Fort Douglas — Buildings — Constructing Quartermaster, Ft. Mason, San Francisco, Calif., plans group of 15 brick and tile buildings at training camp, here.

H. T., Pearl Harbor—Storehouse—Spec. 4911—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans paint and oil storehouse, here.

Alaska, Anchorage—Military Post—Constructing Quartermaster, Ft. Mason, San Francisco, Calif., soon receives bids for military posts, here, incl. 13 officers quarters, 1 administration building, 1 guard house, 2 barracks, 1 recreation hall, 1 hospital, power houses, stables, water, lighting, sewerage and road systems, etc.

BIDS DESIRED

R. I., Providence—Dredging—Oct. 17 at office U. S. Engineer, dredging 373,000 cu.yd. in harbor, here.

N. Y., Castle Point (Chelsea P. O.)—Resurfacing—Oct. 15 by Treas. Dept., Wash., D. C., resurfacing farm road on site of U. S. Veterans' Hospital, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Oct. 4.

N. Y., New Rochelle—Dredging—Oct. 29 at office U. S. Engineer, Army Bldg., 39 Whitehall Bldg., New York, dredging in harbor, here; adv. E. N.-R. Oct. 4.

N. Y., Staten Island—Jetty—Oct. 16 at office Constructing Quartermaster, 39, Whitehall St., New York, stone jetty, Miller Field, here; adv. E. N.-R., Oct. 4.

Md., Annapolis—Water Supply Improvements—Spec. 4890—Oct. 17 by Bureau Yards & Docks, Navy Dept., Wash., D. C., improvements to water supply at high power radio station, here. Noted Aug. 9.

D. C., Bellevue—Barracks, etc.—Spec. 4889—Oct. 10 by Bureau Yards & Docks, Navy Dept., Wash., barracks, garage and generating buildings at Naval experimental and research laboratory, here. Noted July 26.

S. C., Clinton—Post Office—Oct. 26 by Treas. Dept., Wash., D. C., for 1 story, 62 x 64 ft., brick and tile post office, here. J. A. Wetmore, acting superv. archt.

Fla., Pensacola—Distribution System, etc. Spec. 4715—Oct. 17 by Bureau Yards & Docks, Navy Dept., Wash., D. C., steam distributing and heating systems, at Naval Air Station, here. Noted Aug. 30.

Ky., Louisville—Derricks—Oct. 22 at office U. S. Engineer, P. O. Box 72, 6 steel derricks complete (except wire rope) 65 ft. booms bull wheel diam. 16 ft.; adv. E. N.-R. Oct. 4. Noted Sept. 13.

Ill., Cairo—Cradles—Oct. 13, Mississippi-Warrior Service, Inland and Coastwise Waterways Service, War Dept., 320 Custom House, New Orleans, La., two cradles on river front, here.

Mo., St. Louis—Extension—Oct. 18 by Treas. Dept., Wash., D. C., extension to Post Office, here. J. A. Wetmore, acting superv. archt.

Arkansas—Road—Oct. 16 by District Engineer, U. S. Bureau Pub. Rds., Dept. Agriculture, Federal Bldg., Little Rock, constructing Foran Gap, Forest Highway, in Arkansas National Forest, Polk and Scott Counties, 11.02 mi. finishing graded road, 3,931 cu.yd. rock and 68,616 cu.yd. earth excav., etc.

Federal Government Work (Continued)

Tex., Fort Clark—Radio Tower—Oct. 20 by Signal Officer, Fort Clark, 4 concrete foundation piers and steel radio tower.

Tex., Freeport—Repairing Jetty—Oct. 31 at office U. S. Engineer, Galveston, repairing southwest jetty, in Harbor, here; adv. E. N.-R. Oct. 4.

BIDS RECEIVED

Pa., Phila. — Repairs to Roof — Treas. Dept., Wash., D. C., repairs to roof, etc., U. S. Post Office and Court House, here, from Ennis & Hare, 1933 East 31st St., Baltimore, Md., $61,400. Noted Sept. 20.

D. C., Wash.—Steel—Purchasing Agent, Post Office Dept., Wash., D. C., furnishing 100,000 lb. cold rolled steel, from Trumbull Steel Co., Warren, O., $5,910.

La., New Orleans—Cement—U. S. Engineer, furnishing 5,000 bbl. cement, from J. W. Kearny & Sons, 514 South Peters St., $15,100.

O., Cincinnati—Piling—U. S. Engineer, furnishing sixty 30 ft., taper piles, sixty 35 ft. and one hundred forty-six 40 ft. steel sheet piles for Dams 34, 36 and 38, from Bethlehem Steel Co., Cincinnati, $2.94 cwt. (from local stock); Carnegie Steel Co., 1016 Union Trust Bldg., $2.94 cwt. (3-4 months delivery).

Mich., Saute Ste. Marie—Dredging—U. S. Engineer, 337 Federal Bldg., Detroit, dredging 110,000 cu.yd. scow measurement on Bayfield Range and Little Rapids Cut, here, from Duluth-Superior Dredging Co., 1715 Ford Bldg., Detroit, $1.10. Noted Sept. 20.

Wis., Milwaukee—Breakwater—U. S. Engineer, constructing extension to north breakwater in harbor, here, from E. E. Gillen Co., 288 East Water St., $353,813. Noted Aug. 30.

Kan., Ft. Riley—Road Repair—Constructing Quartermaster, 60,000 sq.yd. bituminous roadway, from Kaw Paving Co., 506 N. E. Bldg., Topeka, $68,060. Noted Sept. 6.

CONTRACTS AWARDED

Mass., Chelsea—Reroofing—Spec. 4886—Bureau Yards & Docks, Navy Dept., Wash., D. C., reroofing buildings at Naval Hospital, here, to Johns-Mansville, Inc., 55 High St., Boston, Mass., $36,042 (120 days). Noted Sept. 13.

Va., Norfolk — Changes — Treas. Dept., Wash., D. C., changes at U. S. Marine Hospital 82, here, to P. H. Kea Constr. Co., 310 Dinwiddie St., Portsmouth, $4,916. (90 days).

S. C., Paris Island — Lumber — Port Quartermaster, Marine Barracks, 100,000 ft. lumber, various sizes, to Montgomery & Co., 10 South 15th St., Richmond, Va. Engrs. est. $5,300.

Fla., Jacksonville—Catamarans—U. S. Engineer, 25 pontoon catamarans for Dredge Barnard, to Novelty Steam Boiler Wks., 917 South Howard St., Baltimore, Md., $24,350.

Ala., Florence—Power Development—War Dept., Wash., D. C., for Gorgas plant at Army Muscles Shoals project, to Alabama Power Co., Brown-Marx Bldg., Birmingham, $3,472,487.

Ill., Rock Island—Lumber—U. S. Engineer, Rock Island, furnishing 237,000 ft. Douglas fir for use at Le Claire Canal Lock, etc., to G. T. Mickle Lumber Co., 30 North La Salle St., Chicago, $5037. Noted Sept. 20.

Calif., Oakland—Dredging—U. S. Engineer, Custom House, San Francisco, dredging Areas A, 475,000 cu.yd., B, 150,000 cu. yd. and C, 150,000 cu.yd. in Harbor, here, to Amer. Dredging Co., 255 California St., San Francisco, $184,556. Noted Sept. 20.

Miscellaneous

PROPOSED WORK

Transformer, etc.—North Tonawanda, N. Y.—See "Industrial Works."

Power Development—South Amsterdam (Amsterdam, P. O.), N. Y.—Adirondack Power & Light Co., Amsterdam, having plans prepared for doubling present building on Mohawk River, and installing 40,000 hp. steam turbine generator unit, here. $3,000,000. Private plans.

Conveyor System—Wilson, Pa.—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, plans barge loading conveyor system, here. $35,000.

Dock—Creighton, Pa.—Crucible Fuel Co., Oliver Bldg., Pittsburgh, plans new pile and timber dock here on Allegheny River, to exceed $25,000.

Mine — Waynesville, N. C. — Rhodolite Corp., New York City, plans constructing roads and installing mining machinery for rhodolite mine, annual output of 600,000 ton, near here. $600,000. S. A. Jones, Waynesville, interested.

Summer Resort—Winston-Salem, N. C.—D. D. Smith having plans prepared by E. S. Draper, landscape archt., 11 East 5th St., Charlotte, hotel, golf links, roads and driveways, 200 acre lake with 30 ft. dam, water supply, etc., at Hanging Rock, near here.

Wharves and Public Parks—Baton Rouge, La.—Voted $350,000 bonds for wharves and $75,000 for parks. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr.

Underpass — Kentucky — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans concrete underpass on Muldraughs Hill, 36 mi. from Louisville, also widening road bed and second tracking for several miles, in that vicinity. $700,000. W. H. Courtney, ch. engr.

Asphalt Plant—Segal, Ky.—Natural Rock Asphalt Corp., Greenville, Ky., plans new asphalt plant at site of quarries in Edmondson Co., near here. $60,000.

Lighting System and Park Improvements—Columbus, O.—See "Streets and Roads."

Dock—Mingo Junction, O.—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., plans coke unloading dock, stationary crane on concrete caisson foundation, mooring piles, etc., here. $50,000.

Gravel Plant—Janesville, Wis.—Wilcox Co., 859 South Main St., contemplates new gravel plant and will purchase washing plant, crusher, loading equipment, etc.

Truck, etc., Kenosha, Wis.—City, c/o B. W. Bolerjack, purch. agt., plans to purchase 3 or 4 ton truck for Garbage Dept., also street sweeper.

Golf Links—Madison, Wis.—City plans 18 hole golf course at Forest Hill. Architect not selected. $30,000.

Transmission Line—Wauzeka, Wis.—See "Industrial Works."

Transmission Line, etc.—Herndon, Kan.—Voted $30,000 bonds for transmission lines and distribution system. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, Mo., engrs. Noted Aug. 30.

Levee—Pine Bluff, Ark. — See "Excavation, Drainage, Irrigation."

Golf Course—Dallas, Tex. — Dallas Oak Golf Club, c/o I. J. Willingham, 4907 Columbia St., having plans prepared new golf course. $25,000. J. McKenzie, Lakewood Country Club, engr.

White Way—Greenville, Tex.—Making plans whiteway in business section. $25,000. L. Mitchell, 118 South Briton St., Dallas, engr.

Grade Crossing Elimination—Waco, Tex.—McLennan Co. making plans grade crossing elimination on Highway 2 near Bruceville. $25,000. M. Hannah, co. engr.

Park Improvements, Swimming Pool, etc.—Monrovia, Calif.—Oct. 23 to vote on $80,000 bonds for recreation park and swimming pool, and $16,000 bonds for city's share of cost of bridge across Santa Anita River between here and Arcadia. L. P. Black, clk. Noted July 12.

Lighting System—Newport Beach, Calif.—Plans street lighting system in Peninsula Dist. To exceed $25,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engrs.

BIDS DESIRED

Greenhouses, etc.—New York, N. Y.—Oct. 11, by Park Bd., Municipal Bldg., range of greenhouse and workhouse in Van Cortlandt Park Nurseries, Bronx Boro. F. D. Gallatin, pres.

Sand, Cement, etc.—New York, N. Y.—Oct. 9, by Bd. of Purchase, Municipal Bldg., furnishing and delivering sand, cement and broken stone to Dept. Plants and Structures.

Tunnel—Phila., Pa.—Oct. 17, by Comn. Fairmount Park, City Hall, 1,200 ft. rein.-con. tunnel, 14.5 ft. high, 30 ft. wide, between 23rd St. and Spring Garden Bridge. Zantzinger, Borie & Trumbauer, Otis Bldg., associated archts.

Protection Work—Shreveport, La.—Oct. 23, protection work on Red River. C. E. Smith & Co., 2073 Ry. Exch. Bldg., St. Louis, Mo., consult. engr.; adv. E.N.-R.. Oct. 4.

Steam Heating Plant—Watertown, Wis.—A. Kuenzi, engr., Watertown, taking bids steam heating plant, piping, radiators and boilers for E. Miller. $25,000.

Levee—Ennis, Tex. — Oct. 17, (extended date) by E. Raphael, chn. Bd., Ellis Co. Levee Impvt. Dist. 2, 5,000 ft. levee, 18 ft. high, 2.1 slope, 3 ft. crown, 150,000 yd. earth in fill, 25 acres clearing, 12.5 acres grubbing, etc. C. T. Forest, Waxahachie, dist. engr. Noted Sept. 13.

Grain Elevator—Port Arthur, Tex.—Kansas City Southern R.R., 11th and Wyandotte Sts., Kansas City, Mo., taking bids concrete grain elevator, 600,000-700,000 bu., here. $25,000. C. E. Johnson, c/o owner, engr.

Crane—Tacoma, Wash.—Port of Tacoma, Natl. Bank of Tacoma Bldg., in market for 90 ft. electric crane with track and necessary operating equipment. $50,000. Address G. M. Osgood, ch. engr.

Portland Cement—Portland, Ore.—Oct. 23 by Comrs. Multnomah Co., Court House, furnishing 270,000 bbl. portland cement for construction of Burnside and Ross Island Bridges. C. Rudeen, chn. Hedrick & Kremers, 250½ 3rd St., engrs.

Lighting System—Chino, Calif.—Oct. 16 for ornamental street lighting system, 89 granite concrete standards, 9,528 lin.ft ¾ in. iron conduit with No. 6 lead covered cable. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Tractor—Fairfield, Calif.—Solano Co. receiving bids Fordson tractor for use at county hospital site. G. G. Halliday, clk.

Paving Plant—Vallejo, Calif.—City taking bids asphalt paving plant. $15,000. T. D. Kilkenny, city engr. Noted July 12.

BIDS RECEIVED

Railroad Duct Line—New York, N. Y.—G. McAneny, chn. Transit Comn., 49 Lafayette St., railroad duct line at 239th St. yard, White Plains Rd. Rapid Transit R.R., Route 18, Agreement "CS," from F. Hanratty, 605 2Beach Terrace St., $91,663. Noted Sept. 20.

Sea Wall—New York, N. Y.—B. S. Coler, comr. Dept. Pub. Welfare, Municipal Bldg., sea wall on east shore Welfare Island, from A. M. Hazell, Inc., 26 Cortlandt St., $17,945. Noted Sept. 27.

Culvert—St. Louis, Mo.—Bd. Pub. Serv., 208 City Hall, rein.-con. culvert to carry Delmar Blvd. over River Des Peres, from H. A. Henske, Arcade Bldg., 32,330 cu.yd. Class A excav. $0.85, 72,560 cu.yd. Class B excav. $0.40, 8,485 cu.yd. Class C. excav. $1, 64,030 cu.yd. Class A concrete $0.55, 52,470 cu.yd. Class B concrete $0.45, etc., total $150,766. Noted Aug. 30.

CONTRACT AWARDED

Foundation—Ware, Mass.—Bishop of Diocese, Cathedral, Springfield, foundation for 1 story, 63 x 144 ft. church, 83 x 100 ft. transept, brick and cast stone, Pleasant St., here, to H. P. Cummins Constr. Co., Ware. Total cost $200,000. Contract for superstructure will be let later.

Asphaltic Cement, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 400 tons asphaltic cement, to Standard Oil Co., 26 Bway., $7,700; 1,000 cu.yd. broken trap rock, to Ames Building Material Co., 3437 Kingsbridge Rd., $8,463. Noted Sept. 27.

Steel — Rochester, N. Y. — Knights of Columbus, 700 Main St., E., 1,500 tons steel for 12 story office and clubhouse, Lawn and Chestnut Sts., to Genesee Bridge Co., 666 Plymouth Ave., $204,000.

Tunnel — Madison, Wis. — University of Wisconsin, concrete steam tunnels from central heating plant to new State Hospital, to G. Nelson, 1117 West Johnson St. Noted Aug. 23.

Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., furnishing and delivering structural reinforcing for repairing Wabasha St. Bridge over Mississippi River, to St. Paul Fdry. Co., Como Ave. and Mackubin St., $4,587; 1,320 sq.yd. 3½ in. creosoted wood block for repairing same, to Minnesota Equipment Co., 4536 Dupont Ave. S., Minneapolis, $2.70 per sq.yd.; eight hundred and eighty 12 ft. lengths 6 in. Class B c.i. pipe, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $60.16 per ton; three hundred and thirty 12 ft. lengths 16 in. Class B c.i. pipe, to Glamorgan Pipe Fdry. Co., The Rookery, Chicago, $58.10 per ton. Noted Sept. 27.

Stadium—Pittsburg, Kan.—State Teachers College, general contract rein.-con. stadium, to G. E. Dalton, Constr. Co., Junction City, $43,775.

Underpass—Bells, Tex.—Grayson Co. (Sherman) underpass on county highway here, to F. B. Brooks, Sherman, $27,000.

Gas System—Fairfax, Okla.—J. N. Fly, city clk., gas distribution system, regulator station, meters, incl. 37,500 ft. 2-6 in. iron pipe, etc., to L. A. Galleciez, Enid, $30,837. Engrs. est. $36,000. Noted Sept. 20.

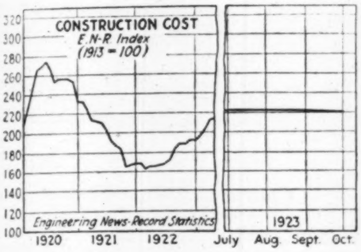
CONSTRUCTION NEWS

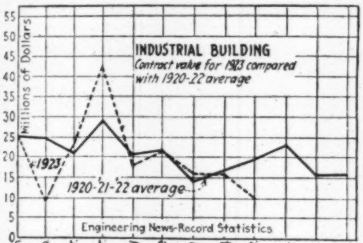
Engineering News-Record, October 11, 1923

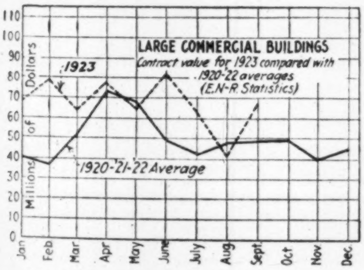
The Construction Barometer

Gain In Volume of Construction—Prices Stable—Drop In Industrial Building

THE apparent stabilization of costs during the last four months has resulted in an abrupt rise in the volume of construction in September, as shown by the charts. Labor costs have risen, in the skilled trades, but basic materials prices have shown little change. Had this lack of change been due to stagnation instead of stabilization, there could not have been an increase in the volume of construction, particularly at this season of the year. Nearly all classes of construction gained in value of contracts let, with the exception of industrial building. The unusual gain in bridge contracts is mainly due to four big jobs, namely: A 2,480-ft. steel bridge over the St. Johns River, Fla., $1,800,000; a 1,733-ft. concrete bridge over the Ashley River, S. C., $1,067,466; a bridge over the Delaware River between Philadelphia and Camden, N. J., $2,546,900 and a bridge over the Carquinez Straits, Calif., $4,500,000.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Sept. 20	$13,016,000	$19,333,000	$32,349,000
Sept. 27	16,057,000	24,127,000	40,184,000
Oct. 4	16,915,000	17,145,000	34,060,000
3 weeks	$45,988,000	$60,605,000	$106,593,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

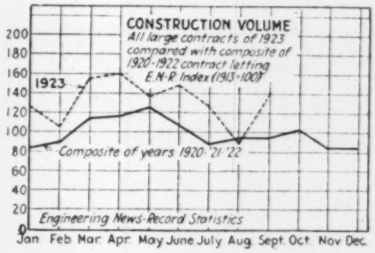
Week Ended	No.	Public Work	No.	Private Work
Sept. 20	7	$1,181,000	35	$16,913,000
Sept. 27	13	1,355,000	36	12,761,000
Oct. 4	12	4,651,000	33	12,587,000
3 weeks	32	$7,187,000	104	$42,261,000

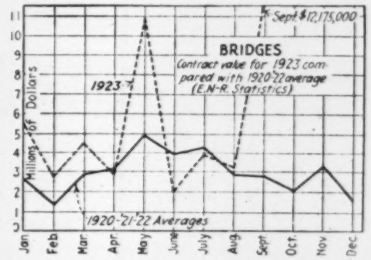
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

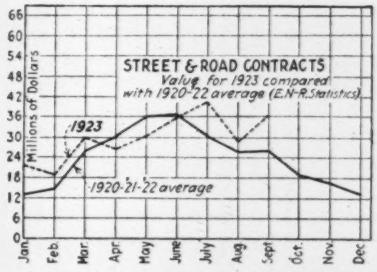
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Sept. 20	35	179	51	35	37
Sept. 27	32	165	44	31	32
Oct. 4	44	186	57	23	43

LABOR AND MATERIALS FIRM AT PRESENT LEVELS

	Quoted on Oct. 11, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	62.00	61.00	Oct. 4
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common Labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 16	Matawan, N. J.	Oct. 4
Oct. 16	Brooklyn Heights (Independence P. O.), O.	Oct. 11
Oct. 17	New York, N. Y.	Oct. 11
Oct. 18	Winona, Minn.	Oct. 4
Oct. 18	South Bend, Ind.	Oct. 4
Oct. 23	Buffalo, N. Y.	Sept. 20
Oct. 23	New Holstein, Wis.	Oct. 11
Oct. 24	Cleveland, O.	Oct. 4
	Adv. Oct. 4 and 11	
Oct. 26	Tulsa, Okla.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Oct. 26	Wash., D. C.	Oct. 11
	Adv. Oct. 11.	
Oct. 30	Washington, Ia.	Oct. 11
Nov. 5	Haledon, N. J.	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Oct. 15	Des Moines, Ia.	Oct. 11
Oct. 17	Brooklyn, N. Y.	Oct. 11
Oct. 17	Wrightsville, Ga.	Oct. 11
Oct. 18	Morris Plains, N. J.	Oct. 11
Oct. 22	Berea, O.	Oct. 4
	Adv. Oct. 4 and 11.	
Oct. 23	Toronto, Ont.	Oct. 11
	Adv. Oct. 11.	
Oct. 30	St. Louis, Mo.	Oct. 4
Nov. 1	Fort Erie, Ont.	Aug. 23
Dec. 10	New Orleans, La.	Oct. 11
	Adv. Oct. 11.	
Dec. 23	New Holstein, Wis.	Oct. 11

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Oct. 30	Indianapolis, Ind.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Oct. 13	West Virginia	Oct. 11
Oct. 15	New Jersey	Oct. 4
	Adv. Oct. 4 and 11	
Oct. 16	Clearwater, Fla.	Sept. 13
Oct. 16	Fishkill, N. Y.	Sept. 27
	Adv. Sept. 27 to Oct. 11	
Oct. 16	Williamson, W. Va.	Sept. 27
Oct. 16	Ohio	Oct. 4
Oct. 16	Greenwood, Miss.	Oct. 8
Oct. 17	Illinois	Oct. 11
Oct. 18	Three Rivers, Mich.	Oct. 11
	Adv. Oct. 11.	
Oct. 19	Tennessee	Oct. 4
Oct. 22	Portland, Ore.	Sept. 27
Oct. 23	Mobridge, S. D.	Sept. 27

Bids Close		See Eng. News-Record
Oct. 23	Alabama	Oct. 4
Oct. 26	Centerville, Tex.	Sept. 27
Oct. 26	Phillipsburg, Kan.	Oct. 4
Oct. 29	California	Oct. 11
Oct. 30	Alabama	Oct. 4
Nov. 5	Fremont, O.	Oct. 11
Nov. 6	Quitman, Miss.	Oct. 11
Nov. 30	Sydney, Australia	Apr. 19
May 1	Tientsen, North China	Oct. 11

DAM

Bids Close		See Eng. News-Record
Oct. 17	Montreal, Que.	Oct. 11

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Oct. 15	Toronto, Ont.	Sept. 27
Oct. 15	Byron, Calif.	Oct. 4
Oct. 16	Fort Dodge, Ia.	Oct. 11
Oct. 19	Granite Falls, Minn	Oct. 4
Oct. 22	Harlingen, Tex.	Oct. 11

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 14	Sebring, Fla.	Oct. 11
Oct. 15	Weston, W. Va.	Sept. 20
Oct. 15	Michigan	Sept. 27
Oct. 15	Lexington, Miss.	Sept. 27
Oct. 15	Tavares, Fla.	Oct. 4
Oct. 15	Center, Tex.	Oct. 4
Oct. 15	Long Island City, N. Y.	Oct. 11
Oct. 15	Evansville, Ind.	Oct. 11
Oct. 16	Waterloo, Ia.	Oct. 4
Oct. 16	Fayetteville, W. Va	Oct. 4
Oct. 16	Ohio	Oct. 4
Oct. 16	Tampa, Fla.	Oct. 11
Oct. 16	Winnetka, Ill.	Oct. 11
Oct. 16	Steubenville, O.	Oct. 11
Oct. 16	Independence, La.	Oct. 11
Oct. 16	Compton, Calif.	Oct. 11
Oct. 16	Colorado	Oct. 11
Oct. 16	Phila., Pa.	Oct. 11
Oct. 16	Michigan	Oct. 11
Oct. 16	Louisiana	Oct. 11
Oct. 16	York, S. C.	Oct. 11
Oct. 16	Sioux City, Ia.	Oct. 11
Oct. 16	Ft. Worth, Tex.	Oct. 11
Oct. 17	Meadville, Miss.	Sept. 27
Oct. 17	Rhode Island Adv. Oct. 4 and 11	Oct. 4
Oct. 17	Michigan	Oct. 4
Oct. 17	San Francisco, Calif	Oct. 4
Oct. 17	Portland, Ore.	Oct. 11
Oct. 17	Illinois	Oct. 11
Oct. 17	Baltimore, Md.	Oct. 11
Oct. 17	Brooklyn, N. Y.	Oct. 11
Oct. 18	Houston, Tex.	Sept. 27
Oct. 18	Hemphill, Tex.	Sept. 27
Oct. 18	Gainesville, Fla.	Oct. 11
Oct. 18	Michigan	Oct. 11
Oct. 19	Marion, Kan.	Sept. 27
Oct. 19	Paris, Tex.	Sept. 27
Oct. 19	Tennessee	Oct. 4
Oct. 19	Wewoka, Okla.	Oct. 11
Oct. 20	Quebec	Oct. 4
Oct. 22	New Jersey Adv. Oct. 4 and 11	Oct. 4
Oct. 22	Norton, Kan.	Sept. 27
Oct. 23	Kentucky	Sept. 27
Oct. 23	New Albany, Miss.	Oct. 4
Oct. 23	Marshall, Tex.	Oct. 11
Oct. 24	Alpha, N. J. Adv. Oct. 4 and 11	Oct. 4
Oct. 25	Ventura, Calif.	Oct. 11
Oct. 29	California	Oct. 11
Oct. 29	New Mexico	Oct. 11
Oct. 30	Cheraw, S. C.	Oct. 11
Oct. 31	Jefferson, Tex.	Oct. 11
Nov. 5	Hondo, Tex.	Oct. 11
Nov. 6	Washington	Oct. 4

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Oct. 16	Fond du Lac, Wis.	Oct. 11
Oct. 17	Los Angeles, Calif.	Oct. 11
Oct. 18	La Grange, Ill.	Oct. 11
Oct. 24	Andrews, N. C. Adv. Oct. 4 and 11.	Oct. 4
Nov. 8	Palmyra, N. Y. Adv. Oct. 11.	Oct. 11

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 15	Bakersfield, Calif.	Sept. 27
Oct. 15	Nevada, Mo.	Oct. 4
Oct. 15	Indianapolis, Ind.	Oct. 4
Oct. 15	Detroit, Mich.	Oct. 11
Oct. 15	Memphis, Tenn.	Oct. 11
Oct. 15	Oklahoma City, Okla.	Oct. 11
Oct. 15	Flint, Mich.	Oct. 11
Oct. 16	Bridgeport, Conn.	Sept. 27
Oct. 16	Brooklyn, N. Y.	Oct. 4
Oct. 16	Montclair, N. J.	Oct. 4
Oct. 16	Leonia, N. J.	Oct. 4
Oct. 16	Waterbury, Conn.	Oct. 11
Oct. 16	Hartford, Conn.	Oct. 11
Oct. 17	Clifton, N. J.	Oct. 4
Oct. 17	San Francisco, Calif.	Oct. 11
Oct. 17	Davenport, Ia.	Oct. 11
Oct. 17	Los Angeles, Calif.	Oct. 11
Oct. 18	Springwells, Mich.	Oct. 4
Oct. 19	Wapakoneta, O.	Oct. 11
Oct. 20	Louisville, Ky.	Sept. 13
Oct. 20	Charlotte, N. C.	Oct. 11
Oct. 22	Johnstown, Pa.	Oct. 4
Oct. 22	Point Grey, B. C.	Oct. 11
Oct. 23	Ann Arbor, Mich.	Oct. 4
Oct. 23	St. Francis, Kan.	Oct. 4
Oct. 23	Madison, N. J.	Oct. 4
Oct. 23	Niles (R. F. D. Norwood Park, Chicago P. O.), Ill.	Oct. 11
Oct. 24	Marion, Ia.	Sept. 27
Oct. 24	Elizabeth, N. J.	Oct. 11
Oct. 27	Shreveport, La.	Oct. 11
Oct. 15	Waseca, Minn.	Sept. 20
Oct. 30	New York, N. Y	Oct. 11
Oct. 30	Norristown, Pa.	Oct. 11
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2
Nov. 1	Hutchinson, Kan.	Oct. 11
Nov. 30	Maggie, W. Va.	Oct. 4

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 15	Breakwater—Hilo, H. T.	Aug. 23
Oct. 15	Dredging—Los Angeles, Calif.	Sept. 27
Oct. 15	Resurfacing—Castle Point (Chelsea P. O.), N. Y.	Oct. 4
Oct. 15	Floors and Runways—San Antonio, Tex.	Oct. 11
Oct. 15	Hangars—Belleville, Ill.	Oct. 11
Oct. 15	Roadwork — Vicksburg, Miss.	Oct. 11
Oct. 16	Buildings, etc.—North Little Rock, Ark.	Sept. 20
Oct. 16	Mechanical Equipment—Carville, La.	Sept. 20
Oct. 16	Buildings—Carville, La.	Sept. 20
Oct. 16	Jetty—Staten Island, N. Y.	Oct. 4
Oct. 16	Road—Arkansas	Oct. 4
Oct. 16	Road—Montana	Oct. 11
Oct. 17	Dredging — Bridgeport, Conn. Adv. Sept. 20 to Oct. 11.	Sept. 20
Oct. 17	Post Office—Dawson, Ga.	Sept. 20
Oct. 17	Radio Masts—Puget Sound, Wash.	Sept. 20
Oct. 17	—Discharge Pontoons—Rock Island, Ill. Adv. Sept. 27 to Oct. 11	Sept. 27
Oct. 17	Dredging—Providence, R. I.	Oct. 4
Oct. 17	Water Supply Improvements—Annapolis, Md.	Oct. 4
Oct. 17	Distribution System, etc.—Pensacola, Fla.	Oct. 4
Oct. 18	Dwellings — Newburg, Ind. Adv. Oct. 4 and 11.	Sept. 20
Oct. 18	Road—Florida	Sept. 27
Oct. 18	Extension—St. Louis, Mo.	Oct. 4
Oct. 20	Pontoons, etc.—Cincinnati, O. Adv. Sept. 20 to Oct. 11.	Sept. 20
Oct. 20	Radio Tower — Ft. Clark, Tex.	Oct. 4
Oct. 20	Mattresses, etc.—Pine Bluff, Ark.	Oct. 11
Oct. 20	Road—Juneau, Alaska	Oct. 11
Oct. 22	Derricks—Louisville, Ky. Adv. Oct. 4 and 11	Oct. 4
Oct. 26	Dredging, etc.—Port Chester, N. Y. Adv. Sept. 27 to Oct. 11	Sept. 27
Oct. 26	Post Office—Clinton, S. C.	Oct. 4
Oct. 29	Dredging—New Rochelle, N. Y. Adv. Oct. 4 and 11	Oct. 4
Oct. 30	Dredging—Norfolk, Va. Adv. Oct. 11.	Oct. 11
Oct. 31	Repairing Jetty—Freeport, Tex. Adv. Oct. 4 and 11.	Oct. 4
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
Nov. 1	Catamarans, etc.—Chicago, Ill. Adv. Sept. 20, 27, Oct. 11 and 18	Sept. 20
Nov. 2	Dredge Pump, etc.—New Orleans, La. Adv. Oct. 11.	Oct. 11
Nov. 5	Post Office—Hoosick Falls, N. Y. Adv. Oct. 11.	Oct. 11
Nov. 6	Sewer Pipe—American Falls, Idaho Adv. Oct. 11.	Oct. 11
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 30	Dam—Quebradillas, P. R. Adv. Sept. 27 to Oct. 11	Sept. 27

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 15	Gravel—Kountze, Tex.	Sept. 27
Oct. 15	Road Scrapers—Montreal, Que.	Oct. 11
Oct. 15	Ornamental Lighting System—Dubois, Pa.	Oct. 11
Oct. 16	Lighting System—Chino, Calif.	Oct. 4
Oct. 16	Materials—St. Paul, Minn	Oct. 11
Oct. 17	Levee—Ennis, Tex.	Oct. 4
Oct. 17	Tunnel—Phila., Pa.	Oct. 4
Oct. 17	Underground Fire Alarm System—New York, N. Y.	Oct. 11
Oct. 18	Rails—Houston, Tex.	Oct. 11
Oct. 18	Lumber—New Orleans, La.	Oct. 11
Oct. 22	Breakwater—St. Francis Harbor, N. S.	Oct. 11
Oct. 22	Breakwater—Port Lorne, N. S.	Oct. 11
Oct. 23	—Protection Work—Shreveport, La.	Oct. 4
Oct. 23	Portland Cement—Portland, Ore.	Oct. 4
Oct. 23	Tractor — Grand Rapids, Minn.	Oct. 11
Oct. 23	Wall and Dike—Shreveport, La.	Oct. 11
Oct. 25	Subway—San Francisco, Calif.	Oct. 11
Nov. 7	Board Walk—Spring Lake, N J. Adv. Oct. 11.	Oct. 11
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Ballston Spa — Soon takes bids dam and storage reservoir in Crook Brook water shed to supply additional 800,000 gal. daily. $325,000. J. L. Tracy, village pres. Noted March 1.

N. Y., Canandaigua—See "Miscellaneous."

N. Y., Hornell—Plans tapping underground stream and installing necessary machinery for pumping water into mains. Cost of machinery $10,000.

N. Y., Sodus—Plans modern water system. $80,000. Engineer not announced.

Pa., Shenandoah — Plans to extend and improve waterworks. Election in November to vote on $200,000 bonds. Engineer not selected.

Fla., Lake Worth—Voted $25,000 bonds for extension to distribution system, 20,000 ft. 4 and 6 in. c.i. pipe. G. Kingsley, Lake Worth, engr.

La., Gibsland—Having preliminary plans prepared for waterworks and distribution system, electric light plant and transmission lines. $50,000. E. T. Archer & Co., 1010 Merchants Bldg., Shreveport, engrs.

La., Shreveport—Voted $405,000 bonds for reservoir, $225,000 for pump house conduit, $106,000 for settling basins, $100,000 for filters and $100,000 for main extensions. J. N. Chester, Engineer, Union Bank Bldg., Pittsburgh, Pa., engrs.

La., Winfield—Having preliminary surveys made extending waterworks, also storm and sanitary sewers. $100,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Tenn., Gallatin — Having preliminary plans prepared filtration plant. $35,000 bonds voted. B. H. Klyce, 4th & 1st Natl. Bank Bldg., Nashville, consult. engr. Noted Sept. 27.

Kan., Lenora — Soon takes bids waterworks plant and distribution system. $35,000 bonds voted. Rachel Eng. Co., Hutchinson, engrs.

Mo., Ava — Making plans waterworks, reservoir, tower, distribution mains, etc. To exceed $30,000. Plans election to vote on bonds. Elston, Axon & Russell, 404 McDaniel Bldg., Springfield, engrs.

Mo., Salem—Oct. 30 to vote on $69,000 bonds waterworks and distribution system. E. T. Archer & Co., 612 New England Bldg., Kansas City, engrs. Noted Sept. 13.

Wyo., Evansville — Plans water supply system incl. small diversion dam, several miles of intake pipe line, standpipe, etc. $85,000 bonds voted. Wheeler & Worthington, Cons. Roy. Bldg., Casper, consult. engrs.

Mo., Cameron — Voted $53,433 bonds waterworks and distribution system. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs. Noted Sept. 13.

Mo., Shelbina—Making estimates 3 mi. c.i. force mains, also appraisal of light and waterworks properties. Burns & McDonnell, Interstate Bldg., Kansas City, engrs.

Okla., Quinton—Preparing plans and will soon vote on $20,000 bonds for rapid sand mechanical filter plant. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engr.

Waterworks (Continued)

Calif., Calexico—Plans to vote on $90,000 bonds for extensions to system, $20,000 will be expended for filters.

Calif., Colusa — G. N. Farnsworth had plans prepared 4,750 ft. of 36 in. precast concrete pipe line, 11,000 ft. canal, 11 ft. top, 5 ft. wide at bottom and 2 ft. deep, 2 centrifugal pumps, etc. To exceed $45,000. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, engr.

Calif., Oceanside—Voted $80,000 bonds for water system.

Calif., Santa Ana—Orange Co. Waterworks Dist. 2 plans election to vote on $30,000 bonds for waterworks.

Calif., Upland—City voted $225,000 bonds to purchase and improve privately owned system. Improvements will exceed $25,000.

Ont., Fonthill—Soon takes bids 3 mi. 6 and 8 in. c.i. mains, hydrants, etc. $40,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Port Credit—Plans 2½ mi. 6 in c.i. mains. $30,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., New York—Oct. 17, by Bd. Purch., Municipal Bldg., furnishing, delivering, unloading, stacking and storing c.i. pipe and special castings to Dept. Water Supply, Gas and Electricity.

N. J., Haledon—Nov. 5, pumping station and extending water system. H. J. Harder, 129 Market St., Paterson, engr.

D. C., Wash.—Oct. 26, at office Washington Suburban Sanitary Comm., Evans Bldg., New York Ave., elevated steel tank, Contr. 38-W. R. B. Morse, Hyattsville, Md., ch. engr. of dist.; adv. E. N.-R. Oct. 11.

La., New Orleans—See "Sewers."

O., Brooklyn Heights (Independence P. O.)—See "Sewers."

Wis., Fond du Lac — See "Industrial Work."

Wis., New Holstein — Oct. 23, drilling artesian well, 800 ft. deep, 130 ft. of 12 in., 390 ft. 10 in pipe, and balance 8 in. $15,000. J. Donohue, Co., 628 North 8th St., Sheboygan, engrs.

Wis., New Holstein — Dec. 18, by L. Hipke, village clk., new waterworks system incl. 29,740 lin.ft. 4-10 in. Class B c.i. pipe, thirty-eight 6-10 in. valves, 10 tons special castings, 1,300 cu.yd. rock excav., 60,000 gal. steel tank on 100 ft. steel tower. J. Donohue Eng. Co., North 8th St., Sheboygan, engr.

Ia., Washington—Oct. 30, by S. J. Kellogg, city clk., 1,900 ft. well with casing. Bids later for pumping plant, elevated tank and other equipment. Ultimate cost $80,000. Noted Sept. 27.

Minn., St. Paul—See "Miscellaneous."

BIDS RECEIVED

N. Y., New York — Bd. Water Supply, Gas & Electricity, Municipal Bldg., Oct. 5, completing contract of J. O'Leary for mains in Baychester Ave., from C. DeBlasio, 339 7th Ave., Mt. Vernon, $30,000; check valves, etc., on mains in 5th Ave. Central Park, from Wataga Contg. Co., $26,650.

O., Idlewood (Cleveland Heights, P. O.)—Cast iron mains in Washington Blvd., Brockway, Cedarbrook, Farland, Trillamore, Bushnell, Fenwick, Lansdale, Vernon, Westwood, and Edgerton Rds., from Consolo & Palermo, 2208 Murray Hill Rd., Cleveland, $31,252.

Wis., Algoma — Watermain extensions, 4,710 ft. 6-10 in. c.i. pipe, from E. Olson, Sturgeon Bay, $18,700.

Tex., Ft. Worth—Filter building addition, mixing chamber, coagulation-sedimentation basin, filter water reservoir with appurtenances and incl. pipe connecting same, also filter equipment, from Carruthers Constr. Co., Ft. Worth, $192,365. Noted Sept. 6.

Calif., Glendale — See "Streets and Roads."

CONTRACTS AWARDED

Connecticut — South Manchester Water Co., 2 mi. 15, 20 and 24 in. c.i. pipe from dam in Buckingham to South Manchester and Manchester, to A. W. Byrne, 71 Turnmore St., Hartford. Engrs. est. $50,000. Noted Sept. 24.

N. J., Glen Rock (Ridgewood P. O.)—See "Sewers."

Ill., Western Springs—Boring and constructing artesian well to S. B. Geiger, Old Colony Bldg., Chicago. Engrs. est. $30,000.

Okla., Cyril—New system, well, tank, tower and hydrants, 17,300 ft. 4 in. and 1,600 ft. 6 in. c.i. pipe, to N. S. Sherman Co., 18 East Main St., Oklahoma City, $30,906. Engrs. est. $31,000. Noted Sept. 20.

Calif., Glendale — See "Streets and Roads.

Sewers

PROPOSED WORK

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, rejected bids Sept. 20, sewer in West 24th St. Will readvertise. Noted Sept. 27.

N. J., Asbury Park—Plans 18-48 in. iron storm drain in Comstock St. $75,000. N. Rogers, Asbury Park, engr.

Mich., Detroit—Plans prepared 13,681 ft. 12-24 in. vitr. crock sewers in Laterals 3888, 4010 and 4013; 3,201 ft. 12-18 in. in Lateral 4016; 5,670 ft. 12 in. to 3 ft. 6 in. and 730 ft. 2 ft. 6 in. to 3 ft. 6 in. in Lateral 4017; 6,478 ft. 12 to 20 in. and 531 ft. 3 ft. 9 in. in Lateral 4018; 1,256 ft. 12-15 in. in Lateral 4019. G. Jerome, city engr.

Ill., Taylorville—Making plans sewers and disposal plant. To exceed $150,000. Engineer not selected.

W. Va., Huntington—Election in November, to vote on $1,000,000 bonds improving and enlarging sewerage system. A. B. Maupin, city engr.

La., Shreveport—Voted $50,000 bonds for outlet sewer, etc. J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.

Kan., Great Bend—Making plans rehabilitating present sanitary sewerage system, requiring construction new outfall and other improvements. $100,000. Ruckel Eng. Co., Hutchinson, designing engrs. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., consult. engrs. Noted Aug. 9.

Mo., Cameron—Voted $53,860 bonds sanitary sewers. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs. Noted Sept. 13.

Mo., Salem—Oct. 30 to vote on $56,000 bonds storm and sanitary sewers. E. T. Archer & Co., 612 New England Bldg., Kansas City, engrs. Noted Sept. 13.

Tex., Laredo—Revising plans and will soon take bids repairing and extending sewerage system. Former bids rejected. E. F. Greelins, 211 Alexander Bldg., engr. Noted Sept. 27.

Tex., San Antonio—Election first week in December to vote on $250,000 bonds extending and general improvements to storm sewers; $100,000 bonds extending and improving sanitary sewers. D. D. Harrigan, city engr.

Okla., Quinton—Preparing plans 7 mi. sanitary sewerage system and disposal plant. $50,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Calif., Dos Palos—Plans to vote on $25,000 or more bonds for sewage improvements.

Calif., Fresno—Had plans prepared 6,999 lin.ft. 8 to 18 in. vitr. pipe sewers in portions of Monterey, G and H Sts. W. Stranahan, city engr.

Calif., Sacramento—Plans sewer in 7th St. between H & S Sts. To exceed $35,000. A. Givan, city engr.

Calif., Tracy — Rejected bids disposal plant. C. F. Smith, 516 Santa Barbara Rd., Berkeley, engr. Noted Sept. 27.

BIDS DESIRED

N. Y., Brooklyn—Oct. 17, by M. E. Connolly, boro pres., Boro Hall, storm and sanitary sewers in 8th St. between Aves. T and W, and between Aves. M and U, 82nd, East 27th, West 6th, 87th and 86th Sts.

N. J., Morris Plains—Oct. 18, by B. G. Lewis, comr. Institutions & Agencies, State House, Trenton, disposal plant, concrete tank, 100 ft. square, 8 ft. deep, terra cotta pipes, 12 ft. brick building, etc., at Hospital for Insane, here. $73,500. A. B. Mills, State Office Bldg., Trenton, engr. Noted May 24.

Ga., Wrightsville—Oct. 17, by city, 5 mi. 6-12 in. pipe sewer. A. Pew, 30 Cone St., Atlanta, engr. Noted Aug. 23.

La., New Orleans—Dec. 10, by Sewerage & Water Bd., 425 Carondelet St., for sewerage, waterworks and drainage construction during 1924; adv. E. N.-R. Oct. 11.

O., Brooklyn Heights (Independence P. O.)—Oct. 16, 1,930 ft. 12-18 in. vitr. clay sewer and 2,600 ft. 6 in. c.i. water mains. To exceed $25,000. W. H. Evers Eng. Co., Engineers Bldg., Cleveland, engrs.

Wis., New Holstein—Dec. 18, by L. Hipke, village clk., new sewerage system, incl. 35,300 lin.ft. 6-12 in. vitr pipe, 460 ft. 6 in. c.i. pipe, 86 manholes, sewage pumping station, 2,400 lin.ft. 15 in. drain tile of shale, concrete or vitr. con., 2,850 lin.ft. 12-15 in. vitr. storm sewers. J. Donohue Eng. Co., North 8th St., Sheboygan, engrs.

Ia., Des Moines—Oct. 15, by A. E. McGlothen, clk., Southwest Sewerage System, 44,406 lin.ft. 10-24 in. pipe, 22,402 lin.ft. 30-48 in. circular sewer, one dry weather outfall and one inverted syphon complete. $600,000. K. C. Kastberg, city engr. Noted Aug. 16.

Ont., Toronto—Oct. 23, by C. A. Maguire, chn. Bd. Control, City Hall, furnishing one 1,000 gal. portable sewage pump with electric motor. R. C. Harris, city engr.

BIDS RECEIVED

N. J., Asbury Park—For 4,470 ft. 12-36 in. concrete storm drains, from W. J. Hanratty, 1124 Sewell St., $29,615. Noted Sept. 27.

N. J., Perth Amboy—Trunk sewer with necessary connections and appurtenances, from Hammen & Co., 4612 Woodward St., Detroit, Mich., $537,000. Noted Sept. 20.

Md., Baltimore—Bd. Awards, Oct. 3, constructing storm water and sanitary sewers in Bellwood Ave., Storm Contr. 64, 900 ft. of 6-9 ft. rein.-con. and 700 ft. 18 in. sewer, from D. Catalano, Knickerbocker Bldg., $30,663. Noted Sept. 27.

O., Cleveland—For 2,906 ft. 4 ft., 2,910 ft. 5 ft. 6 in., 2,693 ft. 5 ft. and 261 ft. 4 ft. 9 in. circular C brick or segmental block sewer in Ridge Rd. Sewer Dist., from Winterbottom & Connolly, 1815 Corning Ave., $232,125. Noted Sept. 20.

O., Cleveland—Cuyahoga Co., disposal plant in Tuxedo Lake allotment, Impvt. 33-B, from Lane & Freeman, Newman Stern Bldg., $25,844.

O., Idlewood (Cleveland Heights, P. O.)—Sewer in Cedar Rd., from Consolo & Palermo, 2208 Murray Hill Rd., Cleveland, $36,158.

Mich., Detroit—Lateral sewer 3884 from W. Blanck & Co., 827 Ford Bldg., $24,476; Lateral 3886 from Detroit Drainage Constr. Co., Detroit, $16,000; Lateral 3889 from P. Cappelo, Detroit, $3,300; Lateral 4099 from C. R. Lennane & Co., 2631 Woodward Ave., $24,391. Noted Oct. 4.

Minn., Austin—City, Sept. 28, installing disposal plant, direct oxidation system, (a) hollow tile and stucco with cement roofs (b) brick with cement roofing, from Direct Oxidation Corp., Penna Bldg., Phila., Pa., (a) $289,755 (b) $289,962.

CONTRACTS AWARDED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, to J. J. Guinan Contg. Co., Inc., 2314 Gravesend Ave., sewers in West 8th St. 90% engrs. est. ($4,825), West 10th St. 83% ($3,505), West 27th St. 84% ($7,805), West 35th St. 83% ($4,848), West 31st St. 83% ($6,378); to Tomasetti & Co., Inc., 1133 60th St., in West 12th St. 85.85% ($13,083), Stillwell Ave. 85.85% ($13,547); to P. J. Donlon Contg. Co., 82 South 3rd St., in West 15th St. 84.9% ($15,762), West 16th St. 83.5% ($14,150), West 9th St. 83.2% ($13,418), West 28th St. 83% ($3,165), West 29th St. 85% ($6,858), West 36th St. 83% ($4,942); Necaro Co., Inc., 97 Court St., in Hamilton Ave. $275,424; S. Ambrozio, 1016 60th St., in 45th St. 88% ($450). Noted Sept. 27.

N. Y., Greenwich—Barbour Flax Spinning Co., modern disposal plant, to Llewellyn-Smith Constr. Co., Glens Falls, $25,000.

N. Y., Rochester—Storm and sanitary sewer in Highland Ave., to J. Petrossi, Elwood Bldg., $49,051. Noted July 5.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sewers in Bradley Ave., to F. J. Cerelli, $11,576; Hinschliff Ave., to J. Johnson Sons, 455 Bway., West New Brighton, S. I., $111,756. Noted Sept. 20.

N. J., Glen Rock (Ridgewood P. O.)—Extending sewerage system, to Paterson Contg. Co., 111 Water St., Paterson; constructing pumping station, to E. B. Edgar, Scotia, N. Y. Noted July 12.

N. J., Montclair—Storm sewerage system, to A. Lampariello, 37 Glenridge Ave., $36,666. Noted Sept. 20.

Pa., Monessen — City, 3,500 ft. storm sewers, lock joint pipe, for 3rd St., to Donora Constr. Co., Donora, $71,318. Noted Aug. 30.

Fla., St. Petersburg—Sanitary sewers, to J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., $189,700 and Miller & Stamm, St. Petersburg, $70,550. Noted Aug. 23.

La., Minden—Storm and sanitary sewers in various streets, to Janes Constr. Co., Southwestern Life Bldg., Dallas, Tex., $105,000. Noted July 26.

Sewers (Continued)

La., Winfield—See "Waterworks."

O., Cleveland—For 1,135 ft. 5 ft. 9 in. circular "E" and 765 ft. 5 ft. 6 in. circular "C" brick sewer in East 141st St., to W. McDowell & Son Co., 10309 Miles Ave., $49,178.

O., Cleveland — Cuyahoga Co., 122 ft. 2 x 4 ft. concrete, 10,310 ft. 8-42 in. vitr. clay and segmental block sewers in Impvt. 34, to Manson Co., c/o Sewer Contractors Exchange, $97,760.

O., Cleveland—For 1,020 ft. 6 ft. 6 in. to 8 ft. circular brick sewer (Morgan Run Culvert), to Donnelly & Miller, 1251 East 84th St., $74,662. Noted Oct. 4.

Mo., Gallatin—For 5,000 ft. sanitary sewers, to Asplund Constr. Co., Tecumseh, Neb., $31,621. Engrs. est. $32,500.

Wash., Seattle — Bd. Pub. Wks., trunk sewer in 30th Ave. S.W. et al., 58,857 ft. 8-30 in., 1,450 ft. 15-30 in. and 415 ft. 8-24 in. clay sewers, to J. F. Shea & Co., Henry Bldg., Portland, $224,659. Engrs. est. $211,845. Noted Sept. 27.

Calif., Centerville—Union Sanitary Dist., 74,793 lin.ft. 6-14 in. vitr. pipe, to W. J. Tobin, 527 Santa Ray Ave., Oakland, $68,685. Noted Oct. 4.

Calif., Long Beach — Deep sewers in Bway. between Alamitos and Golden Aves., to H. D. Churchill Co., 352 Merrick St., Los Angeles, $66,500. Noted Sept. 6.

Waste Disposal

BIDS DESIRED

Ind., Indianapolis—Oct. 30, by Bd. Sanitary Comrs., Room 208, City Hall, 16 trailers for use in collection and removal of garbage and ashes. J. A. Craven, pres.

CONTRACTS AWARDED

W. Va., Huntington—For 40 ton double unit incinerator, to Nye Odorless Creamery Co., Georgia Life Bldg., Macon, Ga. Engrs. est. $35,000.

Fla., St. Petersburg—For 80 ton garbage incinerator, to Superior Garbage Incinerator Co., Dallas, Tex., $76,500. Noted Aug. 23.

Tex., San Antonio—City 60 x 90 ft. brick, concrete and tile (2nd unit) incinerator plant, 40 ton per 12 hr., to Superior Incinerator Co., San Antonio, $35,000.

Bridges

PROPOSED WORK

Vermont—See "Streets and Roads."

Conn., Manchester—Plans concrete bridge on Middle Turnpike. $25,000. J. F. Bowen, 570 Woodbridge St., engr.

Tenn., Smithville — De Kalb Co. and Tennessee Dept. of Hys., Nashville, plan concrete bridge over Caney Fork River, 7 mi. east of here. $120,000. Bonds voted.

O., Youngstown—Mahoning Co. plans to replace ½ mi. steel bridge over Mahoning River, on South Ave. $400,000-$500,000. City plans to widen streets leading up to approach. Engineer not selected.

Minnesota—State Hy. Dept., St. Paul, plans bridge in Olmsted Co., Project 335. $38,500. State Hy. Dept., St. Paul, engrs.

Tex., Fairfield—See "Streets and Roads."

Kan., Winfield — Cowley Co. had plans prepared bridge over Arkansas River, two 130 ft. steel trusses, rein.-con. substructure. $50,000. W. S. Ruggles, co. engr.

Tex., Kountze—See "Streets and Roads."

BIDS DESIRED

West Virginia — Oct. 13, by State Rd. Comn., Charleston, concrete or masonry substructure for approximately 150 ft. steel span bridge known as Fenwick Bridge 929, over Cherry River, Nicholas River. E. B. Carskadon, secy.

W. Va., Weston—See "Streets and Roads."

S. C., York—See "Streets and Roads."

Miss., Greenwood—Oct. 16, by Supervs. La Flore Co., 290 ft. swing span over Yazoo River, 116,000 lb. structural and 268,600 lb. reinforcing steel, 2,228.42 cu.yd. concrete, 12,152 ft. untreated foundation piling, 2,900 ft. untreated timber, 30,800 ft. creosoted timber, etc. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr. Noted Sept. 6.

Miss., Quitman — Nov. 6, by Supervs. Clarke Co., Court House, one 80 ft. span on Federal Aid Project 188-B, Clark Co., 134.52 cu.yd. concrete, 9,950 lb. reinforcing, 560 ft. wooden piling. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Louisiana—Oct. 11, by State Hy. Comn., Reymond Bldg., Baton Rouge, 70 ft. steel riveted truss span and two 20 ft. rein.-con. deck approach spans on rein.-con. piers on Federal Aid Project 82 C, Arcadia-Shreveport Highway, Bienville Parish, also 40 ft. span and two 26 ft. approach spans, all rein.-con deck girders on rein.-con. piers, on Federal Aid Project 110 A, Ruston-Arcadia Highway, Lincoln Parish. J. M. Fourmy, ch. engr.

O., Fremont—Nov. 5, by Sandusky Co. 5 arch rein.-con. bridge over Sandusky River, State St. $240,000. L. H. Wismar, co. surv. Noted May 31.

Mich., Three Rivers — Oct. 18, by E. A. Schall, city clk., 2 span steel bridge over St. Joseph River, Bway. G. Champe, Toledo, O., engr.; adv. E. N.-R. Oct. 11.

Illinois—Oct. 17, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, one 50 ft. steel bridge, 6 rein.-con. girder and 5 rein.-con. slab bridges, 3,060 cu.yd. concrete and 34,000 lb. structural steel. C. H. Older, ch. highway engr.

California—Oct. 29, by State Hy. Comn., Sacramento, bridge over Salinas River at Nacimiento Station, Monterey Co., will have twenty-seven 19 ft. timber trestle spans and four 150 ft. steel truss spans. R. M. Morton, state highway engr.

North China, Tientsen—May 1, by Hai Ho Conservancy Comn., 306 ft. rein.-con. and steel bridge, 58 ft. wide, over Hai Ho River. $550,000. All specifications for American contractors can be obtained from office of Bureau of Foreign & Domestic Commerce, Custom House, New York City.

BIDS RECEIVED

Pa., Johnstown—M. L. Masterton, supt. streets & pub. improvements, City Hall, constructing Napoleon St. Bridge over Stoney Creek, from Farris Eng. Co., Empire Bldg., Pittsburgh, $152,718; Coopersdale Bridge over Conemaugh River, from Independent Bridge Co., May Bldg., Pittsburgh, $179,400. Noted Sept. 13.

Louisiana — State Hy Comn., Reymond Bldg., Baton Rouge, Oct. 2, building bridge on Port Allen-New Roads, Port Allen-Plaquemine and Port Allen-Rosedale Highways, from Banta & Mutersbaugh, Lake Charles, $61,784. Noted Sept. 13.

La., Mermentau—State Hy. Dept., Reymond Bldg., Baton Rouge, Oct. 2, highway bridge and approaches over Mermentau River here, as follows: Alternate A consisting of series of 29 ft. rein.-con. girder spans resting on rein.-con. open bents and pile foundation, 7 spans on east end and 10 spans on west end of bridge from Austin Bridge Co. 1813 Clarence Ave., Dallas, Tex., $190,120; Alternate B consisting of series of 19 ft. creosoted timber spans on creosoted piling, 16 spans on east end and 27 spans on west end of bridge, from Missouri Valley Bridge & Iron Co., 4th and Walnut Sts., Leavenworth, Kan., $146,989; building embankment of approaches from A. E. Perry, Monroe, $33,415. Noted Aug. 30.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing bridges, **c g means concrete girder, c s concrete slab, c c concrete culvert, super superstructure and sub substructure, 3-39 B McDonough means (Route 3, Sect. 39 B, McDonough Co.)** 1 c g 3-39 B McDonough, from H. C. Holmes, Macomb, $7,750; one 50 ft. c g and 4 c c, 3-81 B, Morgan, from Medaris Constr. Co., Greenfield, $14,187; one 30 ft. and one 40 ft. c g 2-35 B Winnebago and Ogle, from F. E. Marsh & Co., Masonic Temple Bldg., Des Moines, Ia., $15,159; one 18 ft. c s and three 40 ft. c g 2-38 B Ogle, and one 20 ft. and one 24 ft. c. s. 2-39 B Ogle, from F. M. Hughes, Dixon, $21,016 and $7,832 respectively; one 130 ft. super for steel, 3-13 C Whiteside, and one 10 ft. c c, one 35 ft. c g and one 130 ft. concrete sub, 3-11 B and 13 B Rock Island and Whiteside, one 20 ft. c s, one 30 ft. c g and one c g with three 30 ft. spans 30-14 B, Stark-Henry, from Sheldon Constr. Co., Putnam Bldg., Davenport, Ia., $10,954, $15,766 and $23,601 respectively; one 30 ft. c. g, and one 80 ft. concrete sub 3-25 B, Mercer, from C. D. Stratton, Little York, $25,762; one 80 ft. super steel, 3-25 C Mercer, from Continental Bridge Co., Monadnock Blk., Chicago, $5,962; 1 temporary steel 4-23 B Logan, from E. H. Heavey, Lincoln, $14,411; one 20 ft. c s and one 40 ft. c g 9-26 B Hancock, from Cameron, Joyce & Co., Keokuk, Ia., $14,396; one c s with two 12 ft. spans, one c s with two 22 ft. spans 19-24 B Lake from R. Mann, Rock ford, $15,926; one 35 ft. c g, one 150 ft. concrete sub and four 50 ft. c s 31-10 B Brown-Schuyler, from List & Gifford Constr. Co., Ry. Exch. Bldg., Kansas City, Mo., $46,751; one 125 ft. steel super 30-110 Stark, from W. H. Shons, South Liberty Ave., Freeport, $11,376; one 150 ft. steel super 31-10C, Brown and Schuyler, from Illinois Steel Bridge Co., Jacksonville, $13,510; one 125 ft. steel sub and three 40 ft c s 30-11 B Stark Co., from I. O. Lain, Bloomington, $30,912. Noted Sept. 20.

California—State Hy. Comn., Sacramento, 240 ft. bridge, 21 ft. wide, over San Lorenzo River, near King City, Monterey Co., from De Waard & Cobham, Granger Bldg., San Diego, $34,456. Noted Sept. 20.

CONTRACTS AWARDED

New Jersey—Joint Comn. for Elimination of Toll Bridges over Delaware River, between New Jersey and Pennsylvania, State House, Trenton, repairing masonry work and superstructure of bridge over Delaware between Wilburtha, N. J., and Yardley, Pa., to Hill Constr. Co., 132 Hulme St., Mt. Holly, $36,100. Engrs. est. $36,000.

Ont., Toronto—City, bridge over Avoca Vale, St. Clair Ave., 600 ft. long, 45 ft. roadway, 2 sidewalks, 2 car tracks, etc., to J. E. Russell Constr. Co., Harbor Comn. Bldg. $572,464.

Michigan — State Hy. Dept., Lansing, three 50 ft. concrete girder bridges 020604, 020605 and 020606, Alger Co., to G. E. Warden Co., Eau Claire, Wis., $26,069. Noted Oct. 4.

Calif., Los Angeles—Harbor Comn., concrete viaduct and ramp for Harbor Blvd., to Clinton Constr. Co., Stock Exchange Bldg., $131,600. Noted Oct. 4.

Dams

PROPOSED WORK

Conn., Winchester—Torrington Electric Light Co., Torrington, plans 175 ft. dam, 20 ft. high, here. $100,000.

Ark., Hiram — Big Creek Power Co., Hiram, soon takes bids 40 ft. rock crib, natural rock spillway dam, 300 cu.yd. excav., 15,210 cu.yd. concrete, two 115 ft. turbines, two 75 k.w. generators with exciters, transformers, etc. and 3¼ mi. transmission line. $44,045. Private plans.

Ark., Little Rock—Arkansas Power Corp. does not plan to take bids for power dam on Little Red River. This corrects report in Sept. 27 issue.

Tex., San Saba—See "Excavation, Drainage, Irrigation."

BIDS DESIRED

N. C., Andrews—See "Industrial Works."

Que., Montreal—Oct. 17, by J. A. Tessier, chn. Quebec Streams Comn., 59 Notre Dame St. E., storage dam at Lake Metis. $200,000.

Railways

PROPOSED WORK

Connecticut—Connecticut Co., 127 State St., Hartford, plans laying double track on Capitol Ave., Hartford. $25,000.

Kentucky—Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond Va., plans extension of yards, terminal facilities, etc., and realignment of main line tracks to site of proposed new station, at Ashland. $500,000. H. Frazier, ch. engr.

Kentucky — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, plans new freight yards at Strawberry. $100,000. W. H. Courtenay, 10th and Bway., Louisville, ch. engr.

Texas—Gulf Coast Lines Ry., Union Sta., Houston, making plans 150 mi. road from Samfordyce to Laredo, via Mirando City, will include new right-of-way, laying new track, etc. $4,000,000. C. S. Kirkpatrick, ch. engr.

Tex., San Saba—San Saba Conservation & Recl. Dist. 1, plans election to vote on $1,500,000 bonds for system to irrigate 45,000 acres. Dam to be rein.-con. according to tentative plans. J. S. Baker, San Saba, attorney. Noted Apr. 5.

California — City and County of San Francisco Co. plan extending municipal railway system from Judah, Cole and Carl Sts. to Ocean Beach. To exceed $25,000. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

Kentucky—Louisville & Nashville R.R Co., 10th St. and Bway., Louisville, receiving bids new road-bed, elimination of curves, trestles and steep grades on Muldraugh Hill, 30 mi. south of Louisville. $500,000. W. H. Courtenay, ch. engr.

CONTRACTS AWARDED

Ontario — Canadian Natl. Ry., London, plans to replace 60 mi. steel rails between Denfield and Wingham with 80 lb. rails. About 16 mi. will be done this fall by day labor. C. Forrester, London, engr.

Ontario—Toronto Transportation Comn. 35 Yonge St., Toronto, will lay street car tracks on Parliament St. from Winchester

Railways (Continued)

St to Bloor St. Viaduct, 1,200 ft. double track on wood ties and concrete base, stone block paving between tracks, steel trolley poles, by day labor. $90,000. H. H. Couzens, mgr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Calif., Colusa.—See "Waterworks." .. ..

Calif., Fairoaks—Beach & Cox, plan 4 mi. canals, 11 ft. wide at top, 4 ft. at bottom, 2 ft. deep; 2 centrifugal pumps, 31.1 sec. ft. capacity, 12 ft. lift.

BIDS DESIRED

Wis., Belleville—Dane Co. Drainage Bd., Court House, Madison, taking bids 15,900 ft. 6-15 in. tile drain. P. H. Hintze, Court House, Madison, engr. Noted Aug. 23.

Tex., Harlingen—Oct. 22, by C. Brown, secy. Cameron Water Impvt. Dist. 1, dredging 8 mi. canal, 60,000 cu.yd. excav., etc. in Cameron Co. $25,000. A. Tamm, Harlingen, engr.

Ia., Ft. Dodge—Oct. 16 at office C. A. Snook, aud. Webster Co., open ditch and tile drains in Joint D.D. 315-156, Webster and Greene Counties, 8,900 cu.yd. excav., 116,560 lin.ft. 6-38 in. tile, etc. $171,030.

BIDS RECEIVED

Calif., Los Angeles—Harbor Comn., Byrne Bldg., dredging 640,000 cu.yd. at Berth 214, from Pan Pacific Constr. Co., Los Angeles, $0.1287 per yd.

CONTRACTS AWARDED

Miss., Yazoo City—Silver Creek D. D., Yazoo, Sharkey and Humphreys Counties, 42 mi. open ditches, 1,250,000 cu.yd. earth excav., to Winston Dredging Co., Louisville, $0.101 per cu.yd. Engrs. est. $205,000.

Mo., Foley—Sandy Creek D.D., 1 story, 16 x 24 ft. pumping station, 145 hp. engine and 7,500 g.p.m. pump, to Fairbanks-Morse Co., 8th and Spruce Sts., St. Louis. Noted Sept. 6.

Calif., Macdoel—Butte Valley Irrigation Dist., 21 mi. canals, 22 mi. laterals, 6 mi. drains, 1,100 ft. 42 in. wood stave pipe, etc., to C. Thompson & Heuser-Packard Co., Loew State Bldg., Los Angeles. Noted Sept. 20.

Calif., Yuba City—Recl. Dist. 1660, Sutter Co., to Olympian Dredging Co., 149 1st St., San Francisco, 323,000 cu.yd. clamshell and team earthwork $0.0993, 42,000 cu.yd. suction dredging $0.50, two culverts $18,404 and $11,484 respectively. Noted Oct 4.

Streets and Roads

PROPOSED WORK

Vermont—Dept. Highways, Montpelier, plans gravel surfacing 2.02 mi. highway in Rutland Co., Project 45, $30,957; bridge in Essex Co., Project 47, $14,157. T. W. Dix, ch. engr.

Conn., Warehouse Point—State Hy. Dept., Hartford, plans 5,000 ft. road, 20 ft., here. $75,000. J. A. MacDonald, state highway engr.

Pa., Franklin—Venango Co. voted $500,000 bonds for general road improvements. Engineer not announced.

N. J., Trenton — Pennsylvania R.R., Broad St. Sta., Phila., plans extending several streets at Clinton St. Station, here. $50,000. A. B. Temple, Broad St. Sta., Phila., engr.

W. Va., Charleston—Union Dist., Kanawha Co., election Nov. 2, to vote on $100,000 bonds constructing 5½ mi. Dunbar-Sattes Rd. F. G. Burdette, co. engr.

N. C., Lincolnton—Bd. Aldermen will receive bids until Oct. 18, for $40,000 street and sidewalk improvement bonds. R. E. Camp, clk.; adv. E. N.-R. Oct. 11.

Fla., Clearwater — Comrs. Pinellas Co., cancelled opening of bids Oct. 16, for paving Rds. 1, 2, 3, 4, 6, 7 and 8, pending sale of bonds Nov. 1. If bond sale is effected, bids for construction will probably be asked during latter part of November. C. E. Burleson, co. engr. Noted Sept. 13.

Miss., Carrollton—Bd. Supervs. Carroll Co., rejected bids Sept. 24, grading and gravel surfacing 8,047 mi. Federal Aid Project 148. Will readvertise. Noted Oct. 4.

Tennessee—State Dept. Hys. & Pub Wks., Nashville, having surveys made 18 mi. road from Covington to Shelby Co. line, Tipton Co., 18 ft. J. G. Creveling, comr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, having surveys made 8 mi. highway between Dyersburg and Lauderdale Co. line, Dyer Co. J. G. Creveling, highway comr.

Tenn., Gallatin—Voted $50,000 bonds improving streets. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, consult. engr. Noted Sept. 27.

Tenn., Monterey—City voted $40,000 bonds constructing various streets.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing 7.766 mi. Mannington-Crofton Lake Rd., State Project 2, Christian Co.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing 10 mi. Lexington-Covington Rd., State Project 5, Scott Co.; 12 mi. Lexington-Covington Rd., State Project 5, Grant Co.; 10.09 mi. Newport-Falmouth Rd., State Project 21, Sect. A, Campbell and Pendleton Counties; 3.16 mi. Newport-Falmouth Rd., State Project 21, Sect. B, Campbell Co.; 723 ft. street in City of Somerset, State Project 22, Sect. C, Pulaski Co.; 5.388 mi. Williamsburg-Jellico Rd., State Project 35, Whitley Co.; 2.83 mi. Owingsville-Sharpsburg Rd., State Project 61, Sect. A, Bath Co.; grading 11 mi. Richmond-McKee Rd., State Project 30, Sect. A, Madison Co. J. S. Boggs, state highway engr.

Ky., Louisville—Bd. Pub. Wks., City Hall, plans 20,000 lin.ft. sidewalks on Eastern Parkway, Brook St. and other streets. $40,000. F. Moss, secy.

O., Canton—Plans asphalt paving ½ mi. Spring Ave. N. E., 50 ft. $35,000. W. E. Sarver, City Bldg., engr.

O., Canton—Mark Hambelton Co., 507-12 Renkert Bldg., takes bids about Dec. 2, constructing brick gutters and asphalt surfacing ¾ mi. 29th St., 30 ft. $35,000. W. E. Sarver, City Hall, engr.

O., Canton—F. A. McGowan, 1216 11th St., N. W., takes bids in spring improving ½ mi. Vassar Ave., N. W., 30 ft., asphalt. $30,000. W. E. Sarver, City Hall, engr.

O., Kenmore—Plans curbing, laying sidewalks and paving ¾ mi. Corey Ave., 35 ft., brick or asphalt. $30,000.

O., Massillon—Plans asphalt paving ¾ mi. South High St., 50 ft. $40,000. C. E. Rice, city engr.

O., Youngstown—See "Bridges."

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 4 mi. State Trunk Line Rd. 23-10, Sect. B, Branch Co., also 4 mi. State Trunk Line Rd. 51-2, Sect. B, Ottawa Co., asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading 20 mi. State Trunk Line Rd. 35-5, Sects. A and B, Marquette Co. A. F. Rogers, state comr.

Mich., Detroit—Plans prepared 15,100 sq. yd. 3½ in. sheet asphalt on 8 in. concrete on Kentucky, Marcus, Coplin and Glendale Aves., $81,740. G. Jerome, city engr.

Minnesota — State Hy. Dept., St. Paul, plans grading 11.24 mi. in Wabasha Co., Project 327, $254,724; hard surfacing 7.268 mi. in Stearns Co., Project 328, $293,593; grading 8.1 mi. in Morrison Co., Project 334, $48,070. State Hy. Dept., St. Paul, engrs.

Kan., Independence—Montgomery Co. rejected bids grading and bituminous macadam surfacing 5.141 mi. Independence-Caney Rd., Federal Aid Project 121, Sect. C. Will readvertise. Noted Sept. 20.

Montana—State Hy. Dept., Helena, plans gravel surfacing 16.5 mi. Federal Aid Project 182, Cascade Co. $116,611. (Federal Government pays $61,851.)

Ark., Ashdown — Little River Co. Rd. Dist. 9, soon takes bids grading, gravel surfacing, etc. 9 mi. road.

Tex., Alpine—Brewster Co. making plans grading and gravel surfacing 12 mi. Robert E. Lee Highway. $150,000. A. L. White, Alpine, engr.

Tex., Angleton—Brazoria Co. soon takes bids shell surfacing Highway 19, 16 ft., $44,000; 5.6 mi. State Highway 19 in Rd. Dist. 20, 16 ft., $40,000. E. N. Gustafson, Angleton, co. engr.

Tex., Bay City—Matagorda Co. soon takes bids grading and gravel surfacing 4.85 mi. road connecting Bay City with road partly graveled, 16 ft. $46,000. E. N. Gustafson, Angleton, engr.

Tex., Belleville—Austin Co. making plans grading, gravel surfacing and bridging 9.2 mi. State Highway 36, 16 ft. $150,000. State Hy. Comn., Austin, appropriated $75,000. W. I. Hill, co. judge. Engineer not selected.

Tex., Brownsville—Cameron Co. election soon to vote on $400,000 bonds grading and surfacing Brownsville-Point Isabel Rd. W. O. Washington, Brownsville, engr.

Tex., Cameron—Milan Co. voted $100,000 bonds resurfacing 18 mi. highway from Add Hall to Minerva Oil Fields, 18 ft. also building 2 way bridge across Little River, near here. $225,000. Federal Government and State appropriated $125,000. Noted Sept. 6.

Tex., Carthage—Panola Co. plans hard surfacing State Highway 8 in. Beckville Dist. from Harrison Co. line south. $350,000.

Tex., Clarksville—Red River Co. making plans grading, gravel surfacing, etc., 3 mi. State Highway 5, 18 ft. $25,000. J. B. Rieman, co. engr.

Tex., Dalhart—Making plans paving with brick or bituminous 12 blocks Main, Rock Island, Denver and 5th Sts., various widths. $25,000. Engineer not announced.

Tex., Dallas—Making plans widening, paving, etc., 1 block Kendall St. from Commerce to Jackson Sts., 50 ft., rock asphalt bitulithic or brick on concrete base, to exceed $25,000.

Tex., Dallas—Dallas Ry. Co., Interurban Bldg., had plans prepared 15 blocks trackage paving, etc., Oak Cliff crosstown line. $75,000-$100,000. B. R. Brown, 318 Interurban Bldg., ch. engr.

Tex., Fairfield — Freestone Co. election soon to vote on $750,000 bonds highway improvements incl. surfacing and bridge across Navasota River. J. A. Roper, co. judge.

Tex., Floresville — Wilson Co. making surveys bituminous surfacing 50 mi. highway, 18 ft. $1,000,000. F. E. Hess, 310 Medical Arts Bldg., Dallas, engr.

Tex., Ft. Worth—H. B. Church, Glen Garden, plans graveling, curbing and guttering, etc., various streets. $25,000. Under supervision D. L. Lewis, city engr.

Tex., Ft. Worth—C. R. Vickery, F. & M. Bldg., making plans graveling, curbing and guttering, etc., various streets in Greenland Hills, to exceed $25,000. Under supervision D. L. Lewis, city engr.

Tex., Gonzales — Gonzales Co. election Nov. 3, to vote on $125,000 bonds, grading and gravel surfacing Nixon-Smiley Section-Glacier-to-Gulf Highway. J. G. Irby, co. engr.

Tex., Hondo—Medina Co. soon takes bids grading, gravel surfacing and bituminous topping 2.7 mi. State Highway 3, 18 ft. $47,000. A. Y. Walton, co. engr.

Tex., Jasper—Jasper Co. soon takes bids gravel surfacing State Highway 7, 16 ft. $65,000. C. P. Hunter, co. engr. Noted Sept. 6.

Tex., Kountze—Hardin Co. soon takes bids grading, gravel surfacing and bridging 11.2 mi. State Highway 40, 16 ft. $101,800. G. C. Brown, co. engr.

Tex., Pearsall—Frio Co. making plans hard surfacing Rd. Dist. 4, from Dilley to Dimmitt Co. line. $110,000. R. E. Kellmer, Pearsall, engr.

Tex., Pecos—Reeves Co. making plans grading and gravel surfacing 4.54 mi. State Highway 27, 16 ft. $30,324. A. J. Adcock, Balmorhea, co. engr.

Tex., Riogrande—Starr Co. soon takes bids grading and gravel surfacing 13.2 mi. State Highway 12 B, 16 ft. $109,000. P. S. Devine, Pharr, co. engr.

Tex., Rio Grande City—Starr Co. soon takes bids grading, gravel surfacing, etc. 17.58 mi. State Highway 12-B, 18 ft. $197,400. Noted Aug. 16.

Tex., Rock Springs—Edwards Co. making plans grading and gravel surfacing 12 mi. State Highway 41, 16 ft. $120,000. State Hy. Comn., Austin, appropriated $60,000. W. E. Simpson Co., Natl. Bank of Commerce Bldg., San Antonio, engrs.

Tex., San Antonio—Election first week in December to vote on $250,000 bonds for opening new streets and widening old ones; $450,000 bonds general street paving in business section, etc. D. D. Harrigan, city engr.

Idaho — State Hy. Dept., Boise, plans paving 14 mi. Federal Aid Project 70, Miami Co., concrete, bituminous concrete or brick, $551,529. (Federal Government pays $255,788.)

Washington—State Hy. Dept., Olympia, lets contract about Dec. 2, 4 mi. road between Columbia River Station and Rock Island. $200,000. J. Allen, superv. of highways.

Calif., Azusa—Voted $75,000 bonds paving various streets.

Calif., Bakersfield—Kern Co. takes bids about Oct. 25, paving road from Arvin to Weed Parch and Di Giorgio Farms, 18½ ft.,

Streets and Roads (Continued)

2 in. asphaltic concrete on 4 in. asphaltic concrete. To exceed $250,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., Colfax—Voted $25,000 bonds concrete paving streets connecting with State Highway. Noted Sept. 13.

Calif., Fresno—Had plans prepared grading, paving, etc., McKinley Ave., 182,530 sq.ft. grading, 144,798 sq.ft. 3½ in. asphaltic concrete with 1½ in. warrenite surface, 25,132 sq.ft. cement sidewalks, etc.; curbing and laying sidewalks on portions of Wishon, North Van Ness and College Ave., 603 lin.ft. curb, 23,569 sq.ft. cement walks, etc. W. Stranahan, city engr. Noted Sept. 13.

Calif., Fresno—Had plans prepared improving Fresno Ave. between Belmont and Olive Aves., 2,640 lin.ft. curb, 2,640 lin.ft. walks, 2,640 lin.ft. 6 in. concrete; Hedges Ave. between Van Ness and Calaveras Sts., 2,640 lin.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 5,380 lin.ft. curb, 5,280 lin.ft. walks. W. Stranahan, city engr.

Calif., Los Angeles—Plans to construct Mulholland Scenic Highway, along crest of Santa Monica Mts., between Chenango Pass and Calabasas. $1,000,000. J. A. Griffin, city engr.

Calif., San Diego—Had plans prepared improving 24th, 25th and B Sts., 253,820 sq. ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc.; Louisiana St., between Upas and Lincoln Sts., 139,577 sq.ft. 1½ in. asphaltic concrete on 3 in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Francisco—Plans widening and improving Virginia Ave. between Mission and Coleridge Sts. $64,000. M. M. O'Shaughnessy, city engr.

Calif., Santa Barbara — Santa Barbara Co. defeated $200,000 bonds constructing Harris-Lompoc Rd. Noted Aug. 16.

Calif., Santa Clara—Plans paving various streets. To exceed $25,000. H. B. Fisher, Growers Bank Bldg., San Jose, engr.

Calif., Santa Cruz—Santa Cruz Co. had plans prepared improving Capitola-Soguel Rd., Soquel Rd. Dist., 61,005 sq.ft. oil macadam, re-oiling 43,272 sq.ft. existing pavement, etc.; Coast Rd., Seaside Dist., 236,175 sq.ft. oil macadam, etc. L. Bowman, co. surv.

Ont., Richmond Hill—Soon takes bids curbing, guttering and paving 6,000 sq.yd. Yonge St., bituminous concrete on concrete. $30,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., Brooklyn—Oct. 17, by E. Riegelmann, boro pres., Boro Hall, paving 77th St. from Narrow Ave. to Ridge Rd., 77th St. from 17th to 18th Aves., Douglass, East 14th, East 19th, Suydam, West 27th, 46th and 83rd Sts.; grading, curbing and flagging East 19th and West 21st Sts.; regrading and paving Kingston Ave.

N. Y., Long Island City—Oct. 15, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Alpha Pl., 117th St., Hayes, Way and Jackson Aves.; grading Anable Ave. and Mary St.; paving 87th Rd., Hayes, and 97th Aves. 103rd, Hallett, 49th and 117th Sts.; grading and paving Linden St., bituminous macadam; grading, curbing, laying sidewalks and paving Linden St., asphalt; recurbing and laying sidewalks on Prospect Ave.; paving Woodside Ave., asphalt; grading and sewer basins and paving 79th St.

Pa., Phila.—Oct. 16, by Dept. Pub. Wks., asphalt pavements on Bigler, Sydenham, 16th, Columbia, Pratt and 17th Sts., Schedule A; granite block pavements on 49th St., Schedule B; central mixed concrete, vitr. paving blocks, wood blocks and gravel for highway repairs, Schedule C; steel fabric for League Island Park bathing beach, Schedule D; lumber, Schedule E. F. H. Caven, dir. pub. wks.

Md., Baltimore—Oct. 17, by Bd. Awards grading, curbing and paving with sheet asphalt, concrete and Hillside vitr. brick on concrete streets in Contr. 245-OCOANA, $45,000; 22,170 sq.yd. asphalt paving on streets in Contr. 246-OANA, $65,000. R. K. Compton, chn. paving comn.

W. Va., Charleston—Oct. 12, by B. A. Wise, city mgr., grading, curbing, paving, repaving and resurfacing Oak, Walnut, Gardner, Clay, Park, 1st and 6th Aves.; Pine, Oney, Birch, 1st, Hunt, 2nd, North Rand, Garden, Red Oak, Fayette, Ross, Bream, Broad, Chilton, Donnally, Brooks and Quarrier Sts.; Highland and Crescent Rds.; Piedmont Rd. from Capitol to Broad Sts. and from California Ave. to intersection of Kanawha St. and Malden Rd.; Springdale, Summit and Edgewood Drives; Columbia Blvd.; 7 alleys; Edgewood Ave. from north corner lot 1. Block A to Beech Ave., and from Highland Rd. to Grace St.; work involves 55,000 sq.yd., grading and paving.

S. C., Cheraw—Oct. 30, at office L. A. Meiklejohn, mayor, 40,000 sq.yd. asphalt or other pavement, etc. Gilbert C. White Co., Durham, N. C., engrs.; adv. E. N.-R. Oct. 11.

S. C., York—Oct. 16, by Comrs. York Co., at office of T. B. Spratt, engr., 1st Trust Co., Ft. Mill, improving 6.4 mi. Federal Aid Project 216, from point near Ft. Mill to North Carolina line, 39,246 cu.yd. earth excav., 13,834 cu.yd. topsoil, 5,693 cu.yd. disintegrated granite surfacing, 4,035 lb. reinforcing, etc., $32,000; rein.-con. bridge over Steel Creek, Federal Aid Project 216, 47,066 lb. reinforcing, etc. $12,000.

Fla., Gainesville—Oct. 18 by Bd. Bond Trustees, Special Rd. and Bridge Dist. 1, Alachua Co., grading Dist. Rd. 7, Orange Heights to Putnam Co. line, in Mellose, 16,000 cu.yd. excav.; Dist. Rd. 1 between Gainesville and Putnam Co. line via Hawthorne, 169,000 sq.yd. scarifying and reshaping, 169,900 sq.yd. surface treatment. A. B. Gross, dist. engr.

Fla., Sebring—Oct. 14, by Highlands Co., grading 7 mi. Sick Island-Kissimee River Rd., 16 ft. $40,000. Former bids rejected. Peacock & Hood, Sebring, engr. Noted Sept. 20.

Fla., Tampa—Oct. 16, grading, paving and curbing 10th, Louisiana and Arlington Aves., 9,350 sq.yd. 2½ in. asphalt blocks, 6,500 lin.ft. concrete curbing. $25,000. R. D. Martin, city engr.

Louisiana — State Hy. Dept., Reymond Bldg., Batton Rouge, taking bids constructing road and furnishing gravel for 5.904 mi. Federal Aid Project 137, St. Francisville-Baton Rouge Highway, 3,700 cu.yd. washed gravel and 7,400 cu.yd. sand clay gravel, also 7.029 mi. Federal Aid Project 138, St. Francisville-Baton Rouge Highway, 4,405 cu.yd. washed gravel and 8,810 cu.yd. sand clay gravel, both East Feliciana Parish. J. M. Fourmy, ch. engr.

Louisiana—Oct. 16, by State Hy. Comn., Reymond Bldg., Baton Rouge, 10 mi. State Project 373, Sect. A, Covington-Franklinton Highway, Tammany Parish, also furnishing 9,070 cu.yd. washed gravel or 12,080 cu.yd. sand clay gravel. J. M. Fourmy, ch. engr.

La., Independence — Oct. 16, by Mayor and Bd. Aldermen, grading and gravel surfacing 5.7 mi. streets, 12,500 cu.yd. earth embankment, etc. I. Stafford, clk.

La., Shreveport—See "Miscellaneous."

O., Steubenville—Oct. 16, by Jefferson Co., macadamiping 3.134 mi. Hammondsville-Knoxville Intercounty Highway, 16 ft. $76,809. J. N. Leech, Court House, engr. Noted Sept. 13.

Ind., Evansville—Oct. 15, by Bd. City Comrs., cement paving 40-50 blocks. To exceed $25,000.

Michigan—Oct. 16, by State Hy. Dept., Lansing, grading and surfacing 7.711 mi. State Trunk Line Rd. 16-3, Eaton Co., 90,476 sq.yd. asphalt, concrete or bituminous concrete, or 85,952 sq.yd. asphalt on black base. Noted Oct. 4.

Michigan—Oct. 18, by State Hy. Dept., Lansing, grading and surfacing 1.11 mi. State Trunk Line Rd. 51-6, Ottawa Co., 7,084 cu.yd. excav., 13,173 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Illinois—Oct. 17, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 127.64 mi. incl. 115.67 mi. 18 ft. pavement and 11.97 mi. 18 and 9 ft. widening pavement, concrete, 4 in. monolithic and 4 in. bituminous filled brick, bituminous concrete with or without binder course; grading 17.31 mi. incl. 708,605 cu.yd. excav. and 2,123 cu.yd. concrete. C. H. Older, ch. highway engr.

Ill., Winnetka—Oct. 16 by Bd. Local Impvts., 12,000 sq.yd. rein.-con. paving, incl. drainage, catchbasins, etc. Windes & Marsh, 598 Birch St., engrs.

Ia., Sioux City — Oct. 16, by Auditor Woodbury Co., grading 2.61 mi. Oto-Climbing Hill Rd., 26 ft., 85,247 cu.yd. excav., etc., $25,000. J. C. McLean, co. engr.

Tex., Corsicana — A. P. Mays, judge Navarro Co. receiving bids scarifying and surfacing with Texaco asphalt 8 mi. Oil Field Rd., 18 ft. $30,000. J. M. Young, K. of P. Bldg., engr.

Tex., Ft. Worth—Oct. 16, by City Comn., paving ,etc., Vickery Blvd. and Ave. F, 16,300 sq.yd. bituminous on 5 in. concrete, 3,170 cu.yd. excav. $40,000. D. L. Lewis, city engr.

Tex., Graham — City Com. taking bids paving with brick and macadam, curbing and guttering, etc., Elm St. from square to Union Station, to exceed $25,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Hondo—Nov. 5, by R. J. Noonan, judge Medina Co., grading, gravel surfacing, etc., 2 mi. highway, 18 ft., $28,000; 3 mi. highway, 18 ft., $43,000; 2 mi. State Highway 3, Sect. E, 18 ft., $28,000. Walton & Arneson, 418 Gunter Bldg., San Antonio, engrs.

Tex., Jefferson—Oct. 31, by E. B. Lewis, judge Marion Co., grading and surfacing with gravel and clay 14.42 mi. State Highway 49, Federal Aid Project 364, 16 ft. $148,600. T. B. Warden, co. engr.

Tex., Marshall—Oct. 23, by J. W. Scott, judge Harrison Co., grading 7.5 mi. La Goves Chapel Rd., 22 ft. roadbed; 10.1 mi. Hynsons Springs Rd., 22 ft. roadbd; 5.8 mi. Noonday Rd., 22 ft. roadbed. Gravel surfacing will be let later. W. J. Warren, co. engr.

Okla., Wewoka—Oct. 19, by D. R. Fraser, city clk., grading and paving 11 blocks Main, Wewoka, Apple and Okfushey Sts., 27,100 sq.yd. vertical fibre brick, 11,000 lin. ft. curbing, 9,000 cu.yd. excav. $137,000. V V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Sept. 13.

Colorado—Oct. 16, by State Hy. Dept., Denver, concrete paving 1.014 mi. Denver-Boulder Rd., Federal Aid Project 251, Boulder Co., 18 ft., $36,256; 3.995 mi. Denver-Colorado Springs Rd., Federal Aid Project 230 B, Douglas Co., 18 ft., $154,484; concrete paving and grade separation 0.852 mi. Federal Aid Project 230 A, Douglas Co., $146,733. Alternate bids on bituminous surfacing on concrete. L. D. Blauvelt, State Office Bldg., Denver, highway engr.

New Mexico—Oct. 29, by State Hy. Comn., Santa Fe, grading and surfacing 13.333 mi. road from Cap Rock east. Federal Aid Project 30-A, Lea Co., 18,603 cu.yd. Class 1 excav., 4,302 cu.yd. Class 2 excav., 23,929 cu.yd. Class 1 borrow, 27,841 cu.yd. two course crushed caliche, etc.; 56.907 mi. Gladstone-Clayton Rd., Federal Aid Project 58, Union Co., 2,120 cu.yd. Class 1 excav., 25,104 cu.yd. two course crushed caliche, etc.; 26.708 mi. Clayton-Nara Visa Rd., Federal Aid Project 59, Union Co., 42,013 cu.yd. two course crushed caliche, 9,863 cu.yd. soft caliche or clay plating, etc. J. A. French, state highway engr.

Idaho—Oct. 15 by P. E. Oxley, dist. engr., Lewiston, 5.91 mi. grading and surfacing in Latah Co., 40,400 cu.yd. earth, 5,900 cu. yd. solid and 4,500 cu.yd. loose rock excav., 12,340 cu.yd. crushed rock, etc. $80,000. Director of Highways, Boise, engr.

Ore., Portland—Oct. 17, by Comrs. Multnomah Co., improving Base Line Rd. from point near Beaver Creek to upper Sandy Bridge 80. C. Rudeen, chn.

California—Oct. 29, by State Hy. Comn., Sacramento, surfacing with gravel or broken stone 11.1 mi. road between point 2 mi. south of Weaversville and Tom Long Gulch, Trinity Co. R. M. Morton, state highway engr. Noted Oct. 4.

Calif., Compton — Oct. 16, by City Trustees, improving Tamarind and Reeve Sts., etc., 199,360 sq.ft. 5 in. concrete pavement, 199,360 sq.ft. grading, 55,160 sq.ft. walks, 11,050 lin.ft. curb, etc.; Palm Ave., 23,220 sq.ft. grading, 23,220 sq.ft. 5 in. concrete pavement, etc.; Almond Ave., 36,375 sq.ft. grading, 16,370 sq.ft. 5 in. concrete, 19,006 sq.ft. 1½ in. willite on 3½ in. bituminous, etc. E. M. Lynch, Central Bldg., Los Angeles, engr.

Calif., San Luis Obispo—Oct. 15, concrete paving 100,000 sq.ft. Osos St., etc., to exceed $25,000. W. B. Roselip, city engr.

Calif., Ventura — Oct. 25, by Supervs. Ventura Co., paving Santa Paula Ojai Rd. from Sulphur Springs to Sulphur Mt. Rd., 348,224 sq.ft. asphaltic concrete or cement concrete, 6,000 cu.yd. excav., 21,764 lin.ft. roll and shape.

BIDS RECEIVED

N. Y., Brooklyn — Park Bd., Municipal Bldg., New York, Oct. 4, grading, curbing, sheet asphalt paving, etc., main roadway of Eastern Parkway from Bedford to Albany Aves., here, from Cleveland Trinidad Paving Co., Flushing, $138,339.

Pa., Phila.—Dept. Pub. Wks., Oct. 2, asphalt pavement on Camac and Cassimer Sts., Schedule A, from Barber Asphalt Co., 239 North 30th St., $4,736 and $2,620 respectively; 27,020 sq.yd. concrete floor and 1,500 ft. curb for West League Island Park bathing beach, Schedule C, from E. Fay

Number of Construction Projects Reported in Construction News in the First Half of 1923

	New England	Middle Atlantic	Southern	Middle West	West of Missis-sippi	Western	Total
Proposed Work	521	1,413	828	1,607	1,619	1,196	7,184
Bids Desired	141	1,013	441	1 095	765	325	3,780
Bids Received	29	340	82	249	169	249	1,118
Contracts Let	314	939	412	1,154	1,005	538	4,362
Total	1,005	3,705	1,763	4,105	3,558	2,308	16,444

Number of Construction Projects Reported in Construction News in the First Half of 1922

	New England	Middle Atlantic	Southern	Middle West	West of Missis-sippi	Western	Total
Proposed Work	319	1,160	706	1 521	1,020	589	5,315
Bids Desired	154	999	571	1,365	741	251	4,081
Bids Received	33	233	99	236	167	122	890
Contracts Let	287	1,028	411	981	753	435	3,895
Total	793	3,420	1,787	4,103	2,681	1,397	14,181

Streets and Roads (Continued)

& Son, 2 Mole St., $33,270; furnishing fuel oil burning equipment, Schedule D, from Bethlehem Ship Corp., Weidner Bldg., $6,475; installing fuel oil burning equipment, Schedule E, from J. B. McHugh, Jr., 892 Markoe St., $7,800. Noted Sept. 27.

Florida—State Hy. Dept., Tallahassee, clearing and paving 0.701 mi. Project 37A, Alachua Co., sheet asphalt, from U. P. McDonald Constr. Co., Tampa, $25,134; 3.261 mi. Project 37C, Alachua Co., bituminous macadam, from F. W. Long & Co., Stockton St., Jacksonville, $131,530; 2.14 mi. Project 37D, Alachua Co., concrete, from Florida Drainage Constr. Co., Palatka, $129,657; 16.169 mi. Project 40A, Brevard Co., concrete, from C. F. Lytle, Jacksonville, $405,952; 16.24 mi. Project 597, Volusia Co. and 6.727 mi. Project 40D, Brevard Co., both concrete, from J. Y. Wilson, Clark Bldg., Jacksonville, $347,281 and $144,348 respectively. Noted Sept. 6.

O., Cleveland—Improving (1) Continental Ave. (2) Crestwood Ave., (1) and (2) involve 9,380 lin.ft. stone curb and 4 in. tile gutter, 15,190 cu.yd. earth excav., 11,500 sq.yd. asphalt on concrete, (3) Liberty Row (4) Vermont Ave., (3) and (4) involve 3,200 cu.yd. earth excav., 1,800 sq.yd. asphalt on concrete, from Baldwin Bros., 4500 Euclid Ave., (1) $39,445 (2) $30,762 (4) $14,683; Bentley Bros., 1836 Euclid Ave., (3) $39,525. Noted Sept. 20.

Michigan—State Hy. Dept., Lansing, grading and surfacing 4.896 mi. State Trunk Line Rd. 10-30, Iosco Co. 9,338 cu.yd. excav. and 46,292 sq.yd. gravel, from Hill & Belknap, East Tawas $57,535. Noted Sept. 27.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.696 mi. Federal Aid Project 89, Sect. D, Jackson Co., 22,622 cu.yd. excav. and 66,860 sq.yd. concrete, from Rockford Constr. Co., Rockford, O., $124,478. Noted Sept. 20.

Mich., Detroit—Grading and paving with 3½ in. sheet asphalt on 8 in. concrete from Detroit Asphalt Paving Co., 20 McGraw Bldg., 3,300 sq.yd. Anstell St., $19,745; 1,300 sq.yd. Edison Ave. $8,343; 4,000 sq.yd. Glenwood Ave. $23,724; 700 sq.yd. Knodell Ave. $4,189; 2,750 sq.yd. Marcus Ave., $16,457; 6,000 sq.yd. Ohio Ave. $35,039; 3,250 sq.yd. Sherbourne Rd. $16,232.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving 5.13 mi. 3-12 Whiteside, means (5.13 mi. Route 3, Sect. 12 Whiteside Co.) 5.13 mi. 3-12 Whiteside and 7.92 mi. 3-75 Randolph, from Cameron, Joyce, Smith, Elder Co., Keokuk, Ia., $102,336 and $203,792 respectively; 4.32 mi. 3-39 McDonough, from McElwee & Rogy, Peoria, $99,074; 3.1 mi. 3-51 Greene, from J. Kesl & Son, Edwardsville, $80,845; 6.8 mi. 3-74 Randolph, from Mautz & Oren, Effingham, $156,351; 2.79 mi. 3-56 Greene from Nelson Bros. & Co., Jerseyville, $56,206; 3.83 mi. 3-81 Morgan, from E. J. Eiff, Quincy, $102,308; 3.71 mi. 19-27 McHenry, from C. P. Ernst Co., Chicago, $89,709; 22.21 mi. 8-27, 28, 29 and 30 McLean, from McMahon Constr. Co., Rochester, Ind., $399,995; 4.15 mi. 28-10 Henry, from R. F. Conway Co., 133 West Washington St., Chicago, $99,173; 9.85 mi. 16-14, 14B and 15 (incl. 4 bridges with fourteen 30 ft. spans) Shelby-Christian, from Indiana Road Paving Co., Rochester, Ind., $223,311; grading 59.431 yd. 3-25A Mercer and 43,262 yd. 9-26A, Hancock, from Lord & Talbott, Monmouth, $29,139 and $25,671 respectively; 77,253 yd. 2-35A Winnebago and Ogle from J. S. Burch, Madison, Wis., $44,985; 95,877 yd. 2-38A and 42,186 yd. 2-39A both Ogle Co., from E. M. Roche, Freeport, $63,884 and $26,091 respectively; 139,816 yd. 3-11A, 13A and 14A, Rock Island and Whiteside, from Lamoreaux Bros., St. Louis, Mo., $46,890; 183,581 yd. 24-11A Tazewell from I. D. Lain, Bloomington, $101,584; 107,351 yd. 19-24A and 25A Lake and McHenry from H. H. Enbody & Son, 272 South 4th St., Aurora, $62,600; 123,832 yd. 31-10A, Brown-Schuyler, and 44,642 yd. 30-11A Stark, from Cameron Joyce & Co., Keokuk, Ia., $65,739 and $22,565; 103,133 yd. 30-14A Stark-Henry from E. P. Olson, 2901 Monterey St., St. Joseph, Mo., $39,543. Noted Sept. 20.

Minnesota — State Hy. Dept., St. Paul, Sept. 26, State Project 6-39, Sect. 1, Federal Aid Project 332, 190,000 cu.yd. excav., Div. A, from M. Barrett, St. Cloud, $32,719, Div. B, from S. Enebak, Warren, $29,788; State Project 2-24, Federal Aid Project 129, between Moorhead and Glyndon, 20,500 cu.yd. gravel surfacing, from Stevens Bros., Piedmont Bldg., St. Paul, $46,580. This corrects report in Oct. 4 issue.

N. D., Wahpeton—Richland Co. gravel surfacing 8 mi. Federal Aid Project 71, Wyndmere-Wahpeton Rd., from Cudd & Hidlebaugh, Foxhome, Minn., $39,236.

Colorado—State Hy. Dept., Denver, paving and gravel surfacing 2.825 mi. Federal Aid Project 222C, Boulder Co. (alternate bids on paving), plain concrete, from R. M. Larsen, 1309 Kalamath St., Denver, $122,667; Topeka pavement from Standard Eng. & Constr. Co., 518 E. & C. Bldg., Denver, $150,050; warrenite bitulithic, from Stamey-Mackey Constr. Co., Trinidad, $167,481.

CONTRACTS AWARDED

Conn., Hartford—Widening Albany Ave. on both sides, resurfacing entire street with 3 in. asphalt on present base and placing new 3 in. asphalt on 6 in. concrete base, to E. Balf & Co., 14 Haynes St. Engrs. est. $25,000.

Conn., Rockville—See "Miscellaneous."

New York—State Hy. Dept., Albany, constructing, completing and reconstructing 8.55 mi. Highway 1681, Otsego Co., 3.35 mi. Highway 8157, Cortland Co., and 6.8 mi. Highway 8106, Seneca Co., to Dale Eng. Co., Mann Bldg., Utica, $448,112, $148,997 and $211,975 respectively; 0.99 mi. Highways 1651 and 5683, Livingston Co., to Oliver Costich Co., Inc., Exchange Pl. Bldg., Rochester, $60,702; 1.98 mi. Highway 5129, Allegany Co., to W. L. Collins, Hornell, $79,083; 0.34 mi. Highway 198, Albany Co., to H. W. Roberts & Co., Utica, $9,931; 3.28 mi. Highway 8158, Suffolk Co., to Heling Contg. Corp., Utica, $149,168; 3.35 mi. Highway 231, Ulster Co. to A. S. Johnson Corp., Long Island City, $120,537; 0.64 mi. Highway 5050, Dutchess Co., to Mascetti & Holley, 561 South Main St., Torrington, Conn., $36,879; 4.39 mi. Highway 8159, Yates Co., to P. H. Murray, Cutler Bldg., Rochester, $224,160; 4.01 mi. Highway 1677, Dutchess Co., to Troy Paving Co., 418 Gay Blvd. St., Troy, $262,619. Noted Sept. 27.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, curbing, flagging and construting vamps and steps on Stillwell Ave., West 12th, West 19th, West 31st, West 36th, West 15th, West 16th, West 24th, West 27th, West 28th, West 29th, West 35th and West 37th Sts., to J. J. Guinan Contg. Co., 2314 Gravesend Ave., $631,673. Noted Oct. 4.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving Calyer and Fulton Sts., asphalt, to Sicilian Asphalt Paving Co., 41 Park Row, New York, $3,092 and $41,474 respectively; Hinsdale Ave. and Park Pl., asphalt, to Cleveland Trinidad Paving Co., Flushing, $33,078 and $11,753 respectively; 73rd and 86th Sts., asphalt, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $11,164 and $53,777 respectively; 73rd St., grade 1 granite, to Galco Contg. Co., Inc., 745 Dean St., $6,437; grading, curbing and flagging West 8th St., to W. J. McHale Contg. Co., 1250 Jefferson St., $3,277. Noted Sept. 27.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving East 18th St., sheet asphalt, to Sicilian Asphalt Paving Co., 41 Park Row, $45,789; 19th, 58th, 67th and East 81st Sts., sheet asphalt, to Uvalde Asphalt Paving Co., 1 Bway., $15,509, $13,745, $9,523 and $19,143 respectively; 83rd St., sheet asphalt, to Cleveland Trinidad Paving Co., Flushing, $10,602; 90th and 98th Sts., sheet asphalt, to Brusstar Constr. Co., Harlem River and 150th St., $36,647 and $11,088 respectively; 138th St., granite block, to Burnside Contg. Co., 270 Burnside Ave., $19,929. Noted Oct. 4.

N. Y., Niagara Falls—Paving Pierce Ave., sheet asphalt, and 8th St., vertical fibre brick, to J. F. McKinney Corp., Gluck Bldg., $49,566 and $13,432 respectively.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, bituminous concrete repaving Grove Ave., to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $60,808; concrete curbing and guttering 4 ft. wide on south side of Lincoln Ave., to F. Leedecke, $4,734. Noted Sept. 20.

N. Y., Warsaw—Letchworth Park Comn. of Amer. Scenic and Historic Preservation Society, Wyoming Co. Natl. Bank, highway in Letchworth Park, Wyoming Co., to Sweeney & Boland, 310 Ellwanger and Barry Bldg., Rochester, $43,124. Noted Sept. 13.

Pennsylvania—State Hy. Dept., Harrisburg, Route 268, Greene Co., to Reed & Moore, Waynesburg, $39,209; Application 1467, Erie Co., to C. H. Fry Constr. Co., Cherry and 19th Sts., Erie, $110,629; Route 160, Berks Co., to Ambler-Davis Co., Harrison Bldg., Phila., $60,643. Noted Sept. 20.

Maryland—State Rds. Comn., Baltimore, concrete, paving 18,300 sq.yd. roads in Frederick Co., Contr. F-62, to Thomas, Bennett & Hunter, Westminster, $60,816. Noted Oct. 4.

Florida — State Rd. Dept., Tallahassee, grading and paving with concrete on stone 16.24 mi. road between New Smyrna and Brevard Co. line, Project 597, Volusia Co., 197,986 cu.yd. earth excav., 743 cu.yd. concrete, and 6.727 mi. road between Sta. 2615 plus 10 and Sta. 297 plus 25, Project 40 D, Brevard Co., 44,684 cu.yd. earth excav., 615 cu.yd. concrete, to J. Y. Wilson, Clark Bldg., Jacksonville, $347,281 and $144,348 respectively, 16.169 mi. between Sebastian River and Melbourne, Project 40 A, Brevard Co., 125,117 cu.yd. earth

Streets and Roads (Continued)

excav., 1,769 cu.yd. concrete, to C. F. Lytle, Jacksonville, $398,721; grading and paving with bituminous macadam on broken stone 3.261 mi. between Sta. 56 plus 80 and Sta. 229 Paynes Praire, Project 37 C, Alachua Co., 28,881 cu.yd. earth excav., 34,440 sq.yd. bituminous macadam, and 0.701 mi. between Gainesville Sta. 0 plus 00 and Sta. 37 plus 00, Project 37 A, Alachua Co., 7,790 cu.yd. earth excav., 7,400 sq.yd. bituminous macadam, to F. W. Long & Co., Realty Bldg., Jacksonville, $131,530 and $25,781 respectively; clearing, grading, dredged embankment and concrete surfacing 2.14 mi. between Sta. 229 plus 00 and Sta. 342 plus 00, Project 37 D, Alachua Co., 15,550 cu. yd. earth excav., 208 cu.yd. concrete, 285,-907 cu.yd. dredged embankment, to Florida Drainage & Constr. Co., Palatka, $129,657. Noted Oct. 11.

Fla., Sebring—Highlands Co. to J. W. Farr, Wauchula, grading Lake Annie-Parker Island Rd., clearing $85 per acre, grading $0.48 per ch.yd.; to W. M. Durrance, Ft. Mead, grading Lake Jackson Rd., clearing $84 per acre, grading $0.3675 per cu.yd. Noted Sept. 20.

Miss., Belonzi—Grading, gravel surfacing, etc., 25 mi. road, to Greaves & Gadis, Bolton.

Miss., Brandon—Rankin Co. constructing 3.473 mi. gravel road between here and Plain, 18 ft., to Lawrence Constr. Co., Jackson, $74,589; 20.322 mi. gravel road between here and Pelahatchie, to McKeithen Constr. Co., Jackson, $209,361. Noted Sept. 20.

Miss., Water Valley—Yalobusha Co. constructing 12.493 mi. concrete and gravel road, Federal Aid Project 161, to Lawrence Nixon & Phillips, Jackson, $198,631. Noted Sept. 20.

La., Lake Charles—Grading and concrete paving 40,000 sq.yd. various streets, to S. Ritchie Lake Charles.

La., Minden—Grading and paving with gravel 2,700 ft. Dorchester Rd., to W. S. and W. D. Frasier, Minden, $25,646.

O., Akron—Bd. Pub. Serv., to T. E. McShaffrey Constr. Co., 171 South Forge St., improving North Main St., 4,960 lin.ft. stone curb $1.35 per lin.ft., 3,400 sq.yd. brick gutter $2.35, 53,600 sq.ft. sidewalk $0.22, 26,000 cu.yd. earth excav. $0.60, 16,800 sq. yd. Texaco asphalt $1.50, 20,200 sq.yd. 8 in. concrete base $2, total $146,465, also Brown St., 109,400 sq.ft. 4 in. cement sidewalk $0.23, 32,000 cu.yd. earth excav. $0.60, 33,-800 sq.yd. Texaco asphalt $1.50, 41,800 sq. yd. 8 in. concrete base, etc., $2, total $271,-905; to McAlonan Bros., 197 West Buchtel Ave., Glendale Ave., 20,260 sq.ft. 4 in. cement sidewalk $0.25, 8,360 sq.yd. vitr. brick $2.30, 8,360 sq.yd. 6 in. concrete base $1.60, etc., total $65,317. Noted Oct. 4.

O., Canton—Grading and concrete surfacing ½ mi. Elysian Way, 30 ft., to Allison & Harris Constr. Co., East Liverpool, $27,-861. Engrs. est. $31,286.

O., Canton—Stark Co., curbing, laying sidewalks and paving ½ mi. 22nd St., N. W., 50 ft., also guttering and paving ½ mi. Rosewood Pl., 40 ft., both asphalt, to Garaux Bros., 415 9th St. S. W., $35,000 and $27,000 respectively.

O., Cleveland—Asphalt paving, etc., West 3rd and East 9th Sts., to Cleveland Trinidad Paving Co., The Arcade, $136,159; Seine Court, West 23rd and West 41st Sts., to Roehl Bros. Paving & Constr. Co., West 25th St. and Clark Ave., $3,050, $17,637 and $17,131 respectively; West 88th St., to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $17,762; Hood Ave., to W. E. McHugh, West 73rd St. and Wheeling & Lake Erie R.R., $20,350; Parkview Ave., to A. M. Pejsa Paving Co., 3161 Derbyshire Rd., $27,431; East 115th St., to Bentley Bros., Union Bldg., $15,252; Braddock Rd., to H. G. Herring, Pavers Exch., Society for Savings Bldg., $9,841; Rosecliff Rd., to Gould & Maybach, 16311 Saranec Rd., $12,-607. Noted Oct. 4.

O., Cleveland — Cuyahoga Co. concrete paving Miner Rd., to Ohio Contg. Co., Newman-Stern Bldg., $45,500. Noted Sept. 27.

Ind., Jeffersonville—Clark Co., improving 1.5 mi. pike between Jeffersonville and Borden, known as Columbus A. Jackson Rd., to Jean & Nangle, Pekin. Engrs. est. $25,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing 3.869 mi. State Trunk Line Rd. 13-48, Kent Co., to Vander Veen Constr. Co., 165 Lyons St., N. E., Grand Rapids, 17,711 cu.yd. excav. $0.60, 49.8 cu.yd. 1:2:4 and 145.9 cu.yd. 1:3:6 concrete, $20, 43,352 sq.yd. 7 in. rein.-con. pavement $1.25, total $72,903. Noted Sept. 20.

Ill., Belleville — St. Clair Co., rein.-con. paving 12,000 ft. East St. Louis-Brooklyn Rd., 14 ft., to Sternberg & Powell, 232 South Clark St., Chicago, $108,391. Engrs. est. $110,000.

Ia., Cherokee — Cherokee Co., grading primary roads, 98,503 cu.yd. excav., to A. L. Cook, Ottawa, Kan., $0.27 per cu.yd. Noted Sept. 27.

Ia., Williamsburg—For 24,500 sq.yd. 6 in. and 1,000 sq.yd. 7 in. limestone concrete pavement, to Wright Constr. Co., 211 Flynn Bldg., Des Moines, $61,420.

Minnesota—State Hy. Dept., St. Paul, 27 mi. State Project 4-27, Federal Aid Project 318, 344,000 cu.yd. excav., to Stevens Bros., Piedmont Bldg., St. Paul, $140,000; 16 mi. State Project 23-22, Federal Aid Project 243, 18,700 cu.yd. gravel surfacing, to C. Beyer, Willmar, $21,790. This corrects report in Oct. 4 issue.

S. D., Sioux Falls—Minnehaha Co., concrete paving 1 mi. road on west side of state prison to C. B. Atkinson Constr. Co., Brookings, $35,000.

N. D., Minot—Ward Co., gravel surfacing 15 mi. Federal Aid Project 85, 20,189 cu.yd. load, spread, compact, etc., 109,423 cu.yd. mile gravel haul, 20,189 cu.yd. screening, to Padgett Co., Lead, $34,256. Noted Sept. 13.

Mo., Sedalia -- Mayor and City Clerk, grading and concrete paving 11,200 sq.yd. Washington Ave., to Bertman & Menefee, Sedalia, $2.35 per sq.yd. Noted Aug. 30.

Tex., Alpine—Brewster Co., gravel and caliche surfacing 15.7 mi. highway from here to Alterda, 18 ft., to Womack Constr. Co., Sherman, $72,119. Noted Oct. 4.

Tex., Ft. Worth—Improving Cherry, New York and Tyler Sts., to West Texas Constr. Co., Cotton Exch. Bldg., warrenite bitulithic on 5 in. base, $3.18 per sq.yd., curbing and guttering $1, excav. $0.90 and $250; improving 6th Ave. and Lee St., to General Constr. Co., Cotton Exch. Bldg., Uvalde rock asphalt on 5 in. base, $2.80, curbing and guttering $1, excav. $0.90 and $2.50.

Tex., Kaufman—Brick paving East Mulberry St., to Plains Paving Co., Staley Bldg., Wichita Falls, $25,000.

Tex., Marlin—Falls Co. gravel surfacing 6.98 mi. State Highway 44, Lott Dist., 18 ft., to P. M. Skinner, 5632 Reiger Ave., Dallas, $64,070. Noted Aug. 30.

Oklahoma—State Hy. Dept. Oklahoma City, grading and paving with Bates type concrete 26.23 mi. Meridian Hy. across Stephens Co., Federal Aid Projects 99, 102 and 102, 269,100 sq.yd. concrete, 75,000 cu. yd. excav., to Smith Bros. Co., Dallas, Tex. $707,098. Noted Sept. 13.

Okla., Waurika — Grading and paving various streets in districts 2 and 3, 57,243 sq.yd. vitr. brick, 9,328 lin.ft. curbing, 7,553 lin.ft. 6 in. gutter, 6,373 cu.yd. excav., to Cooke & Coleman, Ardmore, Okla., $123,443.

Washington—State Hy. Comn., Olympia, to Mohr Constr. Co., Spokane, paving Sunset Highway from Spokane west, Spokane Co., 3,520 sq.yd. crushed rock surfacing $2, 3,800 cu.yd. excav. $0.30, 12,260 cu.yd. loose rock $55, 15,180 cu.yd. solid rock $1.50, etc., total $42,526; State Rd. 22 from Letillion Bridge north, Stevens Co., 6,820 sq.yd. crushed rock surfacing, top, $2.10, 6,820 sq.yd. crushed rock base $2, 126,710 cu.yd. excav. $0.25, 17,610 cu.yd. loose rock $0.60, 10,490 cu.yd. solid rock $1.35, etc., total $98,040. Noted Sept. 13.

Wash., Everett — Concrete paving Hoyt Ave. from 19th to 8th St., 36 ft., to J. Webster Hoover, 1607 Hoyt St., Everett, $58,206. Engrs. est. $61,000.

Calif., Bakersfield—Paving Niles St. and portions of Sonora St., to Union Paving Co., Call Bldg., San Francisco, $67,500 and $60,120 respectively. Noted Sept. 13.

Calif., Glendale—City Trustees, improving Sycamore Canyon Rd., to Heuser-Packard Co. & Thompson, Loew State Bldg., Los Angeles, 8,711 lin.ft. grade $5, 31,988 sq.ft. gutter $0.25, 442.636 sq.ft. 1½ in. National on 4 in. asphaltic concrete $0.23, waterworks complete $17,640, total $188,-650. Noted Sept. 13.

Calif., Glendale—To Heuser Packard Co. and Thompson, Loew State Bldg., Los Angeles, improving Colorado St., 538,989 sq.ft. grading $0.06, 19,473 sq.ft. gutter $0.25, 519,516 sq.ft. 1½ in. National on 4 in. asphaltic concrete $0.23, 23,452 sq.ft. concrete curb $0.50, 5,528 sq.ft. walks $0.17, waterworks $32,250, etc., total $215,786. Noted Oct. 4.

Calif., Los Angeles—Improving Ruthelen St. between 36th Pl. and Exposition Blvd., to W. Liddington, 420 East 60th St., total for grading $7,602, 159,317 sq.ft. concrete $0.205, 9,398 lin.ft. curb $0.52, 36,167 sq.ft. walks $0.195, sanitary sewer $9,850, etc., total $63,000.

Calif., Los Angeles—Paving, curbing and laying sidewalks on 1 mi. on Compton Ave. between Vernon Ave. and south city limits, to G. H. Oswald, 366 East 58th St., concrete pavement $0.23 per sq.ft., curb $0.70, sidewalk $0.25 per sq.ft., total $77,123. Noted Aug. 16.

Calif., Los Angeles—Los Angeles Co., grading, paving, etc. 21 mi. Palmdale Pallette Creek Rd., 76,483 sq.yd. disintegrated granite pavement, 100,293 sq.yd. 6 in. asphaltic concrete, etc., to Southwest Paving Co., Washington Bldg., $460,000. Noted Oct. 4.

Calif., Santa Cruz—Santa Cruz Co. improving Marks and Slaughter House Rds., et. al., 938 cu.yd. earth and 4,555 cu.yd. rock excav., etc., to J. L. Conner, P. O. Box 565, $27,694. Noted Oct. 4.

Calif., Stockton—Paving East Main and East Washington Sts., 191,911 sq.yd. asphalt, to J. E. Johnston, Savings & Loan Bank Bldg., $64,072. Noted Sept. 27.

Que., Montreal—Will pave with asphalt 15,718 ft. on Chateaubriand, Ray, Cuvillier, Leber, Mullins, Jardin, Dorchester, Bourget, St. Augustine, Alma, Dominion, Smith and Letourneau Sts., $235,991; 10,342 ft. concrete sidewalks on Park Ave., St. Lawrence Blvd., Letourneau, Clarke, Victoria, St. Denis Sts. $40,835; by day labor.

Ont., Toronto — To Warren Bituminous Paving Co., 54 University Ave., 14,000 sq.yd. bitulithic pavements on Welverleigh Blvd., Haslett, Ilesworth and Rhyl Aves., $56,604; to Kilmer & Barber, 24 Adelaide St., 7,000 sq.yd. asphalt on concrete on Lawlor Ave. and Wolverleigh Blvd., $29,163; to Constructing & Paving Co., Ltd., Confederation Life Bldg., 4,000 sq.yd. asphalt on concrete on Cinder and Stafford Aves., $16,066; to Comrs. Wks., City Hall, 6,500 sq.yd. asphalt on Elmer and Woodmount Aves., $30,223.

Ont., Toronto—See "Railways."

B. C., Point Grey—Paving 2¼ mi. various streets, 1 course 6 in. concrete, to Ritchie Supply Co., 1318 Granville St., Vancouver, $68,000.

Industrial Works

PROPOSED WORK

Conn., Bristol—Truden & Platt, Inc., 67 Prospect St., having plans prepared by Sperry & Buell, archts. and engrs., 175 Main St., 1 story, 60 x 70 ft. garage, brick and steel, plain foundation, Church St. $40,000.

Conn., Hartford—Capitol Furniture Co., rejected bids 3 story, 40 x 80 ft. storage building, rein.-con., plain foundation, Temple St. $40,000. Will readvertise. D. A. Guerriero, 1029 Main St., archt. Noted Aug. 9.

Conn., Hartford — J. A. Pilgard, 1026 Main St., plans rein.-con. and steel garage, plain foundation, Ann St. $400,000.

Conn., Hartford—B. A. Sellew, archt., 721 Main St., preparing plans 1 story, 90 x 90 ft., brick and steel garage, plain foundation, Walnut St. $40,000. Owners name withheld.

Conn., Meriden — Connecticut Light & Power Co. plans 3 story, rein.-con., brick and steel sub-station, Hanover St. $200,000. Private plans.

Conn., Middletown — M. Klingon, Colchester, had plans prepared by L. H. Goddard, 86 State St., New London, 3 story, 60 x 160 ft. warehouse and grain elevator, brick and steel, plain foundation, Berlin St., here. $40,000.

Conn., Waterbury—A. Genua, 73 Union St., having plans prepared by E. E. Benedict, 51 Leavenworth St., 2 story, 60 x 100 ft. garage, brick and steel, plain foundation, Jefferson St. $40,000.

N. Y., Addison—Dairymen's League c/o B. Whiteman, pres., Canisteo, having plans prepared shipping station, east of here. $40,000. C. H. Russell, c/o owner, construction engr.

Industrial Works (Continued)

N. Y., Buffalo—Pratt & Lambert having tentative plans prepared for plant addition, Dewitt St. $75,000. Engineer and architect not announced.

N. Y., Rochester—R. J. Strasenburgh Co. plans 4 story, 60 x 80 ft., brick and concrete plant addition, Exchange and Troup Sts. $50,000. Engineer and architect not announced.

N. Y., Salem — Acme Road Mchy. Co., Frankfort, having plans prepared by E. H. Cook, archt. and engr., Frankfort, 1 story, concrete and steel factory, plain foundation, Railroad Ave., here. $200,000.

Pennsylvania—Pittsburgh Terminal R.R. and Coal Co., Wabash Bldg., Pittsburgh, preparing plans concrete and steel substations and 22,000 volt transmission lines from here to Rook, Pa., and Horning W. Va.

Pa., Johnstown—Penn Overland Co., 713 Railroad St., plans 3 story and basement, 85 x 120 ft. rein.-con., brick and steel garage, Central Ave. $100,000.

N. C., Duke — Erwin Cotton Mills plan extensive improvements during next 12 months. Contract for 35,000 spindle denim mill building, No. 5, to J. L. Crouse, Greensboro, $500,000. Development includes 1 story daylight construction weave shed for 1,152 looms and modern village. Total cost $2,500,000. Also plans enlarging bleachery at West Durham. J. E. Sirrine & Co., South Main St., Greenville, S. C., engrs.

Ga., Atlanta—Kingan & Co., West Maryland St., Indianapolis, Ind., plans packing house, here. $250,000-$300,000. Private plans.

Ga., Dalton — Amer. Thread Co. plans 30,000 spindle thread mill, store house, boiler house and mill village on 540 acre site, here. Lockwood, Greene & Co., Healy Bldg., Atlanta, engrs.

Fla., Lakeworth—Voted $40,000 bonds for power plant addition. G. Kingsley, city engr. Noted Sept. 6.

Fla., Tampa—Interstate Investment Co., Citizens Bank Bldg., retained Lockwood, Greene & Co., engrs., 24 Federal St., Boston, Mass., to report on feasibility of establishing terminal and warehouse, along water front. Report will also cover complete analysis of operating features of proposed terminal and warehouse, advice as to proper size, type, location and ultimate scheme of development, together with sketch plans and estimate.

La., Gibsland—See "Waterworks."

La., New Orleans—Ulrich Glass Co., 808 Baronne St., having plans prepared by E. W. Ulrich, Jr., c/o owner, 2 story, 30 x 96 ft. warehouse, 739-741 Dryades St.

La., Shreveport—W. Meriwether, c/o S. Van Os., archt., Merchants Bldg., had plans prepared 1 story, 60 x 80 ft. concrete and brick warehouse, plain foundation, Southern Ave. $50,000.

Tenn., Lexington — Herron Motor Car Co. having plans prepared by E. W. Mann, Madison Ave. Bldg., Memphis, 1 story garage, brick and stone. $40,000.

Tenn., Nashville—Nashville Paper Stock Co., 101 Church St., plans 4 story, brick warehouse, 1st and Church Sts. $40,000.

Ky., Adairsville—Dark Tobacco Growers Cooperative Assn., Hopkinsville, soon takes bids 1 story, 125 x 300 ft., brick warehouse, here. $50,000. Manley & Young, Knoxville, archts. Noted June 14.

Ky., Morganfield—Dark Tobacco Growers Cooperative Assn., Hopkinsville, soon takes bids 1 story, 125 x 250 ft. brick warehouse, here. $40,000. Manley & Young, Knoxville, archts. Noted June 14.

O., Cleveland—Grennen Cake Corp., 1941 East 66th St., had plans prepared by J. F. Steffens, Fidelity Mortgage Bldg., 1 story, 69 x 100 ft. garage, brick and steel, 1937 East 66th St. $40,000.

O., Cleveland—White Motor Co., 842 East 79th St., had plans prepared by Watson Co., 4614 Prospect Ave., 1 story, 90 x 216 ft., brick and timber garage, 787 East 73rd St. $60,000.

O., Columbus—City Ice & Fuel Co., 5th and Naghten Sts., plans to enlarge plant and construct coal yard at West Broad St. along tracks of Cleveland, Cincinnati, Chicago & St. Louis R.R. C. M. Rose, purch. agt.

Ind., Crown Point—City plans electric light and power plant at new sanitarium, $50,000. K. D. Morris, Calumet Bldg., East Chicago, Ill., engr.

Ind., Indianapolis—T. L. Green & Co., 202 Miley Ave., having plans prepared by C. E. Bacon, 605 I.O.O.F. Bldg., 1 story, 75 x 110 ft. addition to plant. $40,000.

Ill., Chicago—H. P. Reger, 128 North La Salle St., plans 1 story, 100 x 200 ft. garage, fireproof, 7939-47 South Chicago Ave. $80,000. Hall, Lawrence, Rippel & Ratcliffe, 123 West Madison St., archts.

Wis., Harfford—I. L. Bonniwell plans 2 story, 50 x 80 ft., brick and rein.-con. creamery, plain foundation, to replace one recently destroyed by fire. $40,000. Engineer and architect not selected.

Wis., Kohler—Kohler Co., c/o A. Treick, supt. of construction, plans 1 story, 60 x 140 ft. warehouse and packing room, brick and timber; contract for plain foundation to Immel Constr. Co., 200 North Main St., Fond du Lac. Total $45,000. Private plans.

Wis., Kohler—Kohler Co., c/o A. Treick, supt. of construction, had plans prepared 1 story, 70 x 212 ft., enameling shop, brick and timber, plain foundation. $50,000. Private plans.

Mo., Cameron—Voted $64,500 bonds electric light plant and lines. Burns & McDonnell, 401 Interstate Bldg., Kansas City, engrs. Noted Sept. 13.

Tex., Dallas — W. E. Easterwood, 716 Lowell St., had plans prepared by J. A. Pitzinger, engr. and archt., Southwestern Life Bldg., 1 story, 110 x 150 ft., brick, stone and steel garage, plain foundation, Ervay and Hickey Sts. $40,000.

Tex., Houston — Harris Co. Navigation Dist., Court House, had plans prepared by E. A. Tucker, engr. and archt., Court House, three 1 story, 150 x 480 ft. dock sheds, steel, along Ship Channel. $105,000.

Tex., Marlin—Community Power & Light Co., c/o T. A. Cheeves, having plans prepared plants, at Marlin, Chilton, Rosebud, Mart, Mexia, etc. $500,000. Private plans.

Tex., Refugio—Pratt-Hewitt Syndicate plans carbon black plant. $250,000.

Tex., Waco—Methodist Orphanage plans industrial building and miscellaneous improvements. $40,000. W. F. Barnett, mgr. Engineer and architect not announced.

Okla., Edith—Santa Fe Salt Co. plans plant, 500 tons daily capacity. Cost incl. equipment $100,000.

Calif., Long Beach—C. Bellows, 30 Locust St., having plans prepared by Austin Co., Bartlett Bldg., Los Angeles, 2 story, 125 x 175 ft. brick garage, American Ave. and 20th St.

Calif., Los Angeles—D. E. Foster, 1259 Maryland St., having plans prepared 2 story, 65 x 140 ft. garage, rein.-con. Private plans.

Calif., Sacramento—California Packing Corp., 101 California St., San Francisco, having plans prepared by P. Bush, engr., 101 California St., San Francisco, for packing plant addition, G and H Sts., here. To exceed $150,000.

Calif., San Francisco—Lyons California Glazed Fruit Co., 585 Folsom St., plans factory, will contain more than 100,000 sq.ft. floor space, 17th, Mariposa, Alabama and Florida Sts.

Calif., Vernon—California Metal Enameling Co., East 51st St., had plans prepared by Hamm & Grant, Inc., engrs., Ferguson Bldg., Los Angeles, 1 story, 50 x 120 ft. and 60 x 75 ft. addition to plant. $40,000.

Ont., Brampton—Stacey Wagner Leather Co., Simcoe, plans new plant. $50,000.

Ont., Gowganda—Castle Trethway Mines, Ltd., plans 100 ton mill. $100,000. F. J. Ennis, Porcupine Mines, Schumacher, engr.

Ont., London — S. Jones, 374 Tecumseh Ave., plans plant. $40,000.

Ont., Midland—International Fibre Board Co. plans 60 x 120 ft. concrete and brick addition to factory.

Ont., Ridgetown—E. Fysh plans garage and repair shop. $40,000.

Ont., Timmins — Hollinger Consolidated Gold Mines, Timmins, soon takes bids concrete, brick and steel terminal station building here. $50,000. Kerry & Chace Ltd., Confederation Life Bldg., Toronto, engrs.

Ont., Toronto—Canadian Packing Co., 3 Bathurst St., plans rein.-con., brick and steel plant, plain foundation. $1,000,000. Engineer and architect not selected.

Ont., Toronto—Toronto Hydro-Electric Comn., Yonge and Shuler Sts., plans rein.-con. and steel electric substation, Danforth Ave. $150,000. Private plans.

BIDS DESIRED

Conn., Hartford—Oct. 12, by F. C. Walz, archt., Trumbull St., 1 story, 60 x 240 ft. garage, rein.-con. and brick, plain foundation, State St., for Long Bros., State St. $40,000. Noted Sept. 27.

Conn., Wethersfield — State Prison, Wethersfield, will build 2 story, 50 x 100 ft. factory, brick and steel, plain foundation, by day labor under supervision of Buck & Sheldon, Inc., archts. and engrs., 60 Prospect St., Hartford. $40,000. Noted Aug. 23.

N. Y., Long Island City—Standard Oil Co. of New York, 26 Bway., New York City, will build 2 story, 60 x 100 ft., rein.-con., brick and steel shop, plain foundation, 8th St., here. Work will be done by separate contracts under supervision of H. D. Best & Co., engrs., 949 Bway., New York.

N. Y., Palmyra—Nov. 8, by E. S. Walsh, comr. Canals & Waterways, Albany, completing new power station, Lock 29, here, Contr. 193; adv. E. N.-R. Oct. 11.

La., Baton Rouge—See "Buildings."

O., Cleveland—City Ice and Fuel Co., Cadillac Bldg., receiving bids 1 story, 79 x 158 ft. ice plant, brick, steel and concrete, East 124th St. and Union Ave. $75,000. A. C. Bishop & Co., Guardian Bldg., archts. Noted Sept. 27.

Wis., Algoma—Algoma Wood Products Co. taking bids 2 story, 60 x 120 ft., concrete factory, plain foundation. $50,000. Private plans. Additional factory units to follow.

Wis., Fond du Lac—Oct. 16, by St. Agnes Hospital, c/o M. M. Marcella, 390 East Division St., 2 story, 55 x 128 ft., boiler and engine house, brick, rein.-con. and steel, plain foundation, also 70,000 gal. concrete reservoir and equipment. $100,000. Schmidt, Garden & Marten, 104 South Michigan Ave., Chicago, archts. Noted Sept. 20.

Wis., Madison—Auto Service Co., 213 East Washington Ave., receiving bids 1 story, 50 x 90 ft. garage and repair shop, rein.-con. and brick. $40,000. Private plans. D. Bilsii, prop.

Calif., Los Angeles—J. M. Cooper, archt., Marsh Strong Bldg., taking bids 4 story, rein.-con. warehouse, 11th and Santee Sts., for Electric Corp., 836 South Los Angeles St., $85,000. Noted Aug. 23.

Calif., Los Angeles—Oct. 17, by Bd. Educ., 2 story, 72 x 135 ft. and 3 story, 72 x 120 ft. rein.-con. warehouses, San Pedro St. $160,000. Noted July 12.

CONTRACTS AWARDED

Mass., Quincy (Branch of Boston) — Eustis Pennock & Co., 10 Post Office Sq., Boston, 2 story, 100 x 150 ft. factory, rein.-con., wood pile foundation, Old Colony Ave., here, to Whidden, Beekman Co., 100 Boylston St., Boston, $40,000.

Conn., Hartford — R. G. Miller, Bloomfield, 2 story, 50 x 80 ft. creamery, brick, plain foundation, Barbour St., here, to Garrity & Crowley, 19 Central Row. Archts. est. $60,000. Noted June 21.

Conn., South Windsor — South Winsor Warehouse Co., 3 story, 50 x 150 ft. warehouse, brick and timber, plain foundation, to Industrial Constr. Co., 721 Main St., Hartford. Archts. est. $40,000.

N. Y., Brooklyn—Sanlif Realty Co., c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build brick, steel and stone garage, plain foundation, Van Sinderen Ave., by day labor. $50,000.

N. Y., Long Island City—W. F. Kenny Co., 44 East 23rd St., New York, will build 2 story, 75 x 200 ft., rein.-con., brick and steel garage, plain foundation, Lawson St., here, by day labor. $80,000. Private plans.

W. Va., Clarksburg — American Sheet Glass Co., extending and improving plant, to Simplex Eng. Co., Washington, Pa., $300,000.

N. C., Duke—See "Proposed Work."

N. C., Mooresville—Cascade Mills, 2 story, 60 x 100 ft. and 1 story, 134 x 161 ft. plants, to Grier Lowrance Constr. Co., Statesville, $57,000.

Ky., Adairsville—Dark Tobacco Growers' Co-operative Assn., Hopkinsville, 1 story, 125 x 285 ft., brick warehouse, here, to Lewis Lumber Co., Franklin, about $50,000. Noted Oct. 11.

Industrial Works (Continued)

Ky., Owensboro—I. H. and H. N. Robertson, 1 story, 200 x 260 ft. warehouse, 9th Ave., to G. C. Little & Co., Owensboro. Est. cost $40,000. Noted Sept. 20.

O., Alliance—W. W. Campbell Co., 1 and 2 story, brick, steel and concrete factory, boiler house and office building, to Boldt Constr. Co., 1969 East 70th St., Cleveland. Archts. est. $75,000.

O., Cincinnati—Rauh & Mack Shirt Co., 209 East 6th St., 8 story, 50 x 140 ft., rein.-con. factory, to Ferro Concrete Constr. Co., 3rd and Elm Sts., $178,000. Noted May 31.

O., Cleveland—Fisher Bros. Co., 2323 Lakeside Ave., 6 story and basement, 88 x 260 ft. bakery and warehouse, rein.-con. and brick, Lakeside Ave., to S. W. Emerson Co., Union Bldg. Archts. est. $350,000. Noted Oct. 4.

O., Cleveland — Miller-Becker Co., 6411 Central Ave., 2 story, 50 x 135 ft. garage, brick, steel and concrete, Central Ave. and East 65th St., to J. Miller, 10819 Drexel Ave. Archts. est. $60,000. Noted Oct. 4.

O., Cleveland—H. F. Neighbors, Bulkley Bldg., 1 story, 100 x 200 ft., brick and timber garage, 1826 East 24th St., to W. I. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $50,000.

O., Cleveland—C. W. Schaefer, Society for Savings Bldg., 1 story, 62 x 103 ft., brick and timber garage, 1410 West 55th Pl., to J. W. Chrisford, 1452 Highland Ave., Lakewood. Archts. est. $40,000.

O., Rocky River — River Garage Co., 1183 Cook Ave., Lakewood, 1 story, 15 x 225 ft., brick and concrete garage, Blount St., here, to L. H. Thulen, Rocky River. Archts. est. $40,000.

Mich., Detroit—Great Western Smelting & Refining Co., Russell St., 1 story, 193 x 208 ft. rein.-con., brick and steel foundry and warehouse, plain foundation, Russell St., to P. H. Piper, 208 Sun Bldg. Noted Sept. 20.

Mich., Iron Mountain—Ford Motor Co., 1 story, 115 x 145 ft. and 51 x 261 ft. rein.-con., brick and steel plant, plain foundation, to Worden-Allen Co., Iron Mountain.

Ill., Chicago—L. Fish Furniture Co., 1906 Wabash Ave., 6 story, 100 x 125 ft., warehouse, fireproof, 2225-35 West Pershing Rd., to R. F. Wilson & Co., 1851 Elston Ave. Archts. est. $350,000.

Ill., Chicago — Hudson Motor Co. of Illinois, 2220 South Michigan Ave., 1 story, 100 x 125 ft. garage, fireproof, Ogden St., near Harding St., to W. G. McNulty & Bro., 58 East Washington St. Archts. est. $50,000.

Wis., Biron (Wisconsin Rapids, P. O.)—Consolidated Water Power Paper Co., Wisconsin Rapids, will build 1 story, 50 x 70 ft., brick, rein.-con. and steel, boiler house, plain foundation, by day labor. $40,000. Private plans.

Wis., Milwaukee — P. J. Fischer, 241 Rusk Ave., 1 and 2 story, 60 x 100 ft., brick and timber plant, plain foundation, Clybourn St., to Henning & Coffeen, 1634 21st St. Archts. est. $40,000. Noted July 12.

Wis., Milwaukee — Gridley Dairy Co., 1329 North Ave., 1 story, 42 x 105 ft., dairy addition, brick and concrete, plain foundation, to Dahlman Constr. Co., 456 Bway, Archts. est. $35,000-$40,000.

Wis., Milwaukee—R. Klapinski, 614 Mitchell St., 1 story, 47 x 120 ft., brick and concrete garage, plain foundation, 8th Ave., to Czaplewski Bros., 1440 Midland Ave. Archts. est. $40,000.

Wis., Milwaukee — Milwaukee Coke & Gas Co., 187 Greenfield Ave., 1 and 4 story, 60 x 70 ft. and 60 x 80 ft. benzol plant, brick, concrete and steel, plain foundation, by day labor; steel, to Wisconsin Bridge & Iron Co., North Milwaukee. Engrs. est. $50,000. Noted Sept. 27.

Wis., Milwaukee—Thurner Heat Treating Co., 126 Ferry St., 1 story, 48 x 100 ft., brick and timber plant, plain foundation, to Kuhl & Keating, 428 Grand Ave. Archts. est. $40,000.

Wis., Neillsville—O. Lerverenz will build 50 x 60 ft. garage, repair shop and filling station, rein.-con. and brick, plain foundation, by day labor. $40,000. Private plans.

Wis., Sun Prairie—Sun Prairie Porcelain Co., 2 story, 40 x 100 ft. factory addition, tile and concrete, to A. Lessner, Sun Prairie. Archts. est. $40,000.

Calif., Los Angeles — A. Costello, Los Angeles, 4 story, 72 x 200 ft. rein.-con. garage, 1348 South Figuroa St., to W. D. Lee, 400 Sun Bldg., $129,000.

Calif., Los Angeles—L. R. Lurie, 318 Montgomery St., San Francisco, 2 story and basement, auto stage terminal, rein.-con., 6th and Los Angeles Sts., here, to Vukicevich & Bagge, 815 Bryant St., San Francisco, $200,000. Noted Oct. 4.

Calif., Los Angeles—Roth Cigar Co., 445 South Los Angeles St., 2 story, brick factory, 16th St., to P. J. Bolin, c/o Builders' Exch., to exceed $40,000. Noted Oct. 4.

Calif., Los Angeles — Voelker Co., 532 South Alameda St., 4 story and basement, factory and warehouse, rein.-con., East 7th St., general contract to Clinton Constr. Co., Stock Exch. Bldg., $175,000. Noted Sept. 27.

Calif., Los Angeles — O. J. Weber, 759 South Los Angeles St., 3 story and basement, 50 x 150 ft., rein.-con. warehouse, East 8th St., to May & Grimwood, Haas Bldg.

Calif., Oakland—Chevrolet Motor Co. of California, 69th Ave. and Foothill Blvd., 1 story addition to factory, rein.-con., Foothill Blvd., to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, to exceed $150,000. Noted Sept. 13.

Calif., Oakland—Mutual Creamery Co., 3724 East 14th St., 1 story plant, brick, 5th Ave. and East 11th St., to M. E. Hooper, 1117 Webster St., $43,000. Noted Sept. 13.

Calif., San Francisco — San Francisco Chronicle, Chronicle Bldg., 3 story and basement publishing plant, rein.-con., Mission and 5th Sts., to K. E. Parker Co., Clunie Bldg., $582,750 guaranteed fee, cost plus basis. Noted Nov. 30.

Calif., San Francisco — Western Pacific R.R. Co., Mills Bldg., 1 story, concrete warehouse, 15th and Vermont Sts., to Mahoney Bros., Flood Bldg., $84,000. Noted Oct. 4.

Calif., San Pedro — L. J. Harris, 1939 Gaffey St., 1 story, 50 x 150 ft. garage, brick and concrete, 13th St., to Triangle Constr. Co., 31 Sepulveda St., cost plus basis.

Ont., Welland—W. G. Somerville & Son, 36 Main St. N., 1 story and basement, 52 x 100 ft. garage and repair shop, to W. Mitchell, Welland, $50,000.

Calif., Los Angeles—Los Angeles Motor Bus Co., 806 Los Angeles Ry. Bldg., 1 and 2 story, garage and office, North Virgil St., to Slater Co., 2314 Santa Fe Ave., $115,000. Noted Sept. 13.

Buildings

PROPOSED WORK

Mass., Fall River—High School—City had plans prepared by N. C. Chase, 47 Borden Bldg., and soon takes bids 3 story and basement, 80 x 120 ft., rein.-con., brick and stone, plain foundation, North Park St. $700,000. Noted Aug. 10, 1922.

R. I., Providence—Hospital—Providence Lying In Hospital, 96 Parkway St., having plans prepared by Stevens & Lee, 9 Park St., Boston, Mass., 4 story and basement, rein.-con., brick and stone, wood pile foundation, Parkway St. $800,000.

Conn., Hartford—Apartment—L. Freedman, Vine St., having plans prepared by H. B. Summer, Gold St., 3 story, brick, plain foundation, Vine St. $220,000.

Conn., Hartford—Bank—Dime Savings Bank, 66 Pearl St., plans 3 story, brick, limestone and steel, plain foundation. $200,000. W. F. Brooks, Lewis and Gold Sts., archt.

Conn., Meriden—High School—Bd. Educ. having plans prepared by W. T. Arnold, 34½ West Main St., 3 story, brick and steel, plain foundation. $350,000. Noted Sept. 27.

Conn., Middletown—Nurses Home—Connecticut State Hospital having plans prepared by W. P. Crabtree, Bank Bldg., New Britain, 2 story and basement, brick and steel, plain foundation. $220,000. R. L. Leak, supt. Noted July 26.

N. Y., New York—Office and Hall—Steinway & Sons, 109 West 14th St., having plans prepared by Warren & Wetmore, 16 East 47th St., 15 story, brick, steel and stone, plain foundation, West 57th St. $2,000,000.

N. Y., New York — Church — Calvary Methodist Episcopal Church, c/o J. Gregory, archt. and engr., 49 West 45th St., soon takes bids brick, steel and stone, plain foundation, University Ave. $250,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids P.S. 116, brick, steel and stone, plain foundation, Wren Pl. $1,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Troy—College—Rensselaer Polytechnic Institute having plans prepared by T. R. Lawton, archt. and engr., Troy, 4 story, 95 x 120 ft., brick and steel, plain foundation, on campus. $250,000.

N. J., Newark—School—Bd. Educ., City Hall, having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., brick, steel and stone, plain foundation, Ridge St. $175,000.

Pa., Johnstown—Temple—Masonic Temple Assn., Alma Hall, had plans prepared by R. D. Schmid & Co., Randolph St., Chicago, 4 story and basement, 1[illegible] x 200 ft. concrete, brick, steel and stone, Valley Pike and Hay Ave. $250,000.

Pa., Wilkes-Barre — Clubhouse—Wilkes-Barre Council 302, Knights of Columbus, plans 83 x 215 ft. clubhouse, South Main St. $200,000. Engineer and architect not selected.

N. C., Charlotte—Church, etc.—First Associate Reform Presbyterian Church plans church, community house and parsonage. $200,000. Engineer and architect not selected.

S. C., Spartanburg—Office and Theater—Lockwood-Green & Co., archts., 24 Federal St., Boston, Mass., preparing plans for new Montgomery Bldg., 10 story, here.

La., Alexandria — Schools — Nov. 15, to vote on $1,250,000 bonds for schools in Rapides Parish. Favrot & Livaudais, Hibernia Bank Bldg., New Orleans, preparing plans for high school, grade school and colored school.

La., New Orleans—Hospital—S. Stone, Jr., archt., 714 Union St., preparing plans for 4 story main building and two 3 story wings, rein.-con., Gentilly Rd. $400,000. Bids in January. Funds donated by J. Dibert, of Dibert, Bancroft & Ross, Tulane and Hagan Aves.

La., New Orleans—Office—Union Indemnity Co., 830-836 Union St., having plans prepared by M. H. Goldstein, and Favrot & Livaudais, Hibernia Bank Bldg., 12 story and basement, Baronne and Gravier Sts. $1,250,000.

La., New Orleans—School—Orleans Parish School Bd. having plans prepared by E. A. Christy, archt., c/o School Bd., 3 story, 189 x 254 ft., Carrolton and Apple Aves. $275,000.

Ky., Ashland—Hotel—O. P. Powers plans 4 story, 85 x 100 ft. $150,000. Architect not selected.

Ky., Ashland — Hotel — W. A. Wilson, Williamson, plans modern hotel. $400,000-$500,000. Engineer and architect not announced.

Ky., Ashland—Office—Williamson Wholesale Hardware Co. plans 5 story, 100 x 142 ft., brick and concrete, 16th and Greenup Sts. $150,000. Engineer and architect not announced.

Ky., Ashland — Station — Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., plans new station on 10th St., here. $400,000. F. Q. Cabell, c/o owner, engr.

Ky., Louisville—Bank—Federal Reserve Bank, 5th and Market Sts., having plans prepared by D. X. Murphy & Bros., archts., Louisville Trust Bldg., 2 story, cut stone addition. $200,000.

Ky., Louisville—Church—St. Francis of Rome Congregation, Payne and Coverwood Aves., plans new stone and concrete church. $150,000. Architect not selected.

Ky., Louisville — Office — W. Heyburn, c/o Belknap Hardware & Mfg. Co., 2nd and Washington Sts., having plans prepared by Joseph & Joseph, Francis Bldg., 18 story, 132 x 200 ft., 4th St. and Bway. $2,000,000.

O., Athens—School—Bd. Trustees Ohio University, having sketches made by R. Harsh, Ohio-Hartman Bldg., Columbus, 4 story manual training building, and 3 story and basement engineering building, fireproof, here. $150,000 each.

O., Cincinnati—Library—Nov. 2 to vote on $2,500,000 bonds for library, Vine St. Address Library Bd., 629 Vine St. Engineer and architect not selected.

O., Cleveland—Apartment—M. Narosny, 1083 Lakeview Rd., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 37 x 148 ft., brick and timber, East 97th St. near Lamont Ave. $150,000.

O., Cleveland — Clubhouse — Cleveland Aviation & Athletic Club, Winton Hotel, having plans prepared by Osborn Eng. Co., 2848 Prospect Ave., 1 story, 100 x 187 ft., brick, steel and concrete top addition to hotel (to be used as clubhouse), Prospect Ave. $150,000.

O., Columbus — Hospital — White Cross Hospital Assn., North Park St., having plans prepared 4 story and basement addition, brick and concrete. $300,000. T. M. Hare, Westerville, fiscal agent. Engineer and architect not announced.

O., Findlay—Home—Comrs. Hancock Co., having revised plans prepared by P. H. Husken, Domestic Bldg., Lima, 3 story and basement, 40 x 80 ft., brick, stone, steel and concrete, North Main St. $150,000.

Buildings (Continued)

O., Kenton—Theatre and Office—Kenton Amusement Co. plans 4 story, steel and concrete, east of Hotel Weaver. $150,000.

O., Youngstown—Theatre—B. F. Keith, 1564 Bway., New York City, had tentative plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, 105 x 225 ft. theatre, 50 ft. high, Public Sq., here. $1,450,000. J. R. Elliott, 371 Alameda Ave., mgr. Engineer not announced.

Ind., Evansville — Dormitories — Evansville College plans 2 dormitories. $300,000. Engineer and architect not selected.

Mich., Detroit—Apartment—F. Wardell, Dewey and Hamilton Aves., plans 6 story, 150 x 225 ft. rein.-con., brick, steel and stone, plain foundation, Woodward and Kirby Aves. $1,500,000. Architects name withheld.

Ill., Chicago—Apartment—Owner c/o L. F. Cox, 111 North Dearborn St., plans 3 story and basement, 150 x 200 ft., rein.-con., brick and steel, Kedvale and Belle Plains Aves. $300,000. E. Steinborn, 111 North Dearborn St., archt.

Ill., Glen Ellyn—Hotel—Local Syndicate, c/o Harris & Jilson, archts., 190 North State St., Chicago, having preliminary plans prepared 4 story and basement 150 x 150 ft., brick, stone and rein.-con., here, $300,000.

Ill., Highland Park—Home—Aged and Disabled Railroad Mens Home, Highland Park, plans 3 story addition, fireproof. $150,000. R. W. Flinn, 334 Park Ave., archt.

Ill., Moline—Lodge and Office—Moline Lodge of Elks, c/o L. N. Ritter, 1714 6th Ave., soon takes bids 3 story and basement, 90 x 150 ft., rein.-con., brick and stone. $175,000. Whitsett & Schulzke, Peoples Bank Bldg., archts.

Ill., Peoria—Armory—Dept. Pub. Wks. and Buildings, Springfield, having preliminary plans prepared by E. A. Martin, state archt., 304 South Wabash Ave., Chicago, 2 story and basement, 56 x 170 ft. rein.-con., stone and brick, here, for Illinois National Guard. $200,000.

Ill., Urbana—College—University of Illinois, having preliminary plans prepared by J. M. White, superv. archt., 256 Administration Bldg., 2 story and basement, brick, stone and rein.-con. commercial and business administration building, also agricultural and equipment building on campus, $880,000. C. E. Platt, 101 Park Ave., New York Cty, associated archt. Noted Aug. 17, 1922.

Wis., Madison—Convalescent—Wisconsin Memorial Hospital Comn., c/o W. F. Lorenz, secy. Capitol, having plans prepared by A. Peabody, Capitol Bldg., 1 story, 50 x 150 ft., rein.-con. and brick, plain foundation, Farwells Point. $150,000.

Wis., Milwaukee—Church—St. Florian Congregation, 467 39th Ave., having plans prepared by Brust & Philipp, archts., 405 Bway., 2 story, 62 x 142 ft., brick and concrete, plain foundation, 39th Ave.; contract for basement, to E. Steigerwald & Sons, 2303 Galena St. Total $150,000.

Wis., West Allis—Schools—School Bd. c/o F. E. Haker, pres., plans additions to Roosevelt, High and McKinley Schools, brick and tile, plain foundation. $200,000. Engineer and architect not selected.

Minn., St. Paul—Hotel—Ryan Hotel Co., 6th and Robert Sts., plans 12 or 13 story, rein.-con., brick and tile, 6th and Jackson Sts. $1,500,000. A. D. Darge, mgr. Engineer and architect not announced.

Wyo., Casper—Schools—School Dist. 2, comprising Casper and Salt Creek Oil Fields, voted $300,000 bonds for 2 new schools and additions to 3 schools. Garbutt, Weidner & Sweeney, Cons. Roy. Bldg., archts.

Ark., Fayetteville—Hotel, etc.—Southern Methodist Church, c/o Chautauqua Assn., having preliminary plans prepared various buildings, incl. hotel, mission, Sunday school, ladies' auditorium, administration, etc., brick, concrete and stone. $500,000. Private plans.

Tex., Houston—Library—City takes bids this month, library, Spanish renaissance. $200,000. Watkins & Glover, Scanlan Bldg., engrs. and archts. Noted July 26.

Tex., San Antonio — Auditorium — City having plans prepared by R. H. Cameron, 1116 City Bank Bldg., 2 story, 110 x 175 ft., Romana St. $500,000 available. Election first week in December to vote on an additional $200,000 bonds.

RAILWAY—CALIFORNIA

Following are lowest three bids opened by A. L. Cowell, Secy., Merced Irrigation Dist., Merced, for relocation of Yosemite Valley Ry., (A) Twohy Bros. and P. Welsh Co., Sharon Bldg., San Francisco; (B) Utah Constr. Co., McIntyre Bldg., Salt Lake City; (C) W. A. Bechtel. The unit bids were as follows:

	A	B	C
300 acres clearing and grubbing	$35 00	$50 00	$60 00
654,836 cu.yd. solid rock excavation	1 07	1 15	
175,288 cu.yd. loose rock excavation	65	70	lump
163,011 cu.yd. common excavation	33	38	sum
22,000 cu.yd. common borrow	33	34	bid
57,000 cu.yd. loose rock borrow	65	60	1,500,989 00
Solid rock borrow	1 07	1 10	
Overhaul—			
1,000,000 cu.yd. less than 1,000 ft., per 100 ft	0125	025	03
Overhaul more than 2,000 ft., per 1,000 ft	03	15	15
Retaining walls—			
Riprap	3 00	4 00	3 00
1,300 cu.yd. laid dry	5 00	6 00	5 00
644 cu.yd. laid in cement mortar	8 00	12 00	13 50
Corrugated iron culverts—			
4,444 lin.ft. 18 in	1 50	1 25	2.00
1,397 lin.ft. 24 in	2 00	1 70	2 50
653 lin.ft. 30 in	2 50	2 10	3 00
1,909 lin.ft. 36 in	3 00	2 50	4 00
Culvert ends—			
Concrete	22 00	20 00	30 00
Rubble masonry	12 00	20.00	25 00
3,495 lin.ft. excavation minimum unlined tang. section	65 00	93 00	125 00
Tunnels—Overhaul—			
Less than 1,000 ft., per 100 ft	0125	.025	05
More than 2,000 ft., per 1,000 ft	03	.15	15
2,725 cu.yd. concrete lining	32 50	22.00	33 50
600 cu.yd. concrete portals	25 00	16 00	25.00
Trestles—			
330,046 ft. B.M. fitting and erecting timbers	20.00	33 00	48.00
1,247 cu.yd. concrete piers and footings	22 00	16 00	30 00
Tracklaying and ballasting—			
17.63 mi. tracklaying, including sidings	3,000 00	1,400 00	2,250 00
16.87 mi. ballasting	1,500 00	2,600 00	2,250 00
Setting 8 switches	50 00	100 00	110.00
Extended totals.	$1,407,392	$1,543,651	$2,260,911

*Work covered by above bids did not include furnishing culvert pipe, trestle timber, ties and rails, switches and track fastenings (which will be furnished by the district) nor any work on five bridges and abutments. Engineers estimate of cost of factors not covered in above bids is $1,544,969, of which $1,060,639 is for bridges.

Okla., Pawhuska — Lodge — Wah Sha Mong Lodge No. 110, A. F. & A. M., having plans prepared by J. O. Bradley & Co., Pawhuska, 3 story and basement, 80 x 148 ft., brick and stone. $150,000.

Calif., Berkeley—Bank of Italy, Powell and Market Sts., San Francisco, having plans prepared by H. A. Minton, 550 Montgomery St., San Francisco, 2 story, rein.-con., Telegraph Ave., here. $150,000.

Calif., Los Angeles—Apartment-Store—C. H. Crawford c/o L. L. Moser, designer, 8335 Sunset Blvd., having plans prepared 2 story and basement, brick, Sunset Blvd. $150,000.

Calif., Los Angeles—Club—Jonathan Club, Pacific Electric Bldg., plans 6 story and basement, 6th and Figueroa Sts. To exceed $450,000.

Calif., Norwalk—High School—Plans election to vote on $200,000 bonds for high school buildings, for Excelsior Union High School Dist.

Calif., Oakland—Bank and Office—Bank of Italy, Market and Powell Sts., San Francisco, had plans prepared by H. A. Minton, 550 Montgomery St., San Francisco, 2 story, rein.-con., College St. and Shafter Ave., here. $150,000.

Calif., Oakland—Store, Loft and Hall—A. S. Bugbee, archt., 26 Montgomery St., San Francisco, preparing plans 3 story, rein.-con., here. $175,000. Owners name withheld.

Calif., Orange—Theatre—G. G. Richards having plans prepared by A. Hesse, Hollingsworth Bldg., Los Angeles, brick and rein.-con. $150,000.

Calif., Richmond—Hospital—City plans to vote on $150,000 bonds for hospital and $50,000 for swimming pool. A. C. Faris, city clk.

Calif., San Francisco—Apartment—L. B. Ham, 110 Sutter St., had plans prepared by A. J. Horstman, Sacramento and Franklin Sts., 6 story and basement, rein.-con., Stockton St. near California St. $150,000.

Calif., San Francisco—Apartment—L. B. Ham, 110 Sutter St., having plans prepared 6 story and basement, rein.-con., Sacramento and Octavia Sts. $150,000. Private plans.

Calif., San Francisco—Apartment—F. La Torres, 185 Stevenson St., having plans prepared by E. H. Denke, 1317 Hyde St., 5 story and basement, rein.-con., Washington St. near Jones St. $150,000.

Calif., San Francisco — Hospital — St. Marys Hospital, Hayes and Stanyan Sts., having plans prepared by Shea & Shea, Chronicle Bldg., two 5 story and basement, rein.-con. and steel wing additions, to exceed $150,000.

Calif., San Francisco—Store and Hotel—J. Welsh, 597 20th Ave., had plans prepared by Baumann & Jose, 251 Kearny St., 6 story and basement, rein.-con., Sutter St. near Jones St. $175,000.

Calif., Ventura—Bank—Bank of Italy, Powell and Market Sts., San Francisco, having plans prepared by H. A. Minton, 550 Montgomery St., San Francisco, 1 story, rein.-con., here. $150,000.

Que., Montreal — Hotel — Queens Hotel Ltd., Windsor St., takes bids about December, 10 story, 50 x 60 ft. red sand stone addition. $500,000. J. A. Raymond, mgr. Architect not selected.

Que., Outremont—Mother House—Sisters of Holy Name of Jesus, Notre Dame St. E., Montreal, plan 5 story, rein.-con., brick and stone, Maplewood Ave., here. $600,000. S. Duchastel, Outremont, engr.

Ont., Oshawa—High School—Bd. Educ., Dominion Bank Chambers, soon takes bids 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation, Simcoe St. $200,000. Hutton & Souter, Bank of Hamilton Bldg., Hamilton, archts.

Ont., Toronto—Church—Calvary Angelican Church, c/o E. J. McKittrick, pastor, 267 Blackthorn Ave., plans 1 story and basement, rein.-con. and brick, plain foundation, Silverthorn Ave. $150,000. Engineer and architect not selected.

BIDS DESIRED

Conn., Meriden — Telephone — Southern New England Telephone Co. taking bids and opens same about Oct. 15, 3 story, 60 x 80 ft., brick and steel, plain foundation, Butler St. $150,000. G. H. Gray, 367 Prospect St., New Haven, archt. Noted July 26.

Conn., Hartford—Church—Oct. 16, by F. S. Thompson, chn. Central Baptist Church, 219 Ridgefield St., church Main and Elm Sts., $500,000. Noted July 12.

Conn., Waterbury—Church—Oct. 16, by M. O. Owen, pastor, Bunker Hill Congregational Church, 22 Marion St., brick and stone, plain foundation, Bunker Hill Ave. $200,000. F. A. Webster, 51 West Main St., archt. Noted May 17.

N. Y., Coney Island (Brooklyn, P. O.)—Hotel—R. H. Segal, archt. and engr., 110 West 40th St., New York, taking bids and opens same about Oct. 8, 13 story, rein.-con. and steel, Surf Ave. and 24th St., here, for Sea Gate Hotel & Bath Co., c/o architect. $1,000,000. Noted Aug. 9.

N. Y., New York—High School—Oct. 30, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, for James Monroe High School easterly side of Boynton Ave. from East 172nd to East 173rd Sts., here. Former contract rescinded. Noted Oct. 4.

Buildings (Continued)

N. J., Elizabeth—High School—Oct. 24, by Bd. Educ., Battin High School Auditorium, South Broad St., new junior high school, Cherry St. and Westfield Ave. Kilham, Hopkins & Greeley, 9 Park St., Boston, Mass., archts. Noted Nov. 23.

Pa., Norristown — School — Oct. 30 by School Dist., constructing High School Annex, 2 story, 65 x 270 ft. with three wings, 64 x 82 ft., 70 x 68 ft. and 42 x 70 ft., brick. $400,000. O. R. Parry, 1524 Sansom St., Phila., archt.

N. C., Charlotte—Theatre and Office—Oct. 20, by W. L. Stoddart, archt. and engr., 9 East 40th St., New York City, 3 story, for J. H. Cutter, Commercial Bank Bldg., Charlotte. Noted Sept. 13.

La., Baton Rouge — Passenger Station, etc.—Illinois Central R.R., 135 East 11th Pl., Chicago, Ill., taking bids 2 story passenger station 388 ft. long, tapestry brick and stone, also 1 and 2 story freight depot, 524 ft. long with 143 ft. platform, brick, near river front between Asia and France Sts., here. F. L. Thompson, ch. eng.

La., Shreveport—Theatre—Oct. 27, by E. Weil, archt., Whitney Central Bldg., New Orleans, 111 x 150 ft. rein.-con., brick, steel and stone, here, for Saenger Amusement Co., Tulane and Liberty Sts., New Orleans, and Erlich Bros., Shreveport. $750,000.

Tenn., Memphis—Store—Oct. 15, by E. Weil, archt., Whitney Annex Bldg., New Orleans, La., and Hanker & Cairns, associated archts., Scimitar Bldg., Memphis, 9 story and basement, 150 x 150 ft., rein.-con., brick and terra cotta, Monroe Ave. and Main St., for Lownestein Dept. Store, controlled by Maison Blanche Co. interests, New Orleans, La. Noted Aug. 23.

O., Lakewood (Cleveland P. O.)—Apartment—M. Arnoff, East 105th St. and East Blvd., Cleveland, taking bids and opens same about Oct. 21, 3 story and basement, 56 x 132 ft. and 56 x 72 ft., brick, 12053 Lake Ave., here. $160,000. G. Rudolph, Newman-Stern Bldg., Cleveland, archt.

O., Painesville—Commercial and Club—Pythian Building Co., c/o R. E. Jackson, taking bids 6 story, brick, steel and concrete. $150,000. C. W. Bates, 77 12th St., archt.

O., Sandusky—Hotel—Millot & Parker, archts., Bliss Bldg., receiving bids 6 story and basement, 66 x 66 ft. and 23 x 37 ft., brick, steel and concrete addition, for Rieger Hotel Co., Jackson St. $200,000.

O., Uhrichsville — Hotel — Uhrichsville Hotel Co. taking bids and opens same about Oct. 22, 5 story, 100 room, brick, steel and concrete. $150,000. P. C. Cahill, 4502 Prospect Ave., Cleveland, archt.

O., Wapakoneta—High School—Oct. 19, by C. C. Nordin, clk. Bd. Educ., 3 story and basement, 125 x 151 ft., rein.con. and brick. $150,000. F. L. Packard, 16 East Broad St., Columbus, archt.

Mich., Detroit—Store and Apartment—Oct. 15, by W. Hamacher, engr., 3527 St. Clair Ave., 3 story and basement, 99 x 225 ft. rein.-con., brick and steel, plain foundation, Linwood Ave., for Pitts & Bremer, 2018 Gladstone Ave. $160,000.

Mich., Flint—High School—Oct. 15, by Malcomson & Higginbotham, archts., 405 Moffat Bldg., Detroit, 3 story and basement, 187 x 363 ft. rein.-con., brick and steel, Pasadena Ave., for Bd. Educ. $900,000.

Ill., Chicago—Apartment—J. C. Krietenstein, 35 North Dearborn St., receiving bids 3 story and basement, 110 x 125 ft., fireproof, 54th and Harper Sts. $150,000. Z. E. Smith, 305 East 55th St., archt.

Ill., Chicago—Apartment—D. G. Wallace, archt., 22 West Monroe St., receiving bids 3 story, fireproof, Washington St. and Homan Ave., for L. Susman c/o architect. $150,000.

Ill., Niles (R. F. D. Norwood Park Chicago, P. O.)—Dormitory—Oct. 23 by E. Brielmaier & Sons Co., archts., 432 Bway., Milnaukee, Wis., 3 story and basement, brick and concrete, for St. Hedwigs Industrial School, here. $300,000. Noted May 10.

Wis., Milwaukee—Store and Apartment—T. R. Bishop Co., archts., 35 South Dearborn St., Chicago, receiving bids 3 story and basement, 60 x 162 ft., brick and concrete, Farwell Ave., here. $200,000.

Ia., Davenport—Schools—Oct. 17, at office J. D. McCollister, secy. Bd. Educ., 1144 Main St., for 2 grade schools. Clausen & Kruse, 910 Kahl Bldg., archts.

Minn., Waseca—High School—Oct. 30 (extended date), by Bd. Educ., 3 story and basement, rein.-con., brick, tile and stone. $350,000. W. B. Ittner, 911 Locust St., St. Louis, Mo., archt. and engr. Noted Sept. 20.

Kan., Hutchinson—Schools—Nov. 1, by Bd. Educ., 2 story and basement, 122 x 156 ft. grade school and 2 story, 60 x 110 ft. addition to Sherman High School. $150,000 Smith & English, Hutchinson, archts. for former. Mann & Gerow, Hutchinson, archts. for latter.

Okla., Oklahoma City—High Schools—Oct. 15, by Layton, Smith & Forsyth, archts., 701 Southwest Natl. Bank Bldg., Oklahoma City, constructing Harding Jr. High School, 3 story and part basement, 217 x 233 ft., 33rd and Shartel Sts., $400,000; Roosevelt Jr. High School, 3 story, 9th and Klein Sts., $400,000; 3 story and basement, 100 x 210 ft. high school, $300,000; all rein.-con. and stone. Noted May 10.

Tex., San Antonio—Apartment—H. T. Phelps, archt., 519 Hicks Bldg., taking bids 7 story 90 x 160 ft., rein.-con. and brick, plain foundation, Ave E and 3rd St., for S. L. Jeffers, 1 Bushnell Pl. $200,000. W. E. Simpson Co., N.B.C. Bldg., engrs. Noted Sept. 13.

Calif., Culver City—Store, Office and Hotel—Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, receiving bids 6 story and basement, rein.-con. and brick, Washington and Main Sts., for H. H. Culver, $150,000 or more.

Calif., Los Angeles — Apartment — J. Frauenfelder, archt., Story Bldg., taking bids 5 story, 85 x 160 ft. concrete and brick, 3rd and Lucas Sts., for Los Angeles Nurses Club, 1103 West 8th St.

Calif., Los Angeles—Hotel—L. L. Jones, archt., Grosse Bldg., receiving bids 12 story and basement, fireproof, Bixel and Ingraham Sts., for H. Foote. To exceed $500,000. Noted Sept. 27.

Calif., Los Angeles—School—Oct. 17, by Bd. Educ., 3 story, brick. To exceed $250,000. Morgan, Walls & Morgan, Van Nuys Bldg., archts. Noted July 12.

Calif., Los Angeles—Store—C. F. Plummer, archt., Story Bldg., reeciving bids 3 story and basement, brick and steel, 7th St. and Union Ave., for Youngs Market, Inc., 638 South Bway. $350,000. Noted Sept. 13.

Calif., Marysville — Hotel — E. Glass, archt., Underwood Bldg., San Francisco, taking bids 5 story and basement, 119 x 163 ft. concrete, 5th and E Sts., for Marysville Hotel Co., c/o archt. $300,000. Noted June 21.

Calif., San Francisco—Apartment—L. B. Ham, 110 Sutter St., receiving bids 10 story and basement, brick and steel, Sutter and Leavenworth Sts. $250,000. Private plans.

Calif., San Francisco—High School—Oct. 17, by Bd. Pub. Wks., furnishing, fabricating and erecting structural steel and cast iron for addition to high school, Fell St., for City and San Francisco Co. $90,000. Total cost to exceed $150,000. J. Reid, Jr., 1st Natl. Bank Bldg., city archt.

B. C., Point Grey—Library—Oct. 22, by Minister Pub. Wks., here, Victoria, 3 story, rein.-con., stone, brick and tile, here, for University of British Columbia, 10th and Willow Sts., Vancouver. $350,000. Sharp & Thompson, 708 London Bldg., Vancouver, archts. Noted Aug. 9.

BIDS RECEIVED

R. I., Providence — Armory — Comn. of Armory of Mounted Commands, Oct. 1, 1, 2 and 4 story, brick, plain foundation, North Main St., from E. Turgeon, 86 Weybosett St., $424,301. Archts, est. $380,000. Noted Sept. 27.

Tenn., Nashville—Hospital, etc.—J. H. Kirkland, chancellor Vanderbilt University, 5 story rein.-con. and stone hospital and power plant, on campus, from Hegeman-Harris Co., 185 Madison Ave., New York City, $2,000,000.

Kan., Iola—High School—Bd. Educ., general contract 2 story and basement, 95 x 141 ft., rein.-con., brick and stone, plain foundation, from Peterson Constr. Co., Salina, $116,300.

CONTRACTS AWARDED

N. Y., Flushing — Dormitory, etc. — Bd. Educ., 500 Park Ave., New York, masters house dormitory, barn, infirmary and coal bin, for Parental School, on westerly road side between Flushing and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, here, to T. Dwyer, Bway. and 216th St., New York, $680,000. Noted Sept. 27.

N. Y., New York — Apartment — Ards Building Corp., c/o G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., will build brick, steel and stone, plain foundation, 55 West 11th St., by day labor. $1,500,000.

N. Y., New York—Apartment—Krafner Building Corp., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, plain foundation, Ft. Washington Ave., by day labor. $300,000.

N. Y., New York—Apartment—Lanson Constr. Corp. c/o Gronenberg & Leuchtag archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, Pinehurst Ave., by day labor. $400,000.

N. Y., New York—Apartment—O. F. F. Constr. Co., c/o J. M. Felson, archt. and engr., 1133 Bway., will build 6 story, brick, steel and stone, plain foundation, Creston Ave., by day labor. $300,000.

N. Y., New York — Apartment — One Forty-One East 72nd St., Inc., c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build 15 story, brick, steel and stone, plain foundation, 72nd St. and Lexington Ave., by day labor. $500,000.

N. Y., New York — Apartment — W. H. Peckham Syndicate, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 85 x 100 ft., brick, steel and stone plain foundation, Lexington Ave. and 36th St., by day labor. $500,000.

N. Y., Upper Flushing (Flushing, P. O.)—School—Bd. Educ., 500 Park Ave., New York, general contract P.S. 107, Franconia Ave. from 27th to 28th Sts., here, to J. MacArthur & Co., 220 Ormond Pl., Brooklyn, $926,999. Noted Sept. 27.

N. J., Newark — School — St. Antonias Roman Catholic Church, 337 South Orange Ave., 4 story, brick, steel and stone, plain foundation, to Frank O'Hare Co., Inc., 300 Madison Ave., New York City. Archts. est. $350,000. Noted May 17.

N. J., Newark — Theatre — City Investment Co., Firemens Bldg., 100 x 150 ft. brick, steel and stone, Bloomfield Ave., to Curtis, Warner Corp., 9 Clinton St. Archts. est. $150,000.

N. J., Ocean City—Bank and Office—P. A. Davis & Dunlap, archts., 1713 Sansom St., Phila., superstructure for 7 story, 62 x 96 ft., rein.-con., brick and limestone, concrete pile foundation, 8th and Asbury Sts., here, to J. S. Rogers Co., Drexel Bldg., Phila. for Ocean City Bank. Noted Sept. 13.

Md., Salisbury—High School—Eastern Shore State Normal School, 3 story and basement, 188 x 343 ft., concrete and brick, sheet piling, to Consolidated Eng. Co., Calvert Bldg., Baltimore. Archts. est. $300,000. Noted Sept. 20.

W. Va., Huntington—Dormitory—State Bd. Control, Charleston, dormitory at hospital, here, to R. Mankin & Co., R. and P. Bldg., $166.739.

W. Va., Pruntytown (Grafton P. O.)—School—State Bd. Control, Charleston, 2 story, 69 x 150 ft. brick, tile, concrete, steel and limestone, here, to Engstrom & Co., Wheeling, $165,000. Noted Aug. 2.

Miss., Brookhaven — High School — Bd. Educ., general contract 2 story and basement, 125 x 200 ft., to W. J. McGee, Jackson, Archts. est. $150,000. Noted Aug. 31.

La., Shreveport—Clubhouse—Elks Club, 9 story, 42 x 106 ft., brick, stone and terra cotta, to McGehee Constr. Co., Baton Rouge, $378,873.

O., Geneva—High School—Bd. Educ., 2 story and basement, 159 x 182 ft., brick, steel and concrete, to Willing Bros. Constr. Co., Bellevue. Noted Sept. 27.

O., Lakewood (Cleveland P. O.)—Apartment—Urban Realty Co., c/o M. Levine, 333 Society for Savings Bldg., Cleveland, 3 story, brick and timber, Clifton Blvd. near Donald Ave., here, to M. Lessovitz, 2673 East 53rd St., Cleveland. Archts. est. $200,000.

O., Lorain—Clubhouse—Fraternal Order of Eagles, 4 story, 35 x 130 ft., brick, steel and concrete, Bway., to T. J. Hume, 435 Hamilton Ave., Cleveland. Archts. est. $150,000. Noted Jan. 11.

O., St. Clairsville—High School—Bd. Educ., 2 story and basement, 115 x 117 ft. brick and concrete, to C. W. Shimp, Martins Ferry, $109,000. Noted May 3.

Mich., Highland Park (Detroit P. O.)—Nurses Home—Highland Park General Hospital, 3 story and basement, rein.-con. brick and steel, plain foundation, to Bryant & Detwiler, 2336 Dime Bank Bldg., Detroit. Archts. est. $150,000.

Mich., Niles — Administration — Kawneer Mfg. Co., 3 story and basement, 59 x 120 ft. concrete and brick, plain foundation, to R. L. Reisinger & Co., 464 Oakland Ave., Milwaukee, Wis., Archts. est. $150,000.

Ill., Chicago—Apartment—J. Butterson c/o A. H. Quitsow, archt., 11 South La Salle St., 3 story and basement, 100 x 149 ft.

Buildings (Continued)

fireproof, 6100-08 Winthrop St., to E. [illegible]ilund, 833 Greenleaf Ave. Archts. est. $200,000.

Ill., Chicago — Apartment — O'Connor, Burke & McDonnell, 6823 Stony Island Ave., 3 story, 87 x 124 ft., fireproof, 76th and Colfax Sts., to Olson & Berg, 8014 Champlain Ave. Archts. est. $150,000.

Wis., Madison—Apartment—W. B. Allison, 110 Monona Ave., will build 3 story, 100 x 150 ft., brick, rein.-con. and steel, plain foundation, by day labor. $150,000. E. A. Phillips, Beaver Bldg., archt.

Wis., Milwaukee — Apartment — Randco Corp., c/o Rosman & Wierdsma, archts., 424 Jefferson St., 3 story and basement, 45 x 60 x 134 ft., brick, tile and concrete, plain foundation, 16th St., to R. L. Reisinger & Co., 464 Oakland Ave. Archts. est. $150,000.

Wis., Milwaukee — Apartment — Retep Realty Co., c/o G. Zagel & Bros., 144 Oneida St., 3 story, 100 x 100 ft., brick, tile and concrete, plain foundation, to A. Peters, 1113 West 24th St. Archts. est. $150,000.

Wis., Milwaukee—Apartment—Wisconsin Bond & Mortgage Co., 440 Bway., 4 story and basement, 82 x 100 ft., brick, tile and concrete, Marshall St. and Juneau Ave., to R. Reisinger & Co., 464 Oakland Ave., Archts. est. $200,000. Noted July 19.

Wis., Milwaukee — Business — Republic Bldg. Co., 11th and Wells St., 2 story and basement, 100 x 102 ft., brick and concrete, plain foundation, to S. M. Siesel Co., 160 Ogden Ave. Archts. est. $150,000.

Wis., Milwaukee — Lodge — Columbia Lodge 11, Knights of Pythias, c/o A. Engel, 805 Grand Ave., 3 story and basement, 90 x 106 ft., brick, stone and concrete, Sherman Blvd., to H. Danischefsky, 1484 Humboldt Ave. Archts. est. $150,000. Noted Aug. 9.

Kan., Iola—High School—Bd. Educ., 2 story and basement, 95 x 141 ft., rein.-con., brick and stone, to Peterson Constr. Co., Salina, $116,300. Noted Oct. 11.

N. D., Mandan—High School—Bd. Educ., 2 story and basement, 65 x 136 ft. rein. con., brick, stone and tile, general contract to Redlinger & Hanson, Wahpeton, $89,000. Total est. $150,000. Noted Sept. 20.

Mo., Sedalia—Court House—W. E. Hulse & Co., archts., Hoke Bldg., Hutchinson, Kan., general contract 3 story and basement, 97 x 135 ft., rein.-con., brick and stone, to Western Constr. Co., 716 Park St., Des Moines, Ia., $285,500, for Pettis Co. Noted Sept. 20.

Mo., St. Louis — Store and Office — E. Freund, Iowa and Cherokee Sts., general contract 3 story and basement, 75 x 88 ft., brick and concrete, plain foundation, Grand Ave., to T. H. Ratz Constr. Co., 917 Pine St. Archts. est. $150,000. Noted Sept. 6.

Tex., Arlington — Administration — Order of Eastern Star Home, general contract 2 story, east of here, to Minn Constr. Co., Southwestern Life Bldg., Dallas, $173,000.

Wash., Seattle — Bank — Dexter-Horton Natl. Bank, 2nd and Cherry Sts.; 10 story, 100 x 100 ft., concrete and steel, 2nd and Cherry Sts. (2nd unit of proposed bank), to Puget Sound Bridge & Dredging Co., Central Bldg., $1,250,000. Archts. est. $1,500,000.

Wash., Seattle — Office — Shafer Bros., Arcade Bldg., 8 additional stories to proposed Shafer Blk., (now under construction) steel and concrete, 6th and Pine Sts., to Western Constr. Co., Seaboard Bldg., $400,000.

Calif., Berkeley—Office—L. R. Lurie Co., 318 Montgomery St., San Francisco, 5 story and basement, concrete and brick, Telegraph Ave. and Channing Way, to Bay Constr. Co., Bacon Bldg., Oakland, $155,000.

Calif., Covina—Dormitory—Masonic Homes of California c/o Train & Williams, archts., Western Mutual Life Bldg., Los Angeles, general contract two 2 story, rein.-con. and brick, here, to J. Simpson Co., 701 San Antonio Ave., Los Angeles, $153,500. Noted Aug. 23.

Calif., Los Angeles—Bank and Office—Guaranty Building & Loan Assn., 6364 Hollywood St., 13 story and basement, 75 x 150 ft., rein.-con. and steel, Hollywood Blvd. and Ivar Ave., to W. Simpson Constr. Co., Bank of Italy Bldg., $900,000.

Calif., Los Angeles — Office — See "Industrial Works."

Calif., Los Angeles—School—Bd. Educ., general contract 3 story, 100 x 265 ft., rein.-con. 16th and Hill Sts., to MacDonald & Driver, Douglas Bldg., $244,076. Noted [illegible]

Calif., Los Angeles—Store and Apartment—A. O. Evans, 3423 Vermont St., 2 story and basement, brick, 35th and Vermont Sts., to T. H. Stewart, 1005 Bank of Italy Bldg., $154,000. Noted Aug. 16.

Calif., Pasadena — Bank and Office — Pacific Southwest Trust and Savings Bank, 565 South Spring St., Los Angeles, 8 story and basement, 150 x 200 ft., concrete, brick and steel, Marengo and Colorado Sts., here, to Scofield Eng. Co., Pacific Finance Bldg., Los Angeles, $1,000,000.

Calif., Pasadena—Laboratory—California Institute of Technology, 1201 California St., 3 story and basement, rein.-con., California St., to W. C. Crowell, Security Bldg., $150,000.

Calif., San Francisco—Apartment—C. R. Bricca, 1330 4th Ave., 10 story and basement, rein.-con., Green St. near Jones Sts., to Grace & Bernieri, Claus Spreckels Bldg., cost plus percentage basis, will exceed $300,000. Noted Mar. 29.

Calif., San Francisco—Apartment—Two Thousand and Six Washington St. Inc., c/o C. A. Meussdorffer, Humboldt Bank Bldg., 10 story, basement and sub-basement, rein.-con., Washington St. near Gough St., to R. Trost, 26th and Howard Sts., $625,000. Noted Sept. 20.

Calif., San Francisco—Convent—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., 2 story, rein.-con., Green St., to T. B. Goodwin, 2245 Filbert St., $150,000.

Ont., St. Catharines—Station—Niagara & St. Catharines Electric Ry., 3 story, 40 x 131 ft. concrete, brick and steel, to Frid Constr. Co., Clyde Blk., Hamilton, $150,000.

Federal Government Work

PROPOSED WORK

Pa., Pittsburg—Clam Shell Buckets—U. S. Engineer, Pittsburg, plans to purchase two 2 yard clam shell buckets.

Ala., Mobile—Buckets—U. S. Engineer, Mobile, plans to purchase one 3 side orange peel bucket and one 3 yd. clam shell bucket.

Wash., Camp Lewis—Pipe Line—Constructing Quartermaster plans pipe line to replace present one extending from pumping station on Lake Squalichew to Post.

BIDS DESIRED

N. Y., Hoosick Falls—Post Office—Nov. 5, by Treas. Dept., Wash., D. C., constructing U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Va., Norfolk—Dredging—Oct. 30, at office U. S. Engineer, dredging in eastern branch of Elizabeth River, in Harbor, here; adv. E. N.-R. Oct. 11.

Miss., Vicksburg—Roadwork—Oct. 15, by Quartermaster Intermediate Depot, Jeffersonville, Ind., repairing approach roadway to U. S. National Cemetery, here.

La., New Orleans—Dredge Pump, etc.—Nov. 2, by U. S. Engineer, 329 Custom House, one 24 in. dredge pump and suction mouth piece; adv. E. N.-R. Oct. 11.

Ill., Belleville—Hangars—Oct. 15 at office Constructing Quatermaster, Scott Field, two 66 x 160 ft. steel hangars.

Montana — Road — Oct. 16, by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, Smead-Simons Bldg., Missoula, grading and surfacing 7 mi. Clarks Fork, Weeksville Sect., Cabinet National Forest Rd. Project, Sanders Co., 23,000 cu.yd. rock and 41,300 cu.yd. earth excav., 6,100 cu.yd. crushed rock or gravel, etc.

Ark., Pine Bluff—Mattresses, etc.—Oct. 20 at office U. S. Engineer, 911 McCall Bldg., Memphis, Tenn., constructing subaqueous mattresses and paving bank between Dikes 7 and 9, Arkansas River, here.

Tex., San Antonio—Floors and Runways—Oct. 15 at office Constructing Quartermaster, Ft. Sam Houston, concrete floors and runways at air intermediate depot, Kelly Field 1, here.

Idaho, American Falls—Sewer Pipe—Nov. 6, by O. S. Bureau of Recl., American Falls, furnishing sewer pipe in Reclamation Addition to this city, Minidoka Project. M. Bien, acting comr.; adv. E. N.-R. Oct. 11.

Calif., San Francisco—Pump, etc.—Constructing Quartermaster, Ft. Mason, receiving bids for pump and motor addition to pumping station at Lobos Creek.

Alaska, Juneau—Road—Oct. 20, at office U. S. Engineer, Juneau, crushed rock surfacing 3.63 mi. Ketchikan-Wards Cove Sect. of Tongass National Forest Rd., 4,778 cu. yd. crushed rock, etc. Contractor may lease government machinery.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, dredging 52,500 cu.yd. soft material and 125 cu.yd. boulders, in Pawcatuck River, Rhode Island and Connecticut, from Bay State Dredging and Contg. Co., 62 Condor St., East Boston (Boston P. O.), Mass., $29,800. Noted Aug. 30.

N. Y., Brooklyn—Alteration—Spec. 4866—Bureau Yards & Docks, Navy Dept., Wash., D. C., alterations to nurses quarters at Naval Hospital, here, from J. F. Ferguson, 504 West 53rd St., New York, $1,972.

N. Y., Niagara Falls—Extension—Treas. Dept., Wash., D. C., extension to U. S. Post Office, here, from A. Smith Co., Niagara Falls, $11,744. Noted Sept. 27.

D. C., Wash.—Recreation Building, etc.—U. S. Veterans Bureau Arlington Bldg., recreation building, alteration and addition to garage for attendant's quarters at U. S. Veterans Hospital 32, Mt. Alto, here, from Skinker & Garrett, 1416 F St., $81,000. Noted Sept. 13.

CONTRACTS AWARDED

Mass., Boston—Dredging—U. S. Engineer, Custom House, dredging and disposing of 600,000 cu.yd. material from Beverly Harbor, to J. S. Packard Dredging Co., Turks Head Bldg., Providence, R. I., $24,891. Noted Aug. 2.

Mass., Rutland — Quarters — U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., constructing complete, nurses quarters, mess hall and utilities building at U. S. Veterans Hospital 89, here, to Imbach-Wozny-McCoy, Inc., 700 Knickerbocker Bldg., Baltimore, Md., $122,000 (8 months). Noted Sept. 27.

R. I., Pawtucket—Mailing Vestibule, etc.—Treas. Dept., Wash., D. C., mailing vestibule and driveway at U. S. Post Office, here, to F. A. O'Hare Co., 357 Westminster St., Providence, $2,500. (30 days).

Pa., Phila.—Repairs—U. S. Shipping Bd., c/o J. M. Hoffman, Head, Div. of Docks and Wharves, 1907 Navy Bldg., Wash., D. C., repairs to substructure and deck of portions of Piers 97, 98 and 99, Greenwich Point Delaware River, here, to E. Fay & Son, 2 South Mole St., $154,800. Noted Sept. 13.

W. Va., Huntington—Forgings—For 86 forgings, total weight 77,000 lb. for Dam 13, Ohio River, to Amer. Car and Fdry. Co., Jeffersonville, Ind., $5,547.

La., New Orleans—Cement—U. S. Engineer, furnishing 5,000 bbl. portland cement to J. W. Kearny & Sons, 514 South Peters St., $15,100. Noted Oct. 4.

Ky., Dawson Springs—Outside Service Lines—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., outside service lines for heating, drainage, etc., recreation building and 4 duplex officers quarters, U. S. Veterans Hospital 79, here, to Noland-Clifford Co., 330 28th St., Newport News, Va., $27,262. Noted Sept. 6.

Ky., Louisville—Steel and Iron Work—U. S. Engineer, P. O. Box 72, steel and iron work for power house at Lock and Dam 44, Ohio River, to General Iron Wks. Co., Front and Harriet Sts., Cincinnati, O. Engrs. est. $5,000. Noted Sept. 20.

O., Cincinnati—Piling—U. S. Engineer, Cincinnati, furnishing sixty 30 ft. taper piles, one hundred forty-six 40 ft. and sixty 35 ft. steel sheet piles for Dams 34, 36 and 38, to Bethlehem Steel Co., Cincinnati, $2.94 cwt. Noted Oct. 4.

Neb., Mitchell—Siphon—O. S. Recl. Bureau, Mitchell, constructing Stiver Canyon concrete siphon, Sta. 5685 on Ft. Laramie Canal, North Platte Project, Nebaraska-Wyoming, near Haig, to Jones Eng. and Constr. Co., Inc., 315 Courtney Bldg., Omaha, $39,690. Noted Aug. 9.

Alaska, Sitka—Road—U. S. Bureau Pub. Rds., Wash., D. C., 4 mi. highway near here, to Sims & Carlson, Realty Bldg., Spokane, Wash., $125,000.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Application

431—Idaho Power Co., 7th and Bannock Sts., Boise, Idaho—Wants license for transmission line from Gypsum to Lime, Baker Co., Ore.

432—Pigeon River Power Co., c/o F. R. Weller, Mills Bldg., Wash., D. C.—Wants license for dam, tunnels, conduit and power house in Big Pigeon River at North Carolina-Tennessee State line.

433 — R. Carson, Mono Lake, Calif — Wants license for small diversion ditch from South Fork of Rush Creek to power house at Silver Lake, to develop 5 hp. in Mono Co.

Federal Power Commission (Continued)

434—R. Bennett, 1125 Central Bldg., Los Angeles, Calif.—Wants preliminary permit to divert part of flow of Big Rock Creek in Los Angeles Co., into storage reservoir.

435—Beaverhead Transmission Co., Butte, Mont.—Wants license for transmission line between Sheridan and Dillon.

436 — Winino Mineral Springs, 32 9th Ave., W., Eugene, Ore.—Wants license for small project on Salt Creek, Lane Co.

437—Mt. Reubens Mining Co., Grant's Pass, Ore.—Wants license for small project on Reubens Creek, Josephine Co.

438 — Southern California Edison Co., Edison Bldg., Los Angeles, Calif.—Wants license for transmission line in Angeles National Forest, near here.

Miscellaneous

PROPOSED WORK

Grain Elevator—Middletown, Conn.—See "Industrial Works."

Steam Heating Plant, etc.—Albany, N. Y.—Albany City Hospital, North Scotland Ave., soon takes bids installing new steam heating plant and minor repairs to Pavilion F. $35,000. J. G. Brennan, city engr.

Lighting and Pumping System—Canandaigua, N. Y.—Plans installing lighting and pumping system. $60,000-$75,000. W. J. MacFarlane, mayor. Engineer not announced.

Track Elevation—Trenton, N. J.—Pennsylvania R.R., Broad St. Sta. Phila., having plans prepared elevating tracks on Belvidere Div., here. $150,000. A. B. Temple, Broad St. Sta., Phila., engr.

Transmission Lines—Pennsylvania — See "Industrial Work."

Transmission Line—Pennsylvania — West Penn Power Co., West Penn Bldg., Pittsburgh, plans transmission line, six 132,000 volt wires and three 22,000 volt across Monongahela River at Baird Sta., Washington Co., all on 90 ft. steel towers. $30,000.

Transmission Lines—Gibsland, La.—See "Waterworks."

Coal Tipple—Dawson Springs, Ky.—Dawson Daylight Coal Co. plans coal tipple, crushing outfit and loading booms for opening new coal lands. $30,000.

Transmission Line — Indiana — Indiana Electric Corp., Indianapolis (subsidiary of Central Indiana Power Co.), plans 20 mi. transmission line, 33,000 volts, from Sullivan to Worthington. $40,000. J. H. Brewer, pres.

Parks — Appleton, Wis. — City plans 2 parks, incl. laying out roads, walks, buildings, baseball diamonds, tennis courts, pools, etc. $25,000. E. L. Williams, city clk. Architect not selected.

Athletic Field—Madison, Wis.—Common Council appropriated $50,000 for creation athletic field on east side, incl. tennis courts, football fields, grandstands, apparatus, etc. H. C. Buser, City Hall, clk. Engineer not selected.

Swimming Pool—Two Rivers, Wis.—Bd. Educ. making plans brick, steel and tile swimming pool in high school. $25,000. J. D. Chubb, North Dearborn St., Chicago, engr.

Stadium—Minneapolis, Minn.—University of Minnesota having plans prepared by Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., for stadium. F. M. Mann, dean of Architectural School, associated archt. Noted Sept. 27.

Transmission Lines—Cameron, Mo.—See "Industrial Works."

Breakwater—Ft. Smith, Ark.—Soon takes bids breakwater in Poteau River, also plans to purchase new chlorination machine of 25 lb. daily capacity and dry alum machine 800 lb. daily capacity. $30,000.

Transmission Line — Hiram, Ark. — See "Dam."

Park Improvements—Ft. Worth, Tex.—Making plans walks, drives and other improvements to Cobb Park, etc. $25,000. G. C. Clarke, park supt.

Levee — Kaufman, Tex. — Kaufman Co. Levee Impvt. Dist. 4, election Oct. 13, to vote on $175,000 bonds for improvements, alterations and repairs. Engineer not announced.

Swimming Pools, etc.—San Antonio, Tex.—Plans to vote on $100,000 bonds first week in December, general improvements, incl. 1 or 2 new concrete swimming pools, beautifying parks and additional playground and apparatus. D. D. Harrigan, city engr.

Street Repairing Machine—Chico, Calif.—City plans to purchase machine to repair asphalt streets. F. S. Robinson, city engr.

Electroliers—Fresno, Calif.—Had plans prepared 350 electroliers, c.i. and steel on cement concrete, 2 ft. deep and 2 ft. sq., conduit to be galvanized metal tubing containing wire conductors, etc. $25,000 or more. W. Stranahan, city engr.

Gas Holder—Los Angeles, Calif.—Southern California Gas Co., 950 South Bway., plans 10,000,000 cu.ft. gas holder.

Park, etc.—Richmond, Calif.—Plans to purchase block bounded by 12th and 13th Sts., Bissel and Macdonald Aves., for park improvements and Amer. Legion memorial building. Park site improvements will exceed $25,000.

Swimming Pool—Richmond, Calif.—See "Buildings."

Subway Crossing — Sacramento, Calif.—Having preliminary plans prepared subway crossing at 2nd and R Sts. $50,000-$60,000. A. Givan, city engr.

Power Distributing System—San Francisco, Calif.—Bd. Supervs. of city and San Francisco Co., voted for municipal distribution of power developed on Hetch Hetchy Project. M. M. O'Shaughnessy, city engr., instructed to prepared plans and specifications.

Electric Light and Power System—Blyth, Ont.—Council plans hydro electric lighting and power distribution system. $28,000. Work will be carried out under direction of Hydro Comn., A. Beck, chn., London.

Hydro Electric System—Cayuga, Ont.—City plans hydro electric system. $30,000.

Power Lines—Islington, Ont.—Etobicoke Twp. plans to expend $40,000 for extending lines. Work will probably be done by day labor. S. Barratt, twp. clk.

Drilling—Spry, Ont.—J. H. Cook, Lions Head, interested in syndicate which plans to drill for oil on 6,000 acres in Eastner Twp. $30,000.

BIDS DESIRED

Underground Fire Alarm System — New York, N. Y.—Oct. 17, by T. J. Drennan, fire comr., Municipal Bldg., part of underground fire alarm system in Bronx Boro.

Boardwalk—Spring Lake, N. J.—Nov. 7, by Mayor and Boro Council, Boro Hall, constructing boardwalk. J. M. Braly, boro engr. E. H. Schmieder, Spring Lake, consult. archt.; adv. E. N.-R. Oct. 11.

Ornamental Lighting System—DuBois, Pa.—Oct. 15, by G. Minns, supt. Dept. Pub. Safety, ornamental lighting system on Long Ave. from Stockdale to Main Sts., and on Brady St. from Weber Ave. and Liberty Bridge, 100 standards.

Lumber—New Orleans, La.—Oct. 18, by Bd. Port Comrs., Suite 200 New Court House Bldg., furnishing 60,000 ft. untreated yellow pine. J. H. Walsh, genl. mgr.

Wall and Dike, etc.—Shreveport, La.—Oct. 23, by S. G. Wolf, secy.-treas., 1,000 ft. sheet pile toe wall, 24 ft. deep, 2,200 ft. pile dike 55 ft. deep, willow fascine or plank mattress under dike 100 x 2,200 ft., 20,000 cu.yd. grading and 25,000 sq.ft. creosote pavement. Alternate bids on log crib filled with brush anchored to piling. C. E. Smith, Ry. Exch., St. Louis, Mo., engr.

Unloading Equipment, etc.—Toledo, O.—Swan Creek Lumber & Supply Co., City Park Ave., in market for unloading equipment, pit and automatic conveyors, 4 coal storage tanks, etc. K. Aschbacher, purch. agt.

Tractor—Racine, Wis.—W. A. Bechthold, highway comr. Racine Co., taking bids medium sized tractor.

Tractor—Grand Rapids, Minn.—Oct. 23, by T. Erskine, aud. Itasca Co., one 10 ton tractor. H. A. LeSueur, Grand Rapids, engr.

Materials—St. Paul, Minn.—Oct. 16, by H. W. Austin, city purch. agt., materials for paving Plum St. between Mound Blvd. and Maria Ave., 380 bbl. portland cement, 623 cu.yd. crushed rock, 27 tons asphalt, 116 tons cinder stone, 45 tons trap rock; also 400 coils $\frac{3}{4}$ in. extra strong lead pipe and 5,000 lb. solder for Water Dept. C. M. Shepard, city engr.

Rails—Houston, Tex.—Oct. [illegible] at Navigation Commissioners Office, [illegible] lin.ft. 70-80 lb. rails, new or relay, bids for both rails and fastenings.

Grade Separation — Colorado — See "Streets and Roads."

Subway—San Francisco, Calif.—Oct. 25, by State Bd. Harbor Comrs., Ferry Bldg., subway under Ferry Loop at foot of Market St. $425,000. F. G. White, ch. engr. Noted June 28.

Road Scrapers—Montreal, Que.—Oct. 15, by R. Bauset, city clk., 3 auto road scrapers.

Underground Cable—London, Ont.—Utilities Comrs. taking bids 13,000 volt underground cable. $35,000. E. V. Buchanan, c/o owner, engr.

Motor Flusher—Pembroke, Ont.—Taking bids one motor flusher.

Breakwater—Port Lorne, N. S.—Oct. 22, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, 50 ft. extension to concrete breakwater, 45 ft. wide, here. $27,000.

Breakwater—St. Francis Harbour, N. S.—Oct. 22, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, Ont., 301 ft. concrete breakwater, 20 ft. wide, here. $60,000.

BIDS RECEIVED

Subway—Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York, Oct. 2, subsurface railroad extending along and under 4th Ave. from 87th to 95th Sts., here, from T. A. Gillespie Co., 7 Dey St., New York, $1,725,884. Noted Sept. 20.

Grapple Dredge — Phila., Pa. — G. F. Sproule, dir. Dept. Wharves & Ferries, grapple dredge from Ellicott Machine Co., Bush and Syrian Sts., Baltimore, Md., $211,000. Noted Sept. 20.

Fill—Florida — State Hy. Dept., Tallahassee, Sept. 27, 2.3 mi. fill for Escambia Bay Bridge, Project 38-A, Escambia Co., from Atlantic Gulf & Pacific Co., 13 Park Row, New York City, $491,550.

Levee—Portage, Wis.—Wisconsin State Levee Comn., Capitol, Madison, strengthening, enlarging and protecting portions of levee system, from M. S. Burgitt, Britt, Ia., $26,150. Noted Sept. 20.

CONTRACTS AWARDED

Park—Rockville, Conn.—Grading and paths in Fox Hill Park, to J. Hoye, 374 Capen St., Hartford. Archts. est. $25,000. Noted April 19.

Asphaltic Cement, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 300,000 gal. asphaltic cement to Warner Quinlan Co., 79 Wall St., New York, $15,600; 6,000 cu.yd. binder stone to Calvin Tompkins Co., 30 Church St., New York, $13,860; 50,000 asphalt paving blocks to Hastings Paving Co., 25 Broad St., New York, $4,780; 50,000 grade 1 granite paving blocks to Rockport Granite Co., 13 Park Row, New York, $6,900; 50,000 wood paving blocks to Amer. Creosoting Co., 17 Battery Pl., New York, $2,950; 60,400 ft. lumber to East River Mill & Lumber Co., 92nd St. and East River, New York, $3,962. Noted Sept. 13.

Foundation—Kohler, Wis.—See "Industrial Works under Proposed Work."

Basement—Milwaukee, Wis.—See "Buildings under Proposed Work."

Grade Separation—Milwaukee, Wis.—Bd. Pub. Wks., grade separation at Forest Home Ave., etc., to H. Danischefsky, 1484 Humboldt Ave., Milwaukee, $47.698. Noted Sept. 27.

Wall—Waterloo, Ia.—City and Illinois Central Ry. Co., 135 East 11th Pl., Chicago, 525 lin.ft. rein.-con. river wall on Cedar St. between 5th and 6th Sts., to H. Maine & Co., 305 Marsh Pl., $50,000. Noted Aug. 30.

Tunnel—Redding, Calif.—Pacific Gas and Electric Co., 445 Sutter St., San Francisco, concrete lined tunnel, 4 mi. long, 19 ft. diam., at Pit 3, Shasta Co., to Bates & Borland, Bank of Savings Bldg., Oakland.

Tanks—Watson, Calif.—Pan American Petroleum Transport Co., erecting two 80,000 bbl. and thirteen 100,000 bbl. tanks equipped with water tops, to Chicago Bridge & Iron Wks., Hudson Terminal Bldg., New York City.

Electric Lighting System—Point Grey, B. C.—New electric lighting system in Shaughnessy Heights, to Farr, Robinson & Bird, 546 Howe St., Vancouver, Engrs. est. $58,000.

CONSTRUCTION NEWS

Engineering News-Record, October 18, 1923

The Construction Barometer

Construction Conforms to 1922 Trend in Twenty-five States—September Building Permits Drop 11 Per Cent

CONTRACTS awarded on large engineering construction projects in the United States, during September, showed a considerable gain over similar lettings for the month preceding.

This upward turn in construction conforms to the 1922 trend in New England, the Middle Atlantic states and the group immediately west of the Mississippi. The opposite, however, is true of the South, the Middle West and the far Western states.

In all sections of the country except New England, September construction exceeded the lettings for the same month in 1922. In the Middle Atlantic states, however, the money value was exactly the same.

According to S. W. Straus & Co., September building permits fell off 11 per cent from the month preceding, which was in keeping with the usual trend of permits issued during these two months.

Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

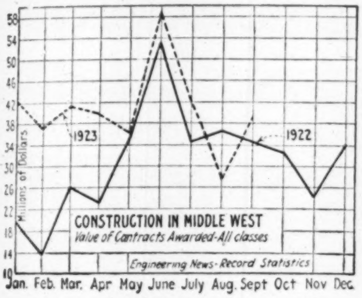
Week Ended	Public Work	Private Work	Total Contracts
Sept. 27	$16,057,000	$24,127,000	$40,184,000
Oct. 4	16,915,000	17,145,000	34,060,000
Oct. 11	16,047,000	16,019,000	32,066,000
3 weeks	$49,019,000	$57,291,000	$106,310,000

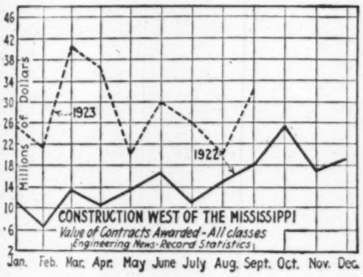
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

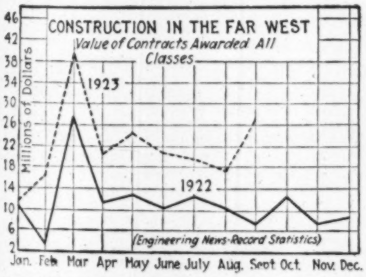
Week Ended	No.	Public Work	No.	Private Work
Sept. 27	13	$1,355,000	36	$12,761,000
Oct. 4	12	4,651,000	33	12,587,000
Oct. 11	14	3,994,000	33	11,490,000
3 weeks	39	$10,000,000	102	$36,838,000

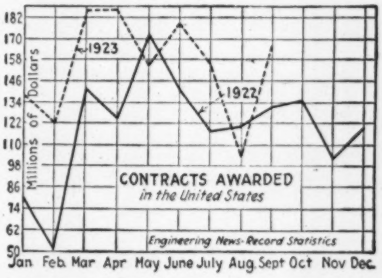
BASIC MATERIALS PRICES FIRM

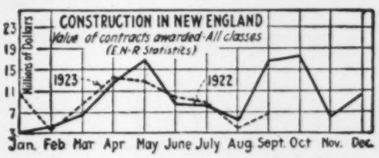
	Quoted on Oct. 18, at	Price Was	On
Structurals, Pittsburgh, 100 lbs.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl...	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	62.00	61.00	Oct. 4
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common labor, hr.	0.54	0.53	June 28

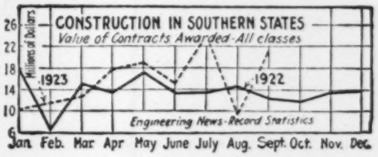


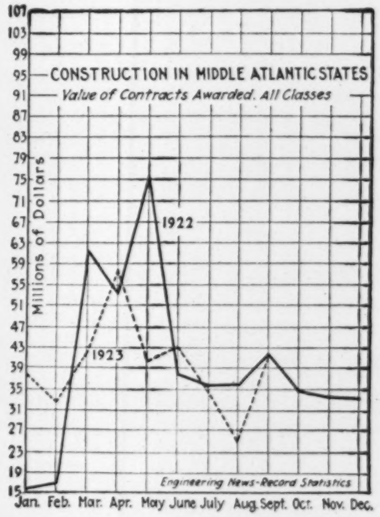












PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 22	Albany, N. Y.	Oct. 18
Oct. 22	Denver, Colo.	Oct. 18
Oct. 23	Buffalo, N. Y.	Sept. 20
Oct. 23	New Holstein, Wis.	Oct. 11
Oct. 23	Hurley, Wis.	Oct. 18
Oct. 23	Long Island City, N. Y.	Oct. 18
Oct. 23	New York, N. Y.	Oct. 18
Oct. 23	St. George, N. Y.	Oct. 18
Oct. 24	Cleveland, O.	Oct. 4
Oct. 24	Baltimore, Md.	Oct. 18
Oct. 25	Watertown, S. D.	Oct. 18
Oct. 26	Tulsa, Okla.	Sept. 27
Oct. 26	Wash., D. C.	Oct. 11
Oct. 26	Buffalo, N. Y.	Oct. 18
Oct. 29	Bethlehem, Pa. Adv. Oct. 18.	Oct. 18
Oct. 30	Washington, Ia.	Oct. 11
Nov. 3	McLeansboro, Ill.	Oct. 18
Nov. 5	Haledon, N. J.	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Oct. 22	Berea, O.	Oct. 4
Oct. 23	Toronto, Ont.	Oct. 11
Oct. 23	St. Joseph, Mo. Adv. Oct. 18.	Oct. 18
Oct. 23	Ft. Worth, Tex.	Oct. 18
Oct. 23	Asbury Park, N. J.	Oct. 18
Oct. 24	Columbus, O.	Oct. 18
Oct. 24	St. Joseph, Mo. Adv. Oct. 18.	Oct. 18
Oct. 30	St. Louis, Mo.	Oct. 4
Nov. 1	Fort Erie, Ont.	Aug. 23
Dec. 10	New Orleans, La. Adv. Oct. 11 and 18.	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Oct. 30	Indianapolis, Ind.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Oct. 23	Mobridge, S. D.	Sept. 27
Oct. 23	Alabama	Oct. 4
Oct. 23	South Dakota	Oct. 18
Oct. 23	Kentucky	Oct. 18
Oct. 26	Centerville, Tex.	Sept. 27
Oct. 26	Phillipsburg, Kan.	Oct. 4
Oct. 26	Louisiana	Oct. 18
Oct. 26	Lake Charles, La.	Oct. 18
Oct. 27	Cleveland, O.	Oct. 18
Oct. 29	California	Oct. 11

Bids Close		See Eng. News-Record
Oct. 30	Alabama	Oct. 4
Nov. 5	Fremont, O.	Oct. 11
Nov. 6	Quitman, Miss.	Oct. 11
Nov. 7	Minnesota	Oct. 18
Nov. 30	Sydney, Australia	Apr. 19
May 1	Tientsen, North China	Oct. 11

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Oct. 29	Turlock, Calif.	Oct. 18

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 22	New Jersey	Oct. 4
Oct. 22	Norton, Kan.	Sept. 27
Oct. 22	St. George, N. Y.	Oct. 18
Oct. 23	Asbury Park, N. J.	Oct. 18
Oct. 23	South Dakota	Oct. 18
Oct. 23	Kentucky	Sept. 27
Oct. 23	New Albany, Miss.	Oct. 4
Oct. 23	Marshall, Tex.	Oct. 11
Oct. 23	Blackwell, Okla.	Oct. 18
Oct. 23	West Palm Beach, Fla.	Oct. 18
Oct. 24	Alpha, N. J. Adv. Oct. 4 to 18.	Oct. 4
Oct. 24	Denver, Colo.	Oct. 18
Oct. 25	Ventura, Calif.	Oct. 11
Oct. 25	Independence, Kan.	Oct. 18
Oct. 25	Tyler, Tex.	Oct. 18
Oct. 25	Brooklyn, N. Y.	Oct. 18
Oct. 26	Palo Pinto, Tex.	Oct. 18
Oct. 26	Michigan	Oct. 18
Oct. 29	Newport Beach, Calif.	Oct. 18
Oct. 29	California	Oct. 11
Oct. 29	New Mexico	Oct. 11
Oct. 29	Michigan	Oct. 18
Oct. 30	Cheraw, S. C.	Oct. 11
Oct. 30	Michigan	Oct. 18
Oct. 30	Louisiana	Oct. 18
Oct. 31	Jefferson, Tex.	Oct. 11
Nov. 1	Claremore, Okla.	Oct. 18
Nov. 5	Hondo, Tex.	Oct. 11
Nov. 6	Marlin, Tex.	Oct. 18
Nov. 6	Washington	Oct. 4
Nov. 7	Minnesota	Oct. 18

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Oct. 24	Andrews, N. C. Adv. Oct. 4 to 18.	Oct. 4
Oct. 26	Elizabeth, N. J. Adv. Oct. 18.	Oct. 18
Nov. 8	Palmyra, N. Y. Adv. Oct. 11 and 18.	Oct. 11

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 19	Drexel Hill, Pa.	Oct. 18
Oct. 22	Johnstown, Pa.	Oct. 4
Oct. 22	Swarthmore, Pa.	Oct. 18
Oct. 23	Ann Arbor, Mich.	Oct. 4
Oct. 23	St. Francis, Kan.	Oct. 4
Oct. 23	Madison, N. J.	Oct. 4
Oct. 23	Niles (R. F. D. Norwood Park, Chicago P. O.), Ill.	Oct. 11
Oct. 23	Fayetteville, N. C.	Oct. 18
Oct. 24	Marion, Ia.	Sept. 27
Oct. 24	Elizabeth, N. J.	Oct. 11
Oct. 24	Tamaqua, Pa.	Oct. 18
Oct. 27	Shreveport, La.	Oct. 11
Oct. 30	New York, N. Y	Oct. 11
Oct. 30	Norristown, Pa.	Oct. 11
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2
Nov. 1	St. Louis, Mo.	Oct. 18
Nov. 1	Hutchinson, Kan.	Oct. 11
Nov. 30	Maggie, W. Va.	Oct. 4

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 22	Derricks—Louisville, Ky.	Oct. 4
Oct. 26	Dredging, etc.—Port Chester, N. Y. Adv. Sept. 27 to Oct. 18.	Sept. 27
Oct. 26	Post Office—Clinton, S. C.	Oct. 4
Oct. 29	Dredging—New Rochelle, N. Y. Adv. Oct. 4 to 18.	Oct. 4
Oct. 30	Dredging—Norfolk, Va.	Oct. 11
Oct. 31	Repairing Jetty—Freeport, Tex. Adv. Oct. 4 to 18.	Oct. 4
Oct. 31	Dredging—Galveston, Tex.	Oct. 18
Nov. 1	Pipe Line Dredge—Chicago, Ill.	Sept. 6
Nov. 1	Catamarans, etc.—Chicago, Ill. Adv. Sept. 20, 27, Oct. 11 and 18	Sept. 20
Nov. 1	Stone—Juneau, Alaska	Oct. 18
Nov. 2	Dredge Pump, etc.—New Orleans, La. Adv. Oct. 11 and 18.	Oct. 11
Nov. 5	Post Office—Hoosick Falls, N. Y. Adv. Oct. 11 and 18.	Oct. 11
Nov. 5	Pump, etc.—Presidio (San Francisco P. O.), Calif.	Oct. 18
Nov. 6	Quarters—Baltimore, Md. Adv. Oct. 18.	Oct. 18
Nov. 6	Sewer Pipe—American Falls, Idaho	Oct. 11
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 10	Quarters — Hot Springs, Ark.	Oct. 18
Nov. 10	Breakwater—Indiana Harbor, Ind. Adv. Oct. 18.	Oct. 18
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 14	Post Office—Carroll, Ia. Adv. Oct. 18.	Oct. 18
Nov. 20	Post Office—Central City, Neb. Adv. Oct. 18.	Oct. 18
Nov. 30	Dam—Quebradillas, P. R. Adv. Sept. 27 to Oct. 18.	Sept. 27

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 22	Breakwater—St. Francis Harbor, N. S.	Oct. 11
Oct. 22	Breakwater—Port Lorne, N. S.	Oct. 11
Oct. 22	Dock — Mackinaw City, Mich.	Oct. 18
Oct. 23	Protection Work—Shreveport, La.	Oct. 4
Oct. 23	Portland Cement—Portland, Ore.	Oct. 4
Oct. 23	Tractor — Grand Rapids, Minn.	Oct. 11
Oct. 23	Wall and Dike—Shreveport, La.	Oct. 11
Oct. 24	Levee—New Orleans, La.	Oct. 18
Oct. 25	Subway—San Francisco, Calif.	Oct. 11
Oct. 26	Station Finish—Brooklyn, N. Y.	Oct. 18
Nov. 7	Board Walk—Spring Lake, N. J. Adv. Oct. 11 and 18.	Oct. 11
Nov. 15	Ferry Landing—New Orleans, La. Adv. Oct. 18.	Oct. 18
Nov. 26	Portland Cement—Los Angeles, Calif. Adv. Oct. 11 and 18.	Oct. 18
Jan. 19	Transformers, etc.—Melbourne, Australia Adv. Oct. 18.	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Me., Portland — Portland Water Dist. plans main water conduit. $275,000. Bids in spring. H. U. Fuller, ch. engr.

N. Y., Orchard Park—Had surveys made and plans election to vote on $215,000 bonds for complete water system. White & Getan, Mutual Life Bldg., Buffalo, engrs. Noted April 19.

N. Y., Pultneyville—Plans 3 mi. water system. $25,000. H. C. Kittridge, Union Trust Bldg., Rochester, engr.

Pa., Shenandoah—Plans to extend and improve waterworks. Election in November to vote on $200,000 bonds. Gannett, Seelye & Fleming, Inc., 1 North Market Sq., Harrisburg, engrs. Noted Oct. 11.

Va., Charlottesville—Nov. 6, to vote on $500,000 bonds for new water system, with Moormans River as source. Fuller & McClintock, 600 Walnut St., Kansas City, Mo., engrs.

W. Va., Keyser—Having plans prepared 500,000 gal. steel storage tank and motor driven centrifugal pump. $50,000. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs. Noted Oct. 4.

N. C., Albemarle—Bd. Comrs. will sell $90,000 bonds Oct. 25, for waterworks. L. C. Russell, town clk.

Ala., Florence—Plans converting steam pumping plant into electrically driven plant, capacity 1,000 g.p.m. $30,000.

Ky., Morgansfield—Election soon to vote on bonds for water plant, and about 6 mi. pipe line.

La., Gibsland—Making plans waterworks and electric improvements. $50,000. E. T. Archer, 609 New England Bank Bldg., Kansas City, Mo., engrs.

La., Leesville—Making plans waterworks, electric light plant and sewers. $225,000. Election soon to vote on bonds. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

La., Winfield — Having final plans prepared waterworks extensions and sanitary sewers. $100,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs. Noted Oct. 11.

O., Dayton—Making surveys enlarging waterworks facilities and equipment, sufficient to meet demands of city during next 25 years. F. O. Eichelberger, city engr.

Ill., Galesburg—Making plans pipe line from Burlington to Galesburg, and pumping station to supply city and Burlington R.R. with water. City will pay $500,000, Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, $750,000, and Illinois Light & Power Co., Illinois Merchants Bank Bldg., Chicago, $250,000.

Ia., Bedford — Voted $20,000 bonds for waterworks extension. J. E. Lovell, clk.

Ia., Corning—Voted $20,000 bonds for extending water system.

Kan., Arkansas City—Soon takes bids new pumping equipment and extensions to distribution system. $53,000.

Kan., Lenora—Plans waterwork system. $35,000 voted. Ruckel Eng. Co., Hutchinson, engrs.

Mo., Breckenridge—Voted $45,000 bonds waterworks and distribution system. E. T. Archer & Co., New England Bldg., Kansas City, engrs. Noted Oct. 4.

Mo., Farmington—Oct. 30 to vote on $55,000 bonds extending water system. C. A. Haskins, 517 Finance Bldg., Kansas City, engr.

Tex., Greenville—Election soon to vote on $325,000 bonds new reservoir, etc. A. D. Duck, city engr. Noted Sept. 13.

Tex., Paris—Plans 500,000 gal. tank and tower, etc. $15,000. M. C. Welborn, city engr.

Mo., Thayer—Voted $55,000 bonds waterworks plant and distribution system. R. B. Alexander, 535 Benton St., Kansas City, engr. Noted Sept. 27.

Tex., Amarillo—Election in November to vote on $500,000 bonds for reservoir and mains. B. Jones, city engr.

Tex., Grand Saline—Making plans filtration and pumping plant. $80,000. H. N. Roberts, 422 Irving St., Dallas, engr. $80,000.

Okla., Okmulgee—Preparing plans storage reservoir and dam in Deep Fork Creek, creating lake covering 25,000 acres. Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted June 14.

Okla., Owasso—City voted $25,000 bonds for waterworks. Holway Eng. Co., 505 Wright Bldg., Tulsa, engrs. Noted Sept. 27.

Okla., Sapulpa—Defeated $100,000 bonds extending and improving waterworks. F. Dunlap, city clk. Noted Sept. 13.

Ariz., Williams—Election soon to vote on $75,000 bonds for waterworks improvements. Burns & McDonnell, 401 Interstate Bldg., Kansas City, Mo., engrs. Noted Aug. 9.

Wash., Camas—Voted $25,000 bonds to equip. municipal water plant. Stevens & Koon, Spaulding Bldg., Portland, engrs.

Ont., Dundas—Plans extending mains in Governors Rd., Ogilvie, Witherspoon, Market, West and Matilda Sts., probably 6 and 8 in. Prices wanted on materials. $25,000. W. M. Mount, city engr.

Ont., Hamilton — Having plans prepared mains in Westdale, suburb, probably 8 in. $35,000. W. L. McFaul, city engr.

Ont., Oshawa—Council plans improving waterworks system incl. storage basin or tank, overhauling system and extending mains. $50,000. W. Smith, city engr.

BIDS DESIRED

N. Y., Albany—Oct. 22, by Bd. Contr. & Supply, City Hall, filtration plant improvements. P. J. Manwiller, secy. Noted Sept. 6.

N. Y., Buffalo—Oct. 26, by F. X. Schwab, comr. Pub. Wks., City Hall, ninety pieces 4 in. and seventy-six pieces 6 in. pipe, 12 ft. lengths, seven 4 in. right angles, etc.

N. Y., Long Island City—Oct. 23, by Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Anable, Woolsey and 6th Aves., Bragaw, Mount and School Sts., etc., here.

N. Y., New York—Oct. 23, by Bd. Water Supply, Gas & Electricity, mains in Boyd, Bronxwood, Colden, Delafield and Leland Aves., etc.

N. Y., New York—Oct. 23, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains and appurtenances in Adee, Arnow, Bartow, Bruner.

Waterworks (Continued)

Gunther, Hammersley, Tiemann and Wickham Aves., Bronx Boro.

N. Y., St. George—Oct. 23, by Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bennett, Clinton, Dewey, Lexington and Nixon Aves., etc., here.

Pa., Bethlehem—Oct. 29 by T. Garey, clk., rein.-con. reservoir, pumping station, pumps, electrical work and pipe lines for high level water system. R. L. Fox, city engr.; adv. E. N.-R. Oct. 18.

Md., Baltimore—Oct. 24, by Bd. Awards, furnishing and delivering flanged pipe and fittings, $9,000, brass service pipe fittings, $20,000. V. Siems, water engr.

Ill., McLeansboro—Nov. 3, by City Clerk, 3,609 ft. 4 in. Class B pipe, 1,054 lb. 4 in. special castings, 400,000 g.p.d. filter plant, pumping equipment, etc., $31,500. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs. Noted Sept. 20.

Wis., Appleton—Water Com., F. R. Morris, secy., taking bids filter machinery and equipment for new filtration plant. Private plans.

Wis., Hurley—Oct. 23, by J. Emunson, city clk., water purification plant and pumping station, incl. intake pipe, $35,000-$40,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engrs. Noted Oct. 4.

S. D., Watertown — Oct. 25, by A. M. Myhre, secy. Municipal Utilities Comn., waterworks imporvements, incl. filter equipment and pump, piping equipment for filter house and pump station. W. F. Cochrane, city engr. Noted Sept. 27.

Colo., Denver — Oct. 22, by Bd. Water Comrs., 1654 Bway., 2,084 pieces 6 in., 1,250 pieces 12 in., 125 pieces 16 in., 84 pieces 24 in., 163 pieces 30 in., 583 pieces 30 in., 219 pieces 42 in., 10 pieces 48 in. Class B, Bell and Spigot c.i. pipe, 96 tons special castings, f.o.b. cars here, $261,000; 4-48 in. gate valves $63,000, 6 in. compound watermeters, $3,000. B. Lowther, Shirley Annex, engr.

Calif., Santa Cruz—City Council receiving bids constructing Bay St. reservoir, 73,500 cu.yd. earth to be excavated, placed and rolled, 2,300 cu.yd. rock to be excavated and placed, 4,550 cu.yd. rein.-con. in reservoir lining, valve control chamber and overflow structure, etc. H. Williams.

BIDS RECEIVED

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Oct. 9, mains in Andrews and Barnes Aves., etc., from Norton Eng. & Contg. Co., 510 West 149th St., $23,047. Noted Oct. 4.

Que., Lasalle — Extending waterworks and sewerage systems, from L. A. Ott & Co., 10 Cathacart St., Montreal, $93,465 and $4 per ft. for extra rock excav.

CONTRACTS AWARDED

Mass., New Bedford—Water Dept., 60 in. intake; furnishing precast pipe to Lock Joint Pipe Co., 9 Rutledge Ave., Ampere, N. J., $23,373, constructing intake and accessories, to R. H. Beattie, Buffington Bldg., Fall River, $163,668. Noted Sept. 20.

N. Y., Ellenville—New outlet for Maratanza Lake, incl. open channels, tunnels, manholes, pipe and fittings, etc., to Daly & Merritt, Inc., 127 Horton Ave., Portchester. $20,780. Noted Sept. 27.

N. J., Wallington—Passaic Valley Sewerage Comrs., 900 Chamber of Commerce Bldg., 24 Branford Pl., Newark, pumping machinery and equipment for Wallington Pumping Sta., here, to Shevlin Eng. Co., Inc., 259 West 34th St., New York City, $44,239. Noted Sept. 13.

O., Columbus—See "Streets and Roads."

O., Idlewood (Cleveland Heights P. O.)—See "Sewers."

Ind., Evansville — Furnishing exterior pipe and fittings for 6 m.g. addition to water filtration plant, to U. S. Cast Iron Pipe and Fdry. Co., East Burlington St., Burlington, N. J., $6,961. Noted Oct. 4.

Wis., Appleton—For 25 x 37 ft., brick addition to filtration plant, to Appleton Constr. Co., College Ave., $14,143.

Ia., Dubuque—Switchboard and transformers complete, for Eagle Point Pumping Station, to Swords Bros. Co., 7th St., Rockford, Ill., $11,192; heating system to Lineham & Molo, 472 Main St. Noted Sept. 20.

Tex., Dallas—For 175 tons of 4 and 12 in. Class B c.i. pipe, to Natl. Cast Iron Pipe Co., Kirby Bldg., Dallas, $65 and $61 respectively; 12 in. hub and gate valves, to Briggs-Weaver Co., North Market St. '72 net. Noted Oct. 4.

Tex., Ft. Worth — Concrete basins and filters, to McKenzie Constr. Co., Riverside St., $193,249 and $76,495 respectively. Noted Sept. 20.

Ore., Portland—For 25 mi. Bull Run Conduit 3 from Bull Run to Mt. Tabor Reservoir, to Willamette Iron and Steel Wks., foot of Front St., lock bar pipe, $2,571,404. Noted Sept. 13.

Sewers

PROPOSED WORK

Conn., Hartford—Plans 4 ft. rein.-con. culvert in Tremont St. $25,000. R. N. Clark, city engr.

Pa., Morrisville—Boro. plans sewage disposal plant. $30,000. T. B. Stockham, Morrisville, engr.

La., Leesville—See "Waterworks."

La., Winfield—See "Waterworks."

Ky., Louisville—Sold $952,000 bonds for sewers. A. A. Kreiger, city engr.

O., New Lexington—Plans disposal plant. $150,000. Engineer not announced.

Mich., Grand Rapids—Election Nov. 6, to vote on $5,000,000 bond issue for sewers and sewage disposal plant. M. P. Adams, city sanitary engr.

Wis., Eden—Plans new sewerage system for entire village. $25,000 or more. Engineer not selected.

Kan., Great Bend—Making plans rebuilding present sanitary sewerage system, constructing new outfall and other improvements. $100,000. Burns & McDonnell Eng. Co., 401 Interstate Bldg., Kansas City, Mo., engrs.

Mo., Breckenridge—Voted $35,000 bonds storm and sanitary sewers. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs. Noted Oct. 4.

Mo., Carthage—Oct. 31, to vote on $90,000 bonds disposal plant. C. A. Haskins, 517 Finance Bldg., Kansas City, engr.

Mo., Farmington — Oct. 30, to vote on $55,000 bonds new sanitary sewerage system. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted May 17.

Mo., University (St. Louis P. O.) — C. Crane, Willmore Corp., Boatmen's Bank, St. Louis having preliminary plans prepared 4,000 ft. 8-36 in. storm and sanitary sewers in University Hills subdivision, here. $35,000-$40,000. Pitzman Survey & Eng. Co., 611 Chestnut St., St. Louis, engrs.

Tex., Kerrville—Plans to vote on bonds for complete sewerage system to cover 5 sq.mi. A. D. Atkins, mayor. Engineer not announced.

Tex., Paris—City Council takes bids in December or January rebuilding and enlarging disposal plants, probably Imhoff tanks. $25,000. M. C. Welborn, city engr.

Levees—Corcoran, Calif.—See "Excavation, Drainage, Irrigation."

Calif., Elsinore—Having plans prepared sewer outfalls and Imhoff tank. To exceed $25,000. Burns & McDonnell, 404 Marsh-Strong Bldg., Los Angeles, engrs.

Calif., Glendale—Plans election to vote on between $800,000 and $1,000,000 bonds to construct 5 ft. sewer to connect with central outfall sewer of Los Angeles.

Calif., Oakland—Plans extending 7th St. outfall sewers. $230,000. W. W. Harmon, city engr.

Ont., Windsor—Council plans sewers in Ellis Ave. $30,000. M. E. Brian, city engr.

BIDS DESIRED

N. J., Asbury Park — Oct. 23, for 5,435 lin.ft. 12-48 in. sewer pipe, also 4,470 lin.ft. 12-36 in. vitr. or concrete storm drains, etc. N. Rogers, Asbury Park, engr.

Pa., Castle Shannon—Oct. 16, by Douglass & McKnight, engrs., 912 Columbia Bank Bldg., Pittsburgh, 17,000 lin.ft. 8 in., 1,100 lin.ft. 10 in. and 2,000 lin.ft. 12 in. terra cotta pipe sewers, etc., in Dist. 1.

O., Columbus—Oct. 24, by Franklin Co., 12,608 ft. 8-18 in. vitr. sewer and 3,000 ft. 8 in. c.i. mains in Sewer Dist. Marion 2 (North Whittier Gardens area), Contr. 16; 2,644 ft. 8 in. vitr. sewer in Sewer Dist. Franklin 3, Contr. 28; 3,566 ft. 6 in. c.i. mains in Sewer Dist. Franklin 3, Contr. 29. $50,000.

Mo., St. Joseph—Oct. 23, at office Bd. Pub. Wks., City Hall, concrete box sewer, also circular concrete or brick sewer. W. K. Seitz, city engr.; adv. E. N.-R. Oct. 18.

Mo., St. Joseph—Oct. 24, at office Bd. Pub. Wks., City Hall, circular concrete or brick sewer. W. K. Seitz, city engr.; adv. E. N.-R. Oct. 18.

Tex., Ft. Worth—Oct. 23, by City Com., for Riverside and miscellaneous sewers. $25,000. D. L. Lewis, city engr.

Calif., Los Angeles—Oct. 22, by Bd. Pub. Wks., furnishing pneumatic sewage ejector for south plant of Hyperion sewage treatment plant.

BIDS RECEIVED

W. Va., Bluefield—For 14 mi. 6-48 in. sewer pipe, 500 manholes, 100 storm water inlets, etc., from W. J. Weakland, Grosscup Dr., Charleston, $546,449. Noted Sept. 13.

O., Euclid—For disposal plant and outfall sewer for Lake Shore Blvd., 34,000 lb. reinforcing bars, 9,000 cu.yd. earth and 12,000 cu.yd. rock trenching, 82 x 108 ft. tank, 35 x 35 ft. laboratory, and 24 x 24 ft. disinfection building, also 35 x 35 ft. screen house, from F. B. Stein, Euclid. $190,616.

Mich., Detroit — Lateral sewers of vitr. crock and 2 ring brick: from Western Constr. Co., 1208 Ford Bldg., Lateral 3888 $8,990, Lateral 3949 $1,890, Lateral 4013 $8,990, Lateral 4016 $5,190, from G. Pontecelli, Wolverine Hotel, Lateral 4010 $18,892, Lateral 4017 $25,078; from F. Mangilafore, Detroit, Lateral 4018 $16,459. Noted Oct. 11.

Mich., Springwells—Vitr. crock and concrete sewers: 7,290 ft. 12-27 in. Special Assessment Dist. 23, from T. D. Nolan, 22 Highland Ave., Highland Park, $14,900; 2,464 ft. 36-72 in. Sewer Arm 39, Ford Rd., and 2,470 ft. 42-66 in. Sewer Arm 40, Donald Ave., from S. Healy, Detroit, $34,889 and $34,889 respectively.

Que., Montreal—Constructing 2 x 3 brick sewers, 482 yd. in Gouin Blvd. and 195 yd. in Hopper St., from V. Matracchio, 554 St. Thimothee St., $8,957 and $3,352 respectively; 168 yd. Woodlands St. and 260 yd. Delanaudiere St. from C. Perluzzi, 407 Labrecque St., $2,950 and $5,227 respectively; 1,282 yd. Belmore Ave. from A. Thzand, 885 St. Catherine St. E., $18,792.

Que., Lasalle—See "Waterworks."

CONTRACTS AWARDED

New York—Towns of Pittsford and Brighton, 2 disposal plants to P. [illegible] Murray, Cutler Bldg., Rochester, $223,936; Town of Brighton, about 30 mi. sewerage system connecting with town of Pittsford, to Oakwood Constr. Co., Oakwood Ave., Detroit, Mich., $393,467; Town of Pittsford, approximately 10 mi. sanitary sewers, to Whitmore, Rauber & Vicinus, 279 South Ave., Rochester, $131,690. Noted Sept. 27, under "Brighton, N. Y."

N. C., Roxboro—Constructing sewerage system to A. H. Guion & Co., Gastonia, $52,500. Spoon & Lewis, consult. engrs., Greensboro, in charge of work. Noted Sept. 20.

O., Cleveland—Cuyahoga Co., disposal plant in Impvt. 33-5, Tuxedo Lake allotment, to Lane & Freeman, Newman-Stern Bldg., $25,844. Noted Oct. 11.

O., Columbus—See "Streets and Roads."

O., Cuyahoga Heights (Cleveland P. O.)—For 1,180 ft. 30-42 in. segmental block and 3,160 ft. 12-24 in. tile sewers in East 71st St. Sewer Dist., to Sprague & Burkhardt, 11811 Browning Ave., Cleveland, $57,492. Noted Oct. 4.

O., Idlewood (Cleveland Heights P. O.)—Sewers and c.i. mains in 4 streets and in Cedar Rd., to Consolo & Palermo, 2208 Murray Hill Rd., Cleveland, $58,062 and $67,410 respectively; 9 streets, to Salem & George Bros., Erie Bldg., Cleveland, $68,039.

Minn., Austin—Disposal plant, direct oxidation system, to Direct Oxidation Corp., Penna. Bldg., Phila., $280,000, for hollow tile and stucco construction with cement roofing. Noted Oct. 11.

Tex., Ft. Worth—Bessie St. storm sewers, to Ellsworth Long Co., Ft. Worth, $36,000. Noted Sept. 20.

Mo., Kansas City — Sanitary sewers in Dist. 356, to Halpin Boyle Constr. Co., 709 Ry. Exch. Bldg., $40,991.

Calif., Los Angeles — See "Streets and Roads."

Calif., Visalia — Constructing modified Imhoff septic tank, to J. F. Shephardson, Bakersfield, $31,090. Noted Sept. 27.

Que., Montreal—See "Streets and Roads."

Waste Disposal

BIDS DESIRED

Ill., Quincy — Finance Comn. receiving bids and opens same about Oct. 22, for garbage incinerator. C. L. Weems, 718 Jersey St., chn.

Waste Disposal (Continued)

Wis., Madison—City, c/o P. Walsh, street supt., City Hall, taking bids 3 or 4 ton garbage truck for use in South Madison Dist.

Bridges

PROPOSED WORK

Vermont—Dept. Highways, Montpelier, rejected bids 68 ft. steel truss span bridge, concrete abutments and gravel surface approaches, in Bloomfield, Federal Aid Project 47; rein.-con. bridge in Ferdinand, Federal Aid Project 44; 1.53 mi. road and one 12 ft. and one 30 ft. bridge, in Colchester, Federal Aid Project 41. Will readvertise. Noted Sept. 27.

Ky., Madisonville—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, plans bridge here, one 85 ft. and two 56 ft. deck plate girder spans. F. L. Thompson, ch. engr.

O., Lakewood (Cleveland P. O.)—Cuyahoga Co. (Cleveland) election Nov. 6 to vote on $930,000 bonds for bridge over Rocky River, from Hilliard Ave., Lakewood, to point approximately opposite same. J. R. Zmunt, chn. of comrs. Noted March 15.

Tenn., Selmer—McNairy Co. plans 8 steel bridges, to exceed $25,000.

O., Cleveland—Cuyahoga Co. election Nov. 6, to vote on $3,235,000 bonds for concrete bridge known as Willow Bridge, to connect East 71st St. in Cuyahoga Heights, with Brecksville Rd. in Independence.

Mont. Glendive—Dawson Co. plans bridge over Yellowstone River, steel superstructure, concrete roadway, 5 piers. $200,000. W. F. Nye, co. clk.

Arkansas—Viaduct Comn., c/o R. Turner, chn. Earle, Ark., had plans prepared 13,300 ft. viaduct on Arkansas side of Harahan Bridge out of Memphis, Tenn., incl. 700,000 cu.yd. surfaced embankment, 1,600 rein.-con. piles, 12,000 yd. concrete, 1,600,000 lb. reinforcing steel, width for 4 traffic lines. Arkansas, Tennessee and Memphis to cooperate in work. $1,500,000. Ayres & Miller, McCall Bldg., Memphis, Tenn., engrs. Noted Apr. 12.

Tex., Dallas—Dallas Co. plans election next July to vote on $2,000,000 bonds concrete viaduct over Trinity River. Nagle, Witt & Rollins, co. engrs.

California—State Hy. Comn., Sacramento, rejected bids for 240 ft. bridge 21 ft. wide, over San Lorenzo Creek near King City, Monterey Co. Will revise plans. R. M. Morton, state highway engr. Noted Oct. 11.

Calif., Elk Horn (Woodland P. O.)—Sacramento and Yolo Counties having plans prepared steel bridge over Sacramento River, here. $150,000-$175,000. C. W. Deterding, Sacramento, Sacramento Co. surv. A. G. Proctor, Woodland, Yolo Co. surv.

BIDS DESIRED

Louisiana—Oct. 26, by State Hy. Comn., Baton Rouge, constructing timber and road approaches to Calcasieu River Bridge, State Project 368, Lake Charles-DeRidder Highway, Sect. A, grading and graveling, Sect. B, 1,121 lin.ft. creosoted pile trestle, composed of fifty-nine 19 ft. panels. J. M. Fourmy, state highway engr. Noted Sept. 27.

Kentucky—Oct. 23, by State Hy. Dept., Frankfort, 100 ft. rein.-con. deck girder bridge, two 30 ft. and one 40 ft. spans, over Shaws Creek, Hardin Co. Former bids rejected. J. S. Boggs, state highway engr.

O., Cleveland—Oct. 27, by Cuyahoga Co. steel superstructure for bridge on Hillside Rd. $31,750. Former bids rejected. F. Lander, Court House, engr. Noted Oct. 4.

Minnesota—Nov. 7, by State Hy. Dept., St. Paul, Bridge 3583 at Split Rock, 80 ft. deck truss span, (former bids rejected); Bridge 3585 at Gooseberry, one 150 ft. arch and two 60 ft. approach spans; Bridge 3584, at Crow Creek, four 100 ft. deck spans, all foregoing on State Project 1-01, Federal Aid Project 282; Bridge 3795, 80 ft. truss span; Bridge 3796, one 100 ft. truss span; Bridge 3797, one 100 ft. truss span, all foregoing on State Project 16-21, Federal Aid Project 314; Bridge 3891, one 120 ft. truss span, and Bridge 4007, 3 skew deck girders, both on State Project 1-39, Div. B, Federal Aid Project 296, Steele Co. State Hy. Dept., St. Paul, engrs.

South Dakota—Oct. 23, by State Hy. Dept., Pierre, approach to north end of bridge over Missouri River, 553 ft., 130,000 lb. structural steel, 385 cu.yd. fill, 672 cu. yd. structural excav., 763 cu.yd. concrete, 61,100 lb. reinforcing, 350 sq.yd. asphalt. $35,000. Harrington, Howard & Ash, 1012 Baltimore St., Kansas City, Mo., engrs.

Tex., Tyler—See "Streets and Roads."

BIDS RECEIVED

North Carolina—State Hy. Comn., Raleigh, rein.-con. bridges and culverts on State Projects 126 and 187, Edgecombe and Pitt Counties, from Eagle Constr. Co., New Bern, $29,120; State Project 302, Bladen Co. and State Project 404, Chatham Co., from Atlantic Bridge Co., Roanoke, Va., $196,313 and $51,876 respectively; State Project 763, Surry Co., from C. A. Helig, Winston-Salem, $72,569. Noted Sept. 27.

Michigan—State Hy. Dept., Lansing, 90 ft. span concrete girder Bridge No 3310001, from Townsend-Shuttleworth-Ballmer Co., Capitol Natl. Bank Bldg., Lansing, $54,380, plus state cement.

CONTRACTS AWARDED

Vermont — Dept. Highways, Montpelier, I beam concrete bridge, gravel surfaced approaches, in town of Chester, Federal Aid Project 46, to G. H. Stebbins, 146 East Main St., North Adams, Mass., $7,267; steel truss bridge, concrete abutments, on Bennington-Brattleboro Rd., in Woodford, Federal Aid Project 48, to M. J. Burrington, $19,634. Noted Sept. 27.

Pa., Johnstown—M. L. Masterson, supt. Streets & Pub. Improvements, City Hall, Napoleon St. Bridge over Stoneycreek to Farris Eng. Co., Empire Bldg., Pittsburgh, $152,718; Coopersdale Bridge over Conemaugh River, to Independent Bridge Co., May Bldg., Pittsburgh, $179,400. Noted Oct. 11.

Miss., Macon—Noxubee Co., 3 concrete bridges on Brooksville-Clifton Rd., concrete spillway at Owl Creek on Brewer Rd., steel and concrete bridge on Macon and Louisville Rd. over Hashuqua Creek, wooden bridge over branch on Macon and Memphis Rd., brick culvert on Rinion Rd. and wooden bridge over Joe's Creek, Allgood Mill Rd., to L. Minor, Brooksville.

Ia., Indianola—Warren Co.,1 high truss bridge, to B. J. Cole, Ames, $16,719; 46 culverts and extensions, to Shackleton Constr. Co., Perry, $21,000. Noted Sept. 27.

Minnesota—State Hy. Dept., St. Paul, Bridge 3458, State Project 1-01, Federal Aid Project 282, Beaver Bay, one 300 ft. steel arch span, to Illinois Steel Bridge Co., 552 Gilfillan Blk., St. Paul, $36,880. Noted Oct. 4.

Dams

PROPOSED WORK

Tex., Ft. Worth—Southwestern Portland Cement Co., Two Republics Bldg., El Paso, having revised plans prepared concrete spillway, 150 ft. earth dam, 40 ft. high, 600,000 gal. daily capacity. Jno. B. Hawley, Cotton Exch. Bldg., engr. Noted Sept. 6.

CONTRACTS AWARDED

Tenn., Lawrenceburg—City, hydro-electric dam over Shoal Creek, near here, to Gould Constr. Co., Independent Life Bldg., Nashville, $80,000. Noted Sept. 13.

Railways

PROPOSED WORK

Oregon—See "Miscellaneous."

California—Atchison, Topeka & Santa Fe Ry. Co., 6th and Main Sts., Los Angeles, plans 1 mi. spur track from Oakdale to cement plant of Yosemite Portland Cement Co., Merced R. B. Ball, ch. engr.

Steel Rails — Eureka, Calif. — Rejected bids furnishing steel rails. J. Griffith, city supt. pub. wks. Noted Sept. 20.

CONTRACT AWARDED

Florida — City of South Jacksonville (Jacksonville, P. O.) laying 1.2 mi. single track street railway using 7 in. 70 lb. high T rail, cypress ties on 2 ft. centres, etc., to Stone & Webster, Inc., 147 Milk St., Boston, Mass.

California—City and San Francisco Co. furnishing and delivering track materials for municipal railway system, to United States Steel Products Co., Rialto Bldg., San Francisco, $48,000. Noted Sept. 13.

Excavation, Drainage, Irrigation

PROPOSED WORK

Calif., Corcoran—Recl. Dist. 825, c/o A. D. Schindler, consult. engr., Balfour Bldg., San Francisco, had plans prepared levees, canals, ditches and a pumping plant. To exceed $3,000,000.

BIDS DESIRED

Calif., Turlock—Oct. 29, by A. Sorensen, secy. Turlock Irrigation Dist., canal enlargements, concrete canal lining and structures, drainage wells, pumps and electrical distribution lines, etc.

CONTRACTS AWARDED

Tex., Ft. Worth—Methodist Hospital, c/o W. H. Matthews, 3220 Ave. G, excavation for 10 story and basement hospital, to Southwell & Addott, First Natl. Bank Bldg., $30,000. Noted under "Buildings" July 12.

B. C., Essondale—Provincial Government, Victoria, 8,300 yd. earth excav. for dyke on Coquitlam River, to A. B. Palmer & Co., 736 Granville St., Vancouver, $25,000.

Streets and Roads

PROPOSED WORK

Vermont—See "Bridges."

Pa., Erie—Plans brick paving 27th and French Sts. $47,000. F. G. Lynch, city engr.

W. Va., Winfield—Pocatalico Dist., Putnam Co., election Nov. 1, to vote on $75,000 bonds for road work. G. H. Davis, Hurricane, engr.

N. C., Bryson City—Comrs. Swain Co. plan to sell $200,000 bonds soon, for road work. S. E. Varner, chn. Bd. Comrs.

N. C., Concord—Bd. Aldermen will sell $88,000 bonds Oct. 25 for street improvements, mostly paving. G. H. Richmond, clk.

Fla., Pahokee—Election Oct. 31, to vote on $25,000 bonds paving, curbing and guttering 1 mi. Main St., 20 ft.; $25,000 bonds paving 1 mi. streets, south and east from city dock, 20 ft. J. H. Cason, town clk.

Louisiana — State Hy. Comn., Baton Rouge, rejected bids opened Sept. 25 constructing Sects. A and B, Winnsboro-Delhi Highway in Franklin Parish. Noted Sept. 13.

Tenn., Athens—McMinn Co. voted $145,000 bonds 18 mi. road from Athens to Monroe Co. line. Noted Sept. 27 under "Tennessee."

Tenn., Crossville—Cumberland Co. plans 6 mi. highway between Isoline and Clark Range. Work will be done under supervision Tennessee Dept. Hy. and Pub. Wks., Nashville.

Tenn., Maryville—Blount Co. voted $50,000 bonds for 8.5 mi. highway between here and Knox Co. line, 16 ft.

Tenn., Nashville — Bd. Pub. Wks. soon takes bids granite block paving Church St. viaduct. Cost to exceed $25,000. W. W. Southgate, city engr.

Ky., Crescent Hill (Louisville P. O.)—River-Payne Development Co., Louisville, plans constructing and paving streets, sidewalks, etc., of Ridge Dale, here. $25,000.

Ky., Whitesburg—Plans to issue $50,000 bonds for paving city streets.

O., Canton—Plans paving 1½ mi. 12th St. N. W., 50 ft. $75,000. Will mature in spring. W. E. Sarver, City Hall, engr.

O., East Liverpool — Plans grading and paving ½ mi. McKinnon Ave., 50 ft. $30,000. J. George, City Hall, engr.

O., Youngstown—Plans widening and paving 1 mi. Watt St., 60 ft. $75,000. W. L. Turner, City Bldg., engr.

Ind., Evansville—Comrs. Vanderburgh Co. having plans prepared and take bids about Feb. 1, hard surfacing 8 mi. Big Cynthia Rd., 7 mi. Petersburgh Rd., 5 mi. Upper Mt. Vernon Rd., and 3 mi. Boonville and New Harmony Rd. Type of material not selected. R. W. Meisinger, co. surv.

Ia., Des Moines—Plans paving and curbing Euclid, Davis and Cornell Aves., 56th and 27th Sts. To exceed $25,000. K. C. Kastberg, city engr.

Kan., Oberlin — Decatur Co. had plans prepared earth roads on Pike Peak Ocean to Ocean Highway, 9.9 mi. Sect. B, 9.06 mi. Sect. A and 1.1 mi. Sect. D, also 18.3 mi. Sect. B, Rock Island Highway. Kansas Eng. Co., Topeka, engrs.

Kan., Troy—Doniphin Co. making plans concrete paving 7.3 mi. Federal Aid Project 169, Sect. C, 18 ft.; 8.01 mi. Federal Aid Project 169, Sect. A, 18 ft. Kansas Eng. Co., Topeka, engrs.

Wyo., Cheyenne—Plans paving 5 blocks North Capitol Ave. and 6 blocks adjacent to State Capitol Building, 40-50 ft. $60,000. J. A. Bruce, Cheyenne, engr.

Mo., Clayton—St. Louis Co. having preliminary plans prepared grading and surfacing, etc., 7 mi. Olive St. Rd., 20 ft., bituminous macadam. $106,681. W. Elbring, Court House, engr.

Mo., Poplar Bluff — Plans grading and concrete surfacing 2,200 ft. various streets. $25,000. E. C. Nickey, city engr.

Streets and Roads **(Continued)**

Mo., St. Louis—E. R. Kinsey, pres. Bd. Pub. Serv. reports tentative 1924 construction programme, incl. streets and alleys, involves expenditure of $2,843,000. Of work planned approximately $715,000 is ready for letting, incl. 129,370 sq.yd. paving and 53,310 cu.yd. grading; projects, aggregating $1,364,000 are pending before Bd. Aldermen, incl. 371,319 sq.yd. paving and 22,365 cu.yd. grading. It is planned to pass most of these ordinances within next few months, so that all work may be let prior to April 1. Balance of 1924 construction is temporarily held up, either for rerouting street car lines, sewers, or by court proceedings. Materials to be used: 188,759 sq.yd. asphalt or bitulithic, 150,147 sq.yd. bitulithic, 190,938 sq.yd. willite, 19,995 sq.yd. brick, 20,500 sq.yd. granite, 18,320 sq.yd. asphaltic concrete, 40,740 sq. yd. Kentucky rock asphalt, 22,285 sq.yd. concrete, etc. H. W. Kiel, mayor.

Ark., Fayetteville—Making preliminary plans grading and concrete paving 11 blocks Center St. and School Street Dists., 30 ft. $25,000. Engineer not selected.

Tex., Belleville—Austin Co. making plans improving 9.2 mi. State Highway 36, 18 ft. $150,000. W. Hill, co. judge.

Tex., Carthage—Panola Co. election Oct. 27, to vote on $225,000 bonds grading and graveling various roads. A. S. Nelson, co. judge. Engineer not selected.

Tex., Crosbyton — Making plans permanent paving Square and business streets. $25,000. R. C. Carter, mayor. Engineer not announced.

Tex., Dallas—Had plans prepared macadam paving Fitzhugh St. at municipal golf course. $25,000. E. A. Kingsley, city engr.

Tex., Glen Rose—Somervell Co. making plans grading and surfacing with gravel and caliche 12.5 mi. State Highway 10-A, 16 ft. $99,600. H. J. Cox, co. engr.

Tex., Hillsboro—Making plans bituminous paving 2nd St. $25,000. M. C. Bullock, Hillsboro, engr.

Tex., Houston—Making plans grading and paving White Oak Bayou Dr., probably gravel with bituminous top. $40,000. J. C. McVea, city engr.

Tex., La Grange—Fayette Co. making plans grading, and gravel surfacing in Road Dist. 7. $100,000. A. Schlafli, co. engr.

Tex., Madisonville—Madison Co. election Oct. 27, to vote on $300,000 bonds, gravel surfacing in Precincts 1, 2 and 4.

Tex., Pearsall—Frio Co. making plans grading and gravel surfacing 14.5 mi. Dilley-Carrizo Springs Highway, 16 ft. $165,000. R. E. Killmer, co. engr.

Okla., Blackwell—Voted bonds and soon take bids grading and paving 14 blocks C, 5th, 7th, Oklahoma, McKinley and Dewey Sts., 30 ft. $119,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Sept. 13.

Washington—Pierce Co. (Tacoma) and King Co. (Seattle) having preliminary surveys made of 24 mi. stretch at summit of Naches Pass Highway, with view to completing road and making shorter route across Cascades.

Calif., Porterville — Had plans prepared improving Belleview Ave., 47,976 sq.ft. 5 in. concrete, 47,976 sq.ft. grading, etc.; Hanrahan, 4th, Valentine and Thurman Sts., etc., 483,680 sq.ft. grading, 483,680 sq.ft. 5 in. concrete, 14,925 lin.ft. concrete curb, etc. F. W. Pease, city engr.

Calif., San Diego—Common Council plans improving Hawthorn St., 102,956 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 68,721 sq.ft. 4 in. concrete, 3,154 sq.ft. concrete sidewalks, etc. F. A. Rhodes, city engr.

Calif., San Francisco — Had plans prepared improving 48th Ave. between Lawton and Santiago Sts., 39,353 cu.yd. fill, 16,800 sq.ft. concrete gutter, 190,344 sq.ft. asphaltic concrete, etc. To exceed $115,000. M. M. O'Shaughnessy, city engr.

Calif., San Luis Obispo—Had plans prepared improving Santa Rosa St. between Monterey and Sycamore Sts., 30,000 sq.ft. 6 in. concrete, 1,000 ft. concrete curb and gutter, 7,000 sq.ft. concrete walks. W. B. Roselip, city engr.

Calif., Santa Ana—Takes bids about Oct. 17, improving portion West 5th St., 172,000 sq.ft. 7 in. concrete with belt finish wearing surface, 2,193 ft. curb, 26,670 sq.ft. regrading and laying 6 in. concrete, etc. W. G. Knox, city engr.

BIDS DESIRED

N. Y., Brooklyn—Oct. 25, by E. Riegelmann, boro pres., Borough Hall, grading, curbing and flagging East 29th and Lake Sts.; paving with permanent asphalt on 6 in. concrete roadways of New York Ave., East 29th and Lake Sts.; paving with bituminous macadam roadway of 67th St. and strip 20 ft. wide of roadway of 73rd St.

N. Y., St. George—Oct. 22, by J. A. Lynch, pres. Richmond Boro, Borough Hall, laying concrete sidewalks on Curtis, Pelton, Richmond, Butler and Nicholas Aves., Gray St. and Amboy Rd., 1st, 2nd, 3rd and 5th Wards; constructing concrete curb, resetting curb, laying vitr. brick gutter and relaying stone block gutter on Elliott Ave., 4th Ward.

N. Y., St. George — Oct. 22, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading, etc. Shaughnessy Lane; concrete repaving Center St., etc.

N. J., Asbury Park — Oct. 23, curbing and sheet asphalt paving 44,500 sq.yd. Cookman Ave. and Kingsley St. N. Rogers, Asbury Park ,engr. Noted Sept. 13.

Fla., West Palm Beach — Oct. 23, by Comrs. Palm Beach Co., treating with liquid asphalt 11.5 mi. road from Palm City south and west (The Loop), $25,000; hard-surfacing, alternate proposals, 8.646 mi. Rds. 1, 2 and 3, Special Road and Bridge Dist. 16, $30,000. C. H. Holstlaw, West Palm Beach, engr. Noted July 26.

Louisiana—Oct. 30, by State Hy. Comn., Baton Rouge, constructing 17.074 mi. Winnefield-Jonesboro Highway, Winn Parish, Federal Aid Project 140; also furnishing gravel and broken stone for surfacing above. J. M. Fourmy, state highway engr.

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Contracts reported by Engineering News-Record

from Mar. 1 to Oct. 1

14 at $5,000,000
174 at 1,000,000
184 at 500,000
310 at 200,000
2,044 at 100,000
341 at 50,000
2,771 at 25,000
129 at 10,000
5,967 avg. $220,000

Total Value:

$1,324,642,000

Michigan—Oct. 26, by State Hy. Dept., Lansing, 250 stas. grading, 91,625 sq.yd. asphalt, concrete or bituminous concrete surfacing on State Trunk Line Rd. 51-2. A and B, 18 ft., Ottawa Co. F. F. Rogers, state comr.

Michigan—Oct. 29, by State Hy. Dept., Lansing, 13,946 cu.yd. earth excav. and 33,978 sq.yd. asphalt, concrete or bituminous concrete surfacing on State Trunk Line Rd. 23-10, Sects. A and B, 20 ft. Branch Co. F. F. Rogers, state comr.

Michigan—Oct. 30, by State Hy. Dept., Lansing, 34,946 cu.yd. earth excav. and 67,284 sq.yd. asphalt, concrete or bituminous concrete surfacing on Federal Aid Project 66, Sect. C, 18 ft., St. Joseph Co. F. F. Rogers, state comr.

Mich., Mackinaw City — See "Msicellaneous."

Minnesota—Nov. 7, by State Hy. Dept., St. Paul, 7 mi. State Project 1-39, Div. B, Federal Aid Project 296, Steele Co., 116,000 cu.yd. excav.; 15 mi. State Project 3-34, Federal Aid Project 303, Houston Co., 300,000 cu.yd. excav., three 30 ft. beam span bridges, one 40 ft. truss and one 50 ft. truss; State Project 5-34, Federal Aid Project 92, Anoka Co., 126,000 cu.yd. concrete paving, 11,700 cu.yd. gravel surfacing; 17 mi. State Project 16-21, Federal Aid Project 314, Cottonwood Co., 338,000 cu.yd. excav. State Highway Dept., St. Paul, engrs.

Kan., Independence — Oct. 25, by Clerk Montgomery Co., grading and bituminous macadam surfacing 5.1 mi. Canery Rd., Federal Aid Project 121, Sect. C, 18 ft. H. K. Hubbard, co. engr. Noted Aug. 16.

South Dakota — Oct. 23, by State Hy. Dept., Pierre, 166,698 cu.yd. gravel surfacing on roads in Brookings, Miner, Grant, McCook, Moody, Beadle, Day and Spink Counties. F. D. Huggins, ch. engr.

Tex., Highland Park (Dallas P. O.)—Taking bids paving Mockingbird Lane from Turtle Creek to Preston St., various types, bituminous considered. Myers & Noyes, Mercantile Bank Bldg., Dallas, engrs.

Tex., Marlin—Nov. 6, by W. S. Hunnicutt, judge Falls Co., grading and gravel surfacing 7.65 mi. State Highway 44, Federal Aid Project 331 B, 16 ft. $92,854. J. P. Wehrung, Lott, co. engr.

Tex., Palo Pinto—Oct. 26, by E. L. Pitts, judge Palo Pinto Co., grading and gravel surfacing 3.37 mi. State Highway 1, Federal Aid Project 383, 18 ft., $60,254, 35,624 sq.yd. bituminous macadam to be let later, $30,865; 15.47 mi. State Highway 1, Federal Aid Project 382, 18 ft., $262,200, bituminous topping to be let later, $140,300. Gravel to be furnished by county. C. W. Courter, co. engr.

Tex., Tyler—Oct. 25, by D. R. Pendleton, judge Smith Co., grading and bridging 6.25 mi. State Highway 15 A, 24 ft. $27,500. D. K. Caldwell, co. engr.

Okla., Blackwell—Oct. 23, by D. Randall, city clk., grading and paving 12 blocks 1st, 5th, Dewey, Oklahoma and C Sts., 1,200 sq.yd. vertical fibre brick, 14,000 sq.yd. concrete, 7,100 lin.ft. curbing and guttering, 7,820 cu.yd. excav. $71,964. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Oct. 18.

Okla., Claremore—Nov. 1, by G. Lane, city clk., grading and paving 6 blocks 3rd and Sequoyah Sts., 8,000 sq.yd. concrete, 2,400 cu.yd. excav. $34,500. V. H. Cochrane, Lynch Bldg., Tulsa, engr.

Colo., Denver—Oct. 24, by Dept. Impvts. and Parks, asphalt paving 37,900 sq.yd. in North Denver Paving Dist. 4. $98,265. A. K. Vickery, city engr.

Calif., Los Angeles—Oct. 22, by Supervs. Los Angeles Co., improving Santa Anita Ave., shaping 8,650 sq.yd. roadbed, removing 7,556 sq.yd. old macadam, 8,650 sq.yd. 6-8 in. concrete, etc. County will furnish cement.

Calif., Newport Beach—Oct. 29, by City Trustees, improving Ocean Blvd., etc., 147,644 sq.ft. 6 in. clay and gravel, 16,680 sq. ft. 5 in., 152,080 sq.ft. 6 in. and 212,354 sq. ft. 8 in. concrete pavement, including grading, 20,200 lin.ft. concrete curb, 101,767 sq. ft. concrete walks, 11,380 lin.ft. 6 in. standard steel pipe, 10,037 lin.ft. 8 in. cement pipe sanitary sewer, etc. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, consult. engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving (1) Empire Blvd. (2) North 7th St. (3) Saratoga Ave. (4) 12th Ave. (5) 79th St. (6) 99th St. (7) 80th St. all asphalt, (8) North 7th St. (9) Union St. both grade 1 granite; grading, curbing and flagging (10) 40th St. (11) 80th and 81st Sts., from Sicilian Asphalt Paving Co., 41 Park Row, New York, (1) $30,320 (2) $33,793 (3) $13,714; Uvalde Asphalt Paving Co., 1 Bway., New York, (4) $22,364; Cranford Co., 52 9th St., (5) $20,920 (7) $8,407; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (6) $7,333; Greico Bros., 172 Russell St., (8) $32,897; J. D. Norton, 20 Sterling Pl., (9) $70,885; W. J. McHale Contg. Co., 1250 Jefferson St., (10) $5,520; F. Persicano, 350 Fulton St., (11) $902. Noted Oct. 4.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Oct. 15, grading, curbing, laying sidewalks, etc., on (1) Alpha Pl. (2) Hayes Ave. (3) Linden St. (4) Linden St. (Bway.) (5) Roosevelt Ave. (6) 49th St. (7) 97th Ave. (8) 117th St., grading, curbing, constructing basins and granite paving (9) Anable Ave., sheet asphalt paving (10) Hayes Ave. (11) Hallett St. (12) 49th St. (13) 97th Ave. (14) 103rd St. (15) 117th St., sheet asphalt repaving (16) 87th St., grading sidewalks space, etc., on (17) Mary St., recurbing, laying sidewalks, etc., on (18) Prospect Ave., permanent paving (19) Woodside Ave., grading, constructing basins and sheet asphalt paving (20) 79th St., from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (1) $9,869 (15) $39,870 (18) $16,607; Kennedy & Smith, 93 Amity St., Flushing, (2) $37,639 (3) $9,799 (5) $14,015 (6) $9,890 (7) $5,635 (8) $20,244; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (4) $32,295 (13) $15,440

Streets and Roads (Continued)

(14) $85,650 (16) $5,510 (19) $43,505 (20) $8,766; Welsh Bros. Contg. Co., 32 Queens St., Astoria, **(9) $49,956**; W. J. Fitzgerald, 547 West 45th St., New York, **(10) $63,315 (11) $22,975 (12) $17,823**; J. J. O'Brien, Jr., William St., Jamaica, **(17) $352.** Noted Oct. 11.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., paving (1) Valentine Ave. (2) Oak Terrace (3) Faile St. (4) East 204th St., sheet asphalt, (5) Sherman Ave. (6) East 178th St., both bituminous concrete, grading, curbing, laying sidewalks, etc., on (7) Montgomery Ave. (8) Purdy St., steps and appurtenances on (9) Transverse Rd., sewer in (10) Grand Blvd. (11) East 158th St., 5 x 5 ft. rein.-con. culvert in (12) Ludlow Ave., from C. D. Beckwith, Inc., 2875 Bway., (1) $16,427 (6) $6,298; J. E. Gaffney, 438 East 91st St., (2) $4,871; Interboro Asphalt Co., 2306 Creston Ave., (3) $13,554 (5) $27,626; Asphalt Constr. Co., 208 Bway., (4) $9,970; Spedero & Turriamo, 3185 East Tremont Ave., (7) $4,730; F. Hanratty, 605 Beach Terrace, (8) $5,134; J. V. Timoney Constr. Co., 220 East 201st St., (9) $6,798; F. Gabrielle, (10) $5,576; M. DelBalso, 660 East 221st St., (11) $1,968 (12) $14,957. Noted Oct. 4.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Oct. 11, sheet asphalt repaving (1) 26th St. (2) East 31st St. (3) East 33rd St. (4) East 49th St. (5) 73rd St. (6) 148th St., widening and granite block repaving (7) Bway. at 35th St., from W. J. Fitzgerald, 547 West 45th St., (1) $38,181; Sicilian Asphalt Paving Co., 41 Park Row, (2) $16,447 (3) $17,934 (4) $10,721; J. E. Gaffney, 438 East 91st St., (5) $15,489 (6) $16,475; Burnside Contg. Co., 270 Burnside Ave., (7) $5,437. Noted Oct. 4.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, Oct. 9, bituminous concrete repaving Sea Ave., from J. W. Donovan, 2205 Richmond Terrace, Port Richmond, $39,910. Noted Oct. 4.

Pa., Reading—For 8,700 sq.yd. rein.-con. road connecting Maiden Creek pumping station with Center Turnpike at Ontelaunee, from D. Maurer & Sons, Carbon Glenside, paving $2.94, cement (lump sum) $8,308, curbing $1.85, total $34,164. Noted Oct. 4.

Maryland—State Rds. Comn., Baltimore, Oct. 9, 0.65 mi. West St., Annapolis, Anne Arundel Co., Contr. AA-35, from P. F. Reddington, 2 East Lexington St., Baltimore, $46,930 for vitr. brick and $51,130 for Mack vitr. brick. Noted Oct. 4.

North Carolina — State Hy. Comn., Raleigh, grading and concrete or asphaltic paving 12.15 mi. State Projects 126 and 187, Edgecombe and Pitt Counties, from Public Service Production Co., Terminal Bldg., Newark, N. J., $389,222, 16.51 mi. State Project 686, Stanley Co., from J. A. Kreis, Holston Bank Bldg., Knoxville, Tenn., $618,985; clearing and grading 10.54 mi. State Project 763, Surry Co., from McDowell Contg. Co., Marion, $77,405, 6.2 mi. State Project 537, Guilford Co., from J. M. Gregory & Co., Pittsboro, $26,470, 11.06 mi. State Project 404, Chatham Co., from W. W. Tuck & Sons, Virgilina, Va., $74,771; concrete or asphaltic paving 7.75 mi. State Project 485 B. Wake Co., from G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $246,449; grading and topsoiling 1.25 mi. State Project 302, Bladen Co., from J. T. Plott, Greensboro, $54,852; waterbound or penetration macadam surfacing 2.31 mi. State Project 352, New Hanover Co., from Highway Eng. Co., Selbyville, Del., $107,360; grading and small rein.-con. bridges and culverts on 8.07 mi. State Project 732, Davie Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $31,807; grading and waterbound macadam paving 2.05 mi. State Projects 990A and 992. Transylvania Co., from Geer & Wilson, Rutherfordton, $89,627. Noted Sept. 27.

Michigan—State Highway Dept., Lansing, 37,332 cu.yd. earth excav. and 51,109 sq.yd. gravel surfacing on State Trunk Line Rd. 40-6, Sect. B, 16 ft., Van Buren Co., from Wilder, Gould & Cross, 877 11th St., Grand Rapids, $60,579.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, Amherst curb, from Detroit Asphalt Paving Co., 20 McGraw Bldg., 13,200 sq.yd. Covington Dr. $66,021, 4,400 sq.yd. Mackie St., $24,570, 1,400 sq.yd. Rochester Ave., $7,797, 5,800 sq.yd. Wisconsin Ave. $29,996; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., 5,800 sq.yd. Nevada Ave. $30,836, 2,000 sq.yd. Pilgrim Ave. $11,401.

Colo., Denver — Asphalt paving ¾ mi. Washington Park Paving Dist. 2, from Western Paving & Constr. Co., International Trust Bldg., $49,911, engrs. est. $62,056; 21 blocks Capitol Hill Paving Dist. 2, from Allied Contractors, Inc., 803 Douglas St., Omaha, Neb., $46,750; engrs. est. $55,000.

Colo., Denver—Concrete paving 12 blocks Alley Paving Dist. 105, from C. C. Madsen Constr. Co., Engineers Bldg., Denver, $21,090, engrs. est. $25,165; 12 blocks Alley Paving Dist. 106, 12 blocks Alley Paving Dist. 107 and 12 blocks Alley Paving Dist. 108, from W. F. Pigg & Son, Engineers Bldg., $17,388, $17,440 and $19,971 respectively; engrs. ests. $20,682, $20,833 and $25,872 respectively.

Wash., Seattle — City, Oct. 5, paving Denny Way et al. and 5th Ave. from D. H. Traphagen, Walker Bldg., 7,730 sq.yd. 8 in. concrete $2.10 per sq.yd., 3,250 ft. asphaltic concrete curbing $0.65, 2,900 cu.yd. earth excav. $0.80, total $35,509. Engrs. est. $35,963.

Calif., Auburn — Grading and paving 205,000 sq.ft. streets connecting with main highways, from Galbraith & Janes, P. O. Box 539, Napa, concrete $55,952; J. A. Costello, 1083 Shotwell St., San Francisco, asphalt $53,992. Noted July 26.

Calif., Los Angeles — Los Angeles Co., from G. H. Oswald, 366 East 58th St., improving east and west portion of Pacific Blvd., 45,103 sq.ft. walks $0.20, 5,792 ft. curb $0.55, 13,319 sq.ft. gutter $0.28, 9,764 sq.yd. concrete $2.14, 42,000 sq.ft. oil and screenings $0.04, etc. Noted Sept. 6.

Calif., Santa Cruz—Santa Cruz Co., from Granite Constr. Co., Watsonville, oil macadam paving coast road in Seaside Rd. Dist., $22,989, road between Capitola and Sequel, $7,398. Noted Oct. 11.

CONTRACTS AWARDED

Vermont — Dept. Highways, Montpelier, 2.02 mi. Rutland-Ludlow Rd., in Claredon, Federal Aid Project 45, to L. Longhi & Bro., Inc., 43 Center St., Torrington, Conn., $28,514 for uncrushed gravel and $34,378 crushed gravel. Noted Sept. 27.

Massachusetts—State Hy. Dept., Boston, concrete paving 16,114 ft. highway, 18 and 20 ft., through Sheffield, to Perini & Sons, Inc., Ashland, $165,457; bituminous macadam paving 5,000 ft. 18 and 20 ft., in Milford, to Milford Constr. Co., Milford, $29,822; bituminous macadam and concrete paving 17,441 ft., 18 ft., in Attleboro and North Attelboro, to T. J. Quinn, Ashton, R. I., and Attleboro, $197,984; bituminous macadam paving 2,500 ft., 18 ft. in Northboro, to C. E. Horne, Millbury, $25,662. Noted Aug. 30 and Sept. 13.

Massachusetts—Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, grading, surfacing, etc. Old Colony Parkway and Quincy Shore Reservation, in Quincy and Boston, to J. H. Fannon, 28 Hinckley St., Somerville, $181,150.

Mass., Boston—Paving Ashland St. from Hyde Park Ave to Wilmot St., West Roxbury, 9,000 sq.yd. bitulithic pavement, to J. McCourt Co., 46 Wait St., Brookline, $27,957.

Mass., Medford — Paving 20,500 sq.yd. Winthrop St., bituminous macadam, to J. A. Gaffey, 19 Curtis St., $48,000.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, Oct. 11, grading, sheet asphalt paving, etc., main roadway of Eastern Parkway from Albany to Ralph Aves., here, from M. J. O'Hara, 1228 Park Ave., New York, $147,081. Noted Oct. 4.

N. Y., Brooklyn — Park Bd., Municipal Bldg., New York, grading, curbing, sheet asphalt paving, etc., main roadway of Eastern Parkway from Bedford to Albany Aves., here, to Cleveland Trinidad Paving Co., Flushing, $138,339. Noted Oct. 11.

N. Y., Schenectady—Resurfacing Crane, Schenectady and Hulett Sts., to W. P. McDonald Constr. Co., 17 West 42nd St., New York, $16,599, $23,355 and $29,185 respectively. Engrs. est. $25,000, $35,000 and $40,000 respectively.

N. J., Belvidere—Warren Co. constructing Sect. 1, Phillipsburg-Belvidere Rd., to C. T. Kavanagh, 32nd St. and Prospect Ave., Bayonne, 96.8% engrs. est. ($182,554). Noted Sept. 20.

Pa., Pittston — Paving Main St., to J. Newcombe, 154 Carroll St.; Swallow and Market Sts., to Reese & O'Brien, Nanticoke; Mill and Searle Sts., to Boyle Bros., Bennett Bldg., Wilkes-Barre; Tompkins and Oak Sts., to B. G. Coon Constr. Co., 274 Union St., Luzerne, prices range from $5.45 to $5.70 per sq.yd. Work involves 34,000 sq.yd.

Maryland—State Rds. Comn., Baltimore, 2 mi. concrete shoulders, Contr. 18-A, Alleghany Co., to J. D. Claiborne Co., Garrett Bldg., Baltimore, $26,400; 1 mi. concrete shoulders, Contr. 19-A, Alleghany Co., to S. T. Brotemarkle, Cumberland, $11,264.

W. Va., Huntington—Concrete paving 3rd Ave. from 3rd to 8th Sts., to Harrison & Dean, Old Walton Bldg., $27,900.

W. Va., Parkersburg — Concrete paving 16th, Liberty and Andrew Sts., to S. A. Palmer & Co., Marietta, O., $64,952; asphalt paving Market St. from 8th to 13th Sts., to Ebersbach Co., Pomeroy, O., $36,049; concrete paving 17th, Rail, Dickel, 23rd, Fairview, 25th, Latrobe and Laird Sts., to Kennedy Constr. Co., Parkersburg, $81,962.

Miss., Aberdeen—Grading and concrete surfacing 18.968 mi. Federal Aid Project 154, to Mills Eng. & Constr. Co., Tupelo, $2.25 per sq.yd. Engrs. est. $600,000. Noted Sept. 13.

Kentucky—State Hy. Dept., Frankfort, constructing and surfacing 6.05 mi. Mt. Sterling-Owingsville Rd., 18 ft., concrete, Federal Aid Project 98, State Project 47, Sect. 1, Montgomery Co., and 6.48 mi. Mt. Sterling-Owingsville Rd., 18 ft., State Project 47, Sect. A, Bath Co., to Gradison Constr. Co., 701 First Natl. Bank Bldg., Cincinnati, O., $220,190 and $296,763 respectively; 14.42 mi. Owen-Carrolton Rd., 18 ft., waterbound macadam, State Project 59, Sect. A, Owen Co., to Muir & Welch, Nicholasville, $265,943; 14 mi. Lookout Mountain Air Line Rd., 24 to 28 ft., State Project 22, Sect. D, McCreary Co., 13 mi. Pineville-Harlin Rd., 24 to 28 ft., State Project 6, Sect. A, Bell Co. and constructing 0.333 mi. approaches to bridge over Livingston Creek, Marion-Princeton Rd., State Project 10, Sect. A, Crittenden and Caldwell Counties, to J. S. Lusk Constr. Co., Knoxville, Tenn., $165,895, $227,484 and $4,585 respectively; 5.067 mi. Whitesburg-Hazard Rd., 24 to 28 ft., State Project 4, Sect. A, Letcher Co., to Codell Constr. Co., Winchester, $139,484. Noted Oct. 4.

O., Cleveland — Curbing, guttering and asphalt paving 10,500 sq.yd. Crestline and Continental Aves., to Baldwin Bros., 4500 Euclid Ave., $70,333. Noted Oct. 11.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 1,404 ft. South Wood Ave., 26 ft., 884 ft. Allen Ave., 26 ft. and 800 ft. Ohlen Ave., 24 ft., all asphalt, to Franklin Asphalt Paving Co., 209 South High St., $21,044, $14,081 and $12,863 respectively; 1,840 ft. Pearl St., 20 ft., and 392 ft. alley west of Cypress Ave., 16 ft., both concrete, to R. J. Dienst, 480 South 5th St., $11,397 and $2,062 respectively; 552 ft. alley west of Pennsylvania Ave., 20 ft., concrete, to Columbus Contg. Co., 1471 West Broad St., $3,636; 584 ft. 2nd alley north of Main St., 290 ft. 1st alley north of Main St., 556 ft. alley west of Stoddard Ave., all foregoing 16 ft., concrete, and 404 ft. Rich St., 26 ft., asphalt, to A. G. Pugh, 401 Commerce Bldg., $1,554, $1,875, $2,863 and $4,315 respectively; 517 ft. alley north of Gates St., 16 ft., concrete, to Yale Constr. Co., 146 Yale Ave., $9,847; 2,485 ft. Buttles Ave., 34 ft., and 266 ft. Findlay Ave., both asphalt, to B. F. Patterson, 1214 Neil Ave., $28,665 and $3,614 respectively; 248 ft. 8 in. sanitary sewer in alley west of Taylor Ave., to B. Canini, 1105 Shawnee Ave., $1,069. Noted Sept. 27.

O., Euclid—Improving Republic Ave., 6,300 lin.ft. stone curb and 4 in. tile drain gutter, 73,200 ft. 6 in. concrete base, 8,800 sq.yd. asphaltic concrete, to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $46,217.

O., Lakewood — Curbing, guttering and asphalt paving 7 streets, to Highway Constr. Co., c/o Pavers Exch., Cleveland, $147,025; four streets, to W. E. McHugh, West 73rd St. and Wheeling & Lake Erie R.R., Cleveland, $57,492.

O., Rocky River—Asphaltic concrete paving Lakeview Rd., Linde St., Riverview and Mitchell Aves., to Ohio Eng. Co., Lorain, $103,137.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 10-30, Iosco Co., to Hill & Belknap, East Tawas, 9,338 cu.yd. earth excav. $0.50, 140.3 cu.yd. concrete $30, 254.9 cu.yd. concrete $20, 46,292 sq.yd. one course gravel $0.93, etc., total $57,535; grading and surfacing 0.568 mi. Sect. A and grading 0.648 mi. Sect. B, State Trunk Line Rd., 10-34, Oakland Co., to Oakland Co. Rd. Com., Pontiac, $26,531. Noted Oct. 11.

Kan., Topeka—Shawnee Co. grading and surfacing 0.593 mi. Capitol Highway, Federal Aid Project 106, Sect. B, 18 ft., to Widell Constr. Co., Mankato, Minn., $25,826. Noted Sept. 13.

S. D., Madison — Rein.-con. paving 3 blocks 1st St. S. and 4,975 sq.yd. 1st. St. S.W. and South Egan Ave., to Booth & Olson, 120 Virginia St., Sioux City, Ia.

Streets and Roads (Continued)

$2.29 per sq.yd. and $13,848 respectively. Noted Aug. 23.

Mo., St. Louis—For 9,350 sq.yd. concrete paving on alleys, 1 alley to Blackburn & Crean, Syndicate Trust Bldg., $5,730, 6 alleys to Skrainka Constr. Co., Security Bldg., $21,660; grading and paving 3,950 sq.yd. Gamble St., to Granite Bituminous Paving Co., Ry. Exch. Bldg., $42,530.

Ark., Monticello—For 6 mi. concrete sidewalks, curbing and guttering, to Phoenix Constr. Co., Ft. Smith.

Tex., Concord—Montgomery Co. grading and gravel surfacing 7.92 mi. State Highway 19, 16 ft., to Womack Constr. Co., Sherman, $28,637. Engrs. est. $32,000. Noted Oct. 4.

Tex., Conroe—Montgomery Co., grading and gravel surfacing, etc., 22.13 mi. State Highway 19, Federal Aid Project 370, 18 ft., to Womack Constr. Co., Sherman, $153,193. Noted Oct. 4.

Tex., Highland Park (Dallas P. O.)—Asphaltic concrete paving, etc., Mt. Vernon, Key, Walker, Patomac and Lexington Sts., to Fuller Constr. Co., Slaughter Bldg., Dallas, $30,000.

Tex., Mt. Pleasant — Titus Co., grading and gravel surfacing 1.91 mi. State Highway 35, 16 ft., to J. D. George and C. C. Kerr, Lufkin, $19,417; 3,332 cu.yd. gravel to be furnished by county $8,332. Engrs. est. $30,523 incl. engineering and contingencies. Noted Oct. 4.

Tex., Mt. Pleasant—Titus Co. grading, gravel surfacing and bridging 4.13 mi. State Highway 1 A, Federal Aid Project 372, 208 cu.yd. concrete, 34,139 cu.yd. roadway and 20,446 cu.yd. borrow excav., 18,334 lb. reinforcing, etc., to J. D. George and C. C. Kerr, Lufkin, $34,088; 7,360 cu.yd. gravel furnished by county $18,917. Engrs. est. $58,500.

Tex., Wichita Falls—Brick paving also removing wood block paving on Indiana St. from 7th to 10th Sts., to Plains Paving Co., Staley Bldg., $25,000.

Okla., Okmulgee—Resurfacing 18 blocks Cherokee Ave., etc., 13,000 sq.yd. vertical fibre brick, 63,000 sq.yd. asphalt, to Tibbits & Pleasant, Daniels Bldg., Tulsa, $241,904.

Okla., Sayre—Grading and paving 5 blocks Bway., 2nd and Cedar Sts., 7,200 sq.yd. concrete, 6,750 lin.ft. curbing, 2,600 cu.yd. excav., to Pearce Constr. Co., Edmond, $30,365.

Okla., Tulsa—Tulsa Co., 1⅝ mi. road, 18 ft., 7 in. concrete, to R. A. Tanner, 1244 North Main St., $2.28 yd.

Nevada—State Hy. Dept., Carson City, grading, building culverts, selected material surfacing and building concrete and steel overhead railroad crossing between Keystone and East City limits of Ely, Projects 25 and 70, White Pine 2-C-3, to Nevada Contg. Co., Fallon, $92,387. Noted Oct. 4.

Ariz., Phoenix—Paving Culver St. from Central Ave. to 12th St., Dist. 21-5, 1½ in. bitulithic on 2½ in. asphaltic concrete, to Phoenix-Tempe Stone Co., Home Builders Bldg., $67,248. Noted Sept. 27.

Wash., Tacoma — Paving Bway. from South 9th to Jefferson Aves., 2 in. warrenite, to Albertson, Cornell Bros. & Walsh, South 12th and Pacific Sts., $31,500. Engrs. est. $32,193.

California—State Hy. Comn., Sacramento, gravel surfacing 12.7 mi. road from point 3 mi. east of Chester and 3 mi. east of Westwood, Plumas and Lassen Counties, to T. H. and M. C. Polk, Chico, $63,322. Noted Oct. 4.

Calif., Fresno — Fresno Co. improving Route 22, Sect. B, to California Constr. Co., 58 2nd St., San Francisco, 7,191 cu.yd. excav. $1.10 per cu.yd., 455,343 sq.ft. 5 in. asphaltic concrete $0.206, total $100,700.

Calif., Los Angeles—Grading, paving and building storm and sanitary sewers in Childs Ave., to W. D. McCray, Amer. Bank Bldg., $458,060. Noted Oct. 4.

Calif., Newport Beach—Improving Santa Ana Ave., to Wells & Bressler, Santa Ana, 10,020 yd. grading $0.04, 23,238 ft. 6 in. concrete $0.29, 75,722 ft. 8 in. concrete $0.366, 1,529 ft. curb $0.75, etc., total $50,395.

Calif., Riverside — Improving Magnolia Ave., to G. M. Pearson, San Dimas, 241,916 sq.ft. macadam at $0.16 per sq.ft., etc.

Calif., San Diego — Bd. Supervs. San Diego Co., paving with 5 in. concrete 3,361 lin.ft. National Ave. connecting National City and Chula Vista, 18 ft., to California Constr. Co., Union Bldg., $32,564; 4.59 mi. highway on Coronado Strand, to Griffith Co., 25 14th St., $99,900. Noted Sept. 27.

Calif., Torrance — Improving Martina Ave., to H. G. Ferraud, Detwiler Bldg., Los Angeles, 78,000 sq.ft. grading $0.04, 78,000 sq.ft. 1¼ in. willite on 3 in. asphaltic concrete $0.215, etc.

Que., Montreal—To Quinlan, Robertson & Janin, Ltd., 50 Notre Dame St. W., paving Sherbrooke St. from De Lorimier to Wurtele Sts., $110,892 and Sherbrooke St. extending to limits of Maisonneuve, $145,365; to Sicily Asphaltum Co., 60 St. Viateur St., paving De Lorimier St., $38,000, 9th Ave., $25,025, Cartier St. $11,520, Chabot St. $15,562; to B. Brault, 2855 Rosemont Blvd., paving Bordeaux St. $26,254; to Rendon, Corlier & Co., 3560 Christopher Colomb St., sidewalk on De Gaspe St.; to A. Thezand, sewers in Belmore St. $18,892.

Industrial Works

PROPOSED WORK

Mass., Lawrence — Curran & Joyce Co., 435 Common St., having plans prepared by Ashton, Huntress & Alter, 447 Essex St., 2 and 4 story, 180 x 200 ft. factory, brick and concrete, Beacon Ave. $150,000.

Mass., Taunton—Weir Stove Co. plans 1 story, 50 x 100 ft. foundry and machine shop, concrete or brick. To exceed $50,000.

Conn., Middleton—Middleton Silk Co. had plans prepared 2 story, 60 x 230 ft., rein.-con. factory, plain foundation, North St. $70,000. Private plans.

Conn., Norwalk—C. Mintz, 92 Washington St., South Norwalk, plans 2 story, brick and steel garage, plain foundation, West Ave. $40,000. H. W. Mather, Norwalk, archt.

Conn., South Norwalk—S. Roodner, 127 Washington St., plans 2½ story, 60 x 200 ft., rein.-con., brick and steel factory, plain foundation, Main St. $150,000. R. H. North, 91 Washington St., archt.

N. Y., Binghamton—Cutler Ice Co. takes bids in 2 weeks for (1st unit) probably 30 ton plant, 310-340 Front St. $60,000-$75,000. J. H. Neff, Canton, O., archt. and engr. Noted Sept. 13.

N. Y., Buffalo—Russel-Miller Milling Co., c/o Amer. Elevator & Warehouse Co., foot of Childs St., having preliminary plans prepared mill, Childs St. and Buffalo River. To exceed $500,000. Engineers and architects names withheld.

N. Y., Medford Station—Great Eastern Sugar Co. plans power plant and mill. $1,500,000. K. Grunwald, in charge.

N. Y., Jewettville—Jewettville Clay Products Co. plans rebuilding 3 story plant, recently destroyed by fire. $60,000-$75,000. Engineer and architect not selected.

N. J., Jersey City—Jersey Journal having plans prepared by J. T. Rowland, 100 Sip Ave., 12 story, 50 x 100 ft., brick, steel and rein.-con. plant and office building, plain foundation, Newkirk St. $1,000,000. F. Sutton, 140 Cedar St., New York City, engr.

N. J., Newark — Intercoastal Lumber Terminal Co., c/o G. Quayle, Grand Central Terminal, New York City, plans plant and substation, Port Newark Terminal, here. $2,000,000.

N. C., Winston-Salem—Blue Ridge Park Mica Co. having plans prepared mica plant. S. C. Park, secy.-treas.

Fla., Jacksonville—Ford Motor Co., Highland Park, Detroit, Mich., plans distributing plant and assembling factory, here. $250,000.

Fla., South Jacksonville (Jacksonville, P. O.)—Leesburg Fibre Pulp & Paper Co., Leesburg, plans paper mill, 50 x 300 ft. main mill with adjoining smaller structures for sorting department, beater rooms, rotary cooking department, pulp tankage department, machine shops, power house and miscellaneous structures, here. $500,000. G. D. Leach, secy. and treas.

Fla., Stuart—Florida Food Products Inc., P. O. Box B 3, plans new plant, Initial works incl. machinery, to cost in excess of $90,000. C. J. Earley, treas.

La., Leesville—See "Waterworks."

Tenn., Nashville—Turner, Day & Woolworth Handle Co., Inc., 1404 Adams St., plans rein.-con. factory, to replace one destroyed by fire. $100,000.

Ky., Louisville—J. P. Dant, 1718 Windsor Pl., plans 2 story, 70 x 110 ft., brick and steel garage, 901-905 Bway. $40,000. Architect not selected.

O., Cleveland—Billings-Chapin Co., 1663 East 40th St., having plans prepared by Perry & Webster Inc., engrs., 31 Union Sq., W., New York City, and Lockwood, Greene & Co., engrs., Hanna Bldg., Cleveland, 2 story and basement, 40 x 60 ft., and 40 x 100 ft., rein.-con. and brick factory, East 40th St., along tracks New York Central R.R. $80,000.

O., Columbus—Shaffer Roofing Co., 272 West Broad St., having sketches made fireproof factory, Broad and Gift Sts. $40,000.

O., Conneaut — Graham Clay Products Co., 518 Guardian Bldg., Cleveland, plans plant, here. $100,000 incl. equipment.

Ill., Joliet—S & H Motor Co., 203 Hacker Ave., having preliminary plans prepared by Downie, Inc., Higgins Bldg., 3 story, 100 x 150 ft., rein.-con. and brick garage and auto sales building, Cass Ave. $65,000. T. T. Shaner, 7 South Dearborn St., Chicago, engr.

Wis., Astico—Wuetrich Bros., Douglastown, and F. B. Christians, Columbus, plan 2 story, brick and timber or brick and concrete factory, plain foundation, here. $40,000. Engineer and architect not selected.

Wis., Horicon — The Davies Shoe Mfg. Co. plans 2 story and basement factory unit, brick, rein.-con. and steel, plain foundation. $50,000. Engineer and architect not selected.

Wis., Madison—D. Bilsie Co., 213 East Washington Ave. plans 2 story, 66 x 120 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Private plans.

Wis., Madison—Madison Medical Assn., c/o R. S. Ingersoll, Lakeside St., having plans prepared 2 story, 45 x 100 ft., boiler house, laundry and garage, brick, rein.-con. and steel, plain foundation. $50,000. Noted Oct. 4.

Wis., Milwaukee—Koehring Co., 31st St. and Concordia Ave., having plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 1 story, 122 x 360 ft., brick and steel factory, plain foundation.

Wis., Milwaukee—Stewart-Harner Products Service Station, 582 Jefferson St., plans 1 story, 120 x 128 ft. sales and service building, brick and concrete, plain foundation, Van Buren and Martin Sts. $100,000. Engineer and architect not selected.

Wis., Plymouth — J. E. Curtiss having plans prepared by E. A. Juul, Security Bldg., Sheboygan, 2 story, 60 x 90 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. Noted Sept. 27.

Wis., Spring Green—Spring Green Canning Co., c/o W. P. McDonnell, plans 2 story, brick, rein.-con. and steel, factory, plain foundation. $50,000. Engineer and architect not selected.

Wis., Valders—Nestles Food Co. plans to rebuild 3 story plant, brick and concrete, or brick and timber, recently destroyed by fire. $45,000. Engineer and architect not selected.

Minn., St. Paul—Amer. Radiator Co., 688 Hampden Ave., plans additional manufacturing unit. $250,000. Engineer and architect not announced.

Minn., St. Paul—C. & C. Cut Glass Co., 727 South 4th St., Minneapolis, plans 2 story, 60 x 200 ft., brick and concrete factory, Hamden and Bradford Aves., here. $75,000.

Kan., Pittsburgh—Pittsburgh Monument & Marble Wks. having preliminary plans prepared plant, Everett Ave. $100,000. P. W. White, pres. Private plans.

Kan., Tecumseh—Illinois Light & Power Corp., Peoria, Ill., plans 15,000 kw. steam power plant, brick and rein.-con., here. $2,225,000. Private plans.

Kan., West Wichita—Bushong Candy Co. had preliminary plans prepared 2 story and basement, brick and rein.-con. factory, Oak and Douglas Sts. $50,000. Engineer and architect not selected.

Mo., Kansas City—Ford Motor Co., Highland Park, Detroit, Mich., had plans prepared by A. Kahn, Marquette Bldg., Detroit, Mich., remodeling 2nd and 3rd floor of present plant, also constructing 1 story, 220 x 880 ft., rein.-con., brick and steel addition, here.

Mo. North Kansas City—Dean Rubber Co., Chestnut and 13th Sts., Kansas City, plans 2 story plant, 16th and Charlotte Sts., here. $45,000.

Tex., Brownsville—Gulf Coast Lines making plans roundhouse and shops, concrete and brick. $100,000. C. S. Kirkpatrick, Houston, ch. engr.

Tex., Dallas — A. L. Black, c/o A. A. Brown, archt., Gaston Bldg., had plans prepared 2 story, 50 x 165 ft., brick, stone and concrete warehouse, plain foundation, 2615 Elm St. $50,000.

Tex., Dallas—City, c/o L. B. Cook, Health Dept., plans abattoir. $50,000. E. A. Kingsley, city engr. Architect not selected.

Tex., El Paso—Ampco Iron Co., Springfield, Mo., having preliminary plans prepared 1 story, rein.-con. and brick foundry. $40,000-$50,000. Private plans.

Tex., Houston — Standard Sanitary Mfg. Co., Preston and Smith Sts., having plans prepared by A. C. Finn, Bankers' Life Bldg., 4 story, 125 x 125 ft., brick, stone and concrete factory, plain foundation, McKinney St. and Bway., to exceed $75,000.

Tex., Magnolia Park (Houston P. O.)—Plans election latter part of month to vote on $300,000 bonds for gas plant. H. Culpepper, city engr.

Industrial Works (Continued)

Tex., Ranger — H. H. Howard, Cedar Grove, La., plans glass factory, here. Cost to exceed $75,000. Engineer and architect not announced.

Tex., San Antonio—San Antonio Express Publishing Co. and San Antonio Evening News, having plans prepared by W. E. Simpson Co., engrs., 418 N. B. C. Bldg., and H. S. Green, archt., 218 Alamo N. B. Bldg., 10 story, 90 x 160 ft., rein.-con., brick and stone, plain foundation, Market and Navarro Sts. $500,000.

Ore., Portland — Willamette Iron and Steel Wks., foot of Front St. N., plans addition to plant. $100,000.

Calif., Alhambra — Wadolene Refining Corp., Lane Mortgage Bldg., Los Angeles, plans first unit of refinery, will exceed $40,000.

Calif., Fresno—United Warehouse Co., H and Mono Sts., had plans prepared by Coates & Traver, Rowell Bldg., 2 story, brick warehouse, San Benito and O Sts. $60,000. Haas Bros., 3rd and Channel Sts., San Francisco, lessee.

Calif., Los Angeles—Weber Show Case Co., 316 South Los Angeles St., plans factory, probably brick and steel, Slauson Ave. and South Park. To exceed $250,000.

Calif., Los Angeles—Western Wholesale Drug Co., 200 South Los Angeles St., having plans prepared by Milwaukee Building Co., 315 Wright Callendar Bldg., 6 story and basement, 100 x 150 ft., wholesale house, rein.-con., San Pedro St. $200,000.

Calif., Oakland—Rose Baking Co., c/o W. A. Doctor, archt., 410 15th St., having plans prepared 2 story and basement baking plant, rein.-con., 22nd and Myrtle Sts. $45,000.

Calif., San Francisco — Pacific Gas & Electric Co., 445 Sutter St., had plans prepared 1 story, generator building, $30,000 and 1 story boiler house. $10,000, both steel, Humboldt St. near Maryland St. Private plans.

Calif., Santa Barbara — Southern California Edison Co., 306 West 3rd St., Los Angeles, plans transformer station, Montecito St., here. To exceed $75,000. Private plans.

Calif., San Bernardino—Atchison, Topeka & Santa Fe Ry., Kerchkoff Bldg., Los Angeles, plans $1,500,000 construction program at this point. Plans completed for concrete and steel shop buildings, first unit. Private plans.

Calif., Woodland — Union Ice Co., 354 Pine St., San Francisco, plans ice plant, 30 tons capacity, Lincoln and 6th Sts., here. $40,000.

BIDS DESIRED

N. J., Elizabeth—Oct. 26, by Union Co. Park Comn., 286 North Broad St., garage, storehouse, shed, machine and carpentry shops, within Elizabeth-Roselle Park tract. C. G. Poggi, 275 Morris Ave., archt.; adv. E. N.-R. Oct. 18.

N. C., Fayetteville—See "Buildings."

O., Painesville—M. H. Carmody taking bids 2 story, brick, steel and concrete garage. $50,000. H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, archts.

Ill., Chicago—S. S. Joy, archt., 2001 West Pershing Rd., receiving bids 3 story 81 x 119 ft. factory, fireproof, 1137-43 West Jackson St., for Blue Valley Creamery Co., 700 South Clinton St. $160,000. Noted Sept. 20.

Ill., Chicago — Rawson & Eisenberg, archts., 5 North La Salle St., receiving bids 1 story, 102 x 125 ft. garage, fireproof, South Central Park Ave. near 12th St. $40,000. Owners name withheld.

Wis., Delavan—H. C. Hengels, archt., 445 Milwaukee St., Milwaukee, taking bids and opens same about Oct. 22, 2 story and basement, 40 x 66 ft. and 20 x 32 ft. brick and concrete garage, plain foundation, for A. H. Schumacher. $50,000.

Wis., Kohler—Kohler Co., c/o A. Treick, supt. of construction, taking bids 1 story, 67 x 210 ft., enameling shop, brick, rein.-con. and steel, plain foundation. $60,000. Private plans. Noted Oct. 11.

Wis., Milwaukee—Leenhouts & Guthrie, archts., 424 Jefferson St., taking bids 1 or 4 story, 120 x 120 ft., brick and concrete garage, Van Buren St., for Luick Ice Cream Co., 183 Ogden Ave. Noted Sept. 13. Basement built.

Wis., Milwaukee — F. Luber, archt., c/o Milwaukee Electric Ry. & Light Co., Pub Service Bldg., taking bids 1 story, 60 x 100 ft., brick and concrete garage, plain foundation, Cold Spring Ave. $40,000.

Wis., Milwaukee—H. J. Esser, archt., 82 Wisconsin St., taking bids 1 story, 110 x 142 ft., brick and timber factory, plain foundation, Humboldt Ave., for Schalmer Products Co., c/o Architect. $60,000.

Calif., Monrovia — Ruoff & Munson, archts., Story Bldg., Los Angeles, receiving bids 1 story, 50 x 150 ft. garage and salesrooms, brick and concrete, here, for G. N. Turner, c/o architects.

CONTRACTS AWARDED

Mass., Springfield — New York, New Haven & Hartford R.R., 244 Main St., 3 story, 40 x 50 ft., brick and steel, freight house, plain foundation, Water St., to H. Wales Lines, 134 State St., Meriden, $50,000.

Mass., Wollaston (Boston P. O.)—Boston Gear Wks., 256 Franklin St., Boston, 2 story, 85 x 100 ft. concrete addition to plant, Haywood St., here to Canter Constr. Co., 6 Beacon St., Boston.

Conn., Glenbrook—Norma Co. of America, Anable Ave., Long Island City, N. Y., 1 story, 100 x 400 ft., brick and steel factory, plain foundation, here, to Post & McCord, 101 Park Ave., New York City. $70,000. Noted July 26.

Conn., Stamford — Conde Nast Publications, Inc., 19 West 44th St., New York City, 60 x 120 ft., 66 x 100 ft. and 50 x 70 ft. buildings, all 1 story, and 4 story, 60 x 200 ft. building, near here, to Turner Constr. Co., 244 Madison Ave., New York City. Work will be done under direction of W. Higginson, archt., 15 Park Row, New York City.

N. Y., Astoria—Brecher Building Corp., c/o A. C. Kunzi, archt. and engr., 779 Manhattan Ave., Brooklyn, will build rein.-con., brick and steel factory, plain foundation, Washington Ave. and 5th St., here, by day labor. $415,000.

N. Y., Brooklyn—Baltire Powers Realty Co., c/o Magnuson & Kleinert, archts. and engrs., 52 Vanderbilt Ave., will build 1 story, rein.-con., brick and steel garage, plain foundation, 3rd Ave., by day labor. $60,000.

N. Y., Buffalo—J. A. Cramer, 1010 Main St., 3 story and basement, 51 x 110 ft., brick, steel and concrete sales room and service station addition, to Turner Constr. Co., 11 Goodell St.

N. Y., New York—Goodman Bakery Co., 138 East 17th St., rein.-con. and steel bakery addition, plain foundation, 134 East 17th St., to Fleischman Constr. Co., 531 7th Ave. Archts. est. $150,000.

N. Y. Palmyra—J. F. Strobel, archt., E and B Bldg., Rochester, 1 story and basement, 100 x 200 ft., rein.-con., brick and steel warehouse addition, here, to Curran Mason Co., 271 Central Ave., Rochester, for Garlock Packing Co. $155,000. Noted Sept. 13.

N. J., Clifton—Pennsylvania Textile Mills, Inc., 3 story, 60 x 300 ft. rein.-con. mill, to Turner Constr. Co., 244 Madison Ave., New York City. Work will be done under direction of Clark, MacMullin & Riley, archts., 101 Park Ave., New York City.

N. J., Kearny (Arlington P. O.)—Pub. Serv. Corp., Terminal Bldg., Newark, power station, initial capacity about 200,000 hp., ultimate capacity 400,000 hp., here. to Pub. Serv. Production Corp., Terminal Bldg., Newark, about $20,000,000. Noted April 26.

Pa., Altoona — H. M. and H. H. Fleck, Central Trust Bldg., 3 story and basement, 100 x 120 ft. garage, brick, concrete and steel, 13th Ave., to C. M. Singiser, 1717 21st Ave., cost plus basis. Archts. est. $130,000. Owners will purchase materials.

Pa., Phila. — J. F. Shellenberger Co., Front and Race Sts., factory 107-115 Race St., to W. R. Daugherty, 1612 Sansom St., $160,000.

Pa., Phila.—G. W. Smith Co., Inc., 49th and Botanic Sts., 1 story, 212 x 352 ft. rein.-con., brick and steel plant, 51st and Botanic Sts., to J. R. Gill Constr. Co., Otis Bldg., $200,000.

S. C., Graniteville—Graniteville Mfg. Co., 1 story and basement, 124 x 371 ft. dyeing and finishing plant, rein.-con., to Lawrence Constr. Co., Lamar Bldg., Augusta, Ga.

S. C., Greenville—Steel-Heddle Mfg. Co., Greenville, and 21st and Allegheny Sts., Phila., Pa., 2 story and basement, 120 x 160 ft. plant, rein.-con and brick, to W. M. Welch, Greenville. Noted Sept. 13.

Ala., Lanett—Lanett Bleachery & Dye Wks., extensions to plant, 34,500 sq.ft. floor space, to Gallivan Building Co., Arlington Ave., Greenville, S. C.

O., Cleveland—Acorn Refinery Co., 8001 Franklin Ave., 4 story and basement, 65 x 110 ft., brick and rein.-con. factory addition, to M. B. Parker Constr. Co., Union Bldg. Archts. est. $75,000.

O., Cleveland—Frankel Chevrolet Co., c/o P. Frankel, Discount Bldg., remodeling and constructing 1 story, 25 x 106 ft., brick and steel garage, 1250 East 105th St., to P. Kitzer, Engineers Bldg. Archts. est. $40,000.

O., Cleveland — Gabriel Mfg. Co., 1407 East 40th St., 2 story and basement, 80 x 150 ft., brick and steel factory addition, to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $60,000. Noted Sept. 20.

O., Cleveland — White Motor Co., 842 East 79th St., 1 story, 90 x 216 ft., brick and concrete garage, 787 East 73rd St., to Ardern & Gleason, 8423 Brookline Ave. Archts. est. $80,000. Noted Oct. 11.

Mich., Lansing—Franklin Lansing Co., 2 story and basement, 80 x 180 ft. brick and steel print shop, Hazel St., to Christman Constr. Co., Porter Apts.

Mich., Lansing—Lansing Storage Co., 410 North Washington St., 5 story, 50 x 100 ft. steel and terra cotta storage warehouse, South Washington St., to Reniger Constr. Co., 336½ Michigan St. Engrs. est. $125,000.

Mich., Lansing — Lorenz Bros., 3 story (ultimately 5 story) 83 x 216 ft. rein.-con. and brick garage, North Grand St., to Christman Constr. Co., Porter Apts.

Ill., Ottawa—National Plate Glass Co., General Motors Bldg., Detroit, Mich., general contract for additions to plant, here, to Jobst & Son, Lehman Bldg., Peoria. Cost incl. machinery to exceed $5,000,000.

Wis., Antigo—A. L. Kommers, Main St., will build 1 and 2 story, 32 x 70 x 80 x 90 ft., brick, tile and concrete warehouse, plain foundation, by day labor. $42,000. E. Schoepke, Antigo, archt.

Wis., Appleton—Fox River Tractor Co. will build 2 story and basement, 50 x 75 ft., brick, rein.-con. and steel factory, plain foundation, by day labor. $40,000. Private plans.

Wis., Cedar Grove—Cedar Shoe Mfg. Co. will build 2 story, 32 x 100 ft., brick and timber factory, plain foundation, by day labor. $45,000. Dick & Bauer, 811 State St., Milwaukee, archts.

Wis., Cobb — O. F. Guderian and H. Terens, Markesan, 2 story, 60 x 95 ft. factory and warehouse, brick, rein.-con. and steel, plain foundation, to H. J. Selmer Co., McCartney Natl. Bank Bldg., Green Bay. Archts. est. $50,000. Noted Sept. 13.

Wis., Kenosha—Kenosha Fruit Co., 452 Pearl St., 1 story and basement, 60 x 132 ft., brick and concrete warehouse, plain foundation, to Bondgard & Christenson, 1135 Mound Ave., Racine. Archts. est. $50,000.

Wis., Kenosha — Nicholson Transit Co., 2654 East Atwater, Detroit, Mich., 1 story, 64 x 170 ft., steel garage, plain foundation, to Truscon Steel Co., 216 West Water St., Milwaukee. Archts. est. $45,000.

Wis., La Crosse—Mashak & Schwalbe, 326 South 5th St., 1 story, 60 x 152 ft., brick and concrete garage, plain foundation, South 5th St., to F. R. Schwalbe & Sons, 414 Rivoli Bldg., Milwaukee. Est. cost $45,000.

Wis., Madison—Madison Nash. Co., c/o A. R. Dillon, mgr., 155 East Wilson St., will build 2 story and basement, 66 x 122 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, by day labor. $60,000. Claude & Starck, Badger Annex, archts. Noted Aug. 16.

Wis., Mayville — Improvement Corp. of Mayville, 1 story, 50 x 120 ft., brick and timber factory, plain foundation, to Rohde-Kapelle Co., Kekoskee. Archts. est. $40,000.

Wis., Milwaukee—Chicago, North Shore & Milwaukee Ry., Highwood, Ill., 1 story, 24 x 190 ft. and 22 x 88 ft., brick, tile and concrete warehouse, plain foundation, Sycamore St., here, to W. J. Scown Building Co., 36 West Randolph St., Chicago. Archts. est. $50,000.

Wis., Milwaukee—Concrete Specialty Mfg. Co., Humboldt Ave., 1 story, 112 x 130 ft., concrete factory plain foundation, Holton St., to P. Hirt, 1717 Vliet St. Archts. est. $40,000. Noted Aug. 31.

Wis., Milwaukee — H. Weisner, 1433 Prairie St., 1 story and basement, 64 x 145 ft., brick and concrete garage, plain foundation, to Coddington Eng. Corp., 290 3rd St. Archts. est. $40,000.

Wis., Milwaukee — West Side Mfg. Co., 3100 Walnut St., 2 story, 60 x 120 ft., brick and timber warehouse, plain foundation, Walnut St., to W. J. Dallmann, 3513 Cherry St. Archts. est. $40,000.

Wis., Plymouth — Plymouth Phonograph Co., 2 story, 58 x 160 ft. and 40 x 62 ft. factory, to P. Welling, Plymouth. Archts. est. $45,000. Noted Sept. 20.

Wis., Racine—Wisconsin Incubator Co., 18th and Halborn Sts., 1 story and basement 50 x 100 ft., brick and concrete warehouse, plain foundation, to W. Fergus and Olson Bros., 904 Belmont Ave. Archts. est. $40,000.

Minn., Litchfield—City, enlarging power plant and waterworks system; new power house, to Anderson Bros., Litchfield, $29,245; rein.-con. chimney, to J. G. Robertson, 2543 University Ave., St. Paul, $5,085; 500 kva. steam-engine-driven generating unit, switchboard, etc., also boiler plant and piping, incl. 250 hp. water tube boiler, stoker, to J. G. Robertson, 2542 University Ave., St. Paul, $66,137; water softening plant for boiler feed, 24,000 gal. daily capacity, to Wayne Pump & Tank Co., 1311 Hennepin Ave., Minneapolis, $2,280; wells and piping to J. F. Coyle, Sauk Center, $5,250. Noted Sept. 20.

Industrial Works (Continued)

Mo., St. Louis—Electric Storage Battery Co. of Philadelphia, Boatmen's Bank Bldg., 1 story and basement, 129 x 245 ft., rein.-con. and brick factory, Vandeventer St., to Wimmer Constr. Co., Victoria Bldg. Archts. est. $85,000. Noted Sept. 13.

Tex., Dallas — W. E. Easterwood, 716 Lowell St., 1 story, 110 x 150 ft., brick, concrete and steel garage, plain foundation, Ervay and Hickory Sts., to Inge Constr. Co., Hawkins St., $40,000.

Calif., Los Angeles—Crescent Creamery Co., 237 Winston Ave., 2 story milk plant, 1 story boiler house and 2 story ice cream plant, all rein.-con., Slauson Ave., to R. E. Milsap, Marsh-Strong Bldg., $112,000. Noted Sept. 20.

Calif., Los Angeles—D. E. Foster, 1259 Maryland St., 2 story, rein.-con. garage, Maryland St., to G. G. Stuart, Lissner Bldg., to exceed $40,000. Noted Oct. 11.

Calif., Oakland—Post-Enquirer, 16th St. and San Pablo Ave., 1 story plant addition, concrete, Franklin St., to F. T. Kennedy, 434 9th St., $42,000.

Calif., San Pedro—Union Pacific Railway Co., 610 South Main St., Los Angeles, 3 stall rein.-con. and steel roundhouse, here, to Unit Constr. Co., Phelan Bldg., San Francisco.

Buildings

PROPOSED WORK

Me., Sanford—Hotel—G. A. Byers, c/o F. Goodwillie, archt. and engr., 56 West 45th St., New York City, having sketches made 5 story, 100 x 150 ft., brick, steel and stone, plain foundation, here.

Mass., Boston—Hospital—City having plans prepared by Ritchie, Parsons & Taylor, 15 Ashburton Pl., new buildings and additions to old ones, Harrison Ave. $3,000,000. Noted June 21.

Mass., Stoneham—High School—School Committee having plans prepared by Ritchie, Parsons & Taylor, 15 Ashburton Place, Boston, 3 story and basement, brick and rein.-con., plain foundation. $275,000.

Conn., Hartford—Bank—Mechanics Savings Bank, Main St., having plans prepared by B. W. Morris, 101 Park Ave., New York City, 50 x 70 ft., brick, limestone and steel, plain foundation, Pearl St. $300,000. Noted Feb. 22.

Conn., Hartford—Church—Second Church of Christ plans 2½ story, Lafayette St. $150,000. R. C. Northam, chn. Bd. Dir. I. A. Allen, Jr., Inc., 100 Farmington Ave., archt.

Conn., Meriden—Schools—Bd. Educ. having plans prepared by W. T. Arnold, 34½ West Main St., 3 story, known as North End Primary, $150,000; 3 story addition to West Grammar School, $150,000; addition to King St. School, $120,000; all foregoing brick, plain foundations. Noted Sept. 27.

Conn., Simsbury—Library—Simsbury Library Assn. plans 3 story, steel and stone, plain foundation. $150,000. Smith & Bassette, 36 Pearl St., Hartford, archts.

Conn., Wallingford — Hospital — Masonic Charity Foundation plans 3 story, brick, plain foundation. $150,000. F. A. Verplanck, pres. Architect not selected.

N. Y., Albany—Hotel—C. J. Holding, Hotel Wellington, having plans prepared 12 story, 60 x 80 ft., rein.-con., brick and steel addition, plain foundation, State St. $275,000. Engineer and architect not selected.

N. Y., Buffalo—School—Bd. Educ., 1400 Telephone Bldg., plans P. S. 76, Elmwood Ave. $550,000. Associated Buffalo Architects, 234 Delaware Ave., archts.

N. Y., Maspeth—Theatre—I. Levin, c/o H. J. Nurick, archt. and engr., 44 Court St., Brooklyn, soon takes bids brick, steel and stone, plain foundation, Grand and 1st Aves., here. $150,000.

N. Y., New York—Apartment—V. C. Farrar, archt. and engr., 4 East 39th St., preparing plans 6 story, brick, steel and stone, plain foundation, West 171st St. $300,000. Owners name withheld.

N. Y., New York—Apartments—Walt-Marcy Building Corp., 1235 Vyse Ave., plans two 5½ story, brick, steel and stone, plain foundations, 171st St. and Wythe Ave. $450,000 each.

N. Y., New York—Dormitory—Barnard College and Columbia University, Morningside Heights, soon takes bids 8 story, brick, steel and stone, plain foundation, 116th St. and Claremont Ave. $600,000. McKim, Mead & White, 101 Park Ave., archts.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon takes bids 5 story, brick, steel and stone, plain foun-

ROAD WORK—KENTUCKY

Following are lowest three bids opened by State Highway Comn., Frankfort, Sept. 26, for improving 11.509 mi. Pineville-Harlan Rd., Bell Co., (A) J. S. Lusk, Knoxville, Tenn. (awarded contract); (B) Codell Constr. Co., Winchester; (C) F. P. Henderson Constr. Co., Harlan. The unit bids were as follows:

	A	B	C
33 acres clearing and grubbing	$75.00	$85.00	$80.00
203 trees and stumps	5.00	3.50	4.00
77,009 cu.yd. earth excavation	.38	.50	.50
58,818 cu.yd. solid rock excavation	.98	1.10	1.10
43,262 cu.yd. loose rock excavation	.80	.75	.65
27,512 cu.yd. borrow excavation	.38	.50	.55
2,570 cu.yd. structural excavation	1.00	1.00	1.00
527 cu.yd. dry earth excavation	1.00	1.00	1.25
174 cu.yd. wet earth excavation	3.00	4.50	2.50
174 cu.yd. dry rock excavation	3.00	4.00	2.00
59 cu.yd. wet rock excavation	3.00	4.50	4.00
64,098 sq.yd overhaul	.02	.05	.02
931 cu.yd. riprap	2.50	4.00	4.00
5,537 cu.yd. cement rubble	10.00	11.00	13.00
483 cu.yd. class A concrete	24.00	23.00	29.00
18 cu.yd. class B concrete	24.00	22.00	22.00
9 cu.yd. class D concrete	80.00	75.00	40.00
70,421 lb. reinforcement	.08	.08	.08
1,958 ft. 18 in. vitrified pipe		....	....
1,268 ft. 24 in. vitrified pipe		....	....
319 cu.yd. encasing concrete		....	....
1,958 ft. 18 in. concrete pipe	2.75	3.25	3.30
1,268 ft. 24 in. concrete pipe	4.00	5.00	4.75
Extended totals concrete pipe	$227,566	$256,092	$264,002

SUBWAY—BROOKLYN, N. Y.

Following are lowest three bids opened by Transit Comn., 49 Lafayette St., New York, Oct. 2, for extension of 4th Ave. Subway to 95th St., Route 11-B, Sect. 3, (A) T. A. Gillespie Co., 7 Dey St., New York (awarded contract); (B) Godwin Constr. Co., 130 East 144th St., New York; (C) Oakdale Contg. Co., Inc., 93 Amity St., Flushing. The unit bids were as follows:

	A	B	C
175,000 cu.yd. earth excavation	$4.68	$5.00	$5.80
200 cu.yd. earth excavation for sewers, etc.	3.50	5.05	6.00
Maintaining No. 8724-4th Ave. (lump sum)	2,000.00	2,500.00	1,500.00
Maintaining No. 9002-4-4th Ave. (lump sum)	2,500.00	3,000.00	2,300.00
Maintaining No. 9102-4-4th Ave. (lump sum)	2,500.00	6,000.00	2,250.00
Maintaining No. 9306-4th Ave. (lump sum)	2,000.00	2,000.00	1,500.00
Maintaining No. 9312-4th Ave. (lump sum)	2,000.00	1,000.00	1,500.00
Maintaining No. 9318-4th Ave. (lump sum)	1,200.00	1,000.00	1,500.00
Maintaining Public Library 4th Ave. and 95th St. (lump sum)	1,000.00	1,000.00	1,500.00
Maintaining No. 9502-4th Ave. (lump sum)	1,500.00	2,700.00	1,500.00
10 furnishing and setting trees	80.00	25.00	10.00
20,000 cu.yd. concrete masonry, in place	15.80	14.00	14.00
45,000 sq.ft. rubbing to smooth finish surface of concrete	.08	.05	.05
2,000 cu.yd. protective concrete masonry in place	18.05	14.00	14.00
225 cu.yd. brick masonry in place	25.00	35.00	35.00
Removing of bulkhead existing subway 4th Ave. and 87th St. (lump sum)	500.00	1,000.00	600.00
700 cu.yd. hollow terra cotta brick or tile masonry, in place	18.00	30.00	30.00
50 lin.ft. 4½ in. x 13 in. terra cotta flue lining, in place	1.00	2.00	1.40
100 bbl. grout of portland cement	6.00	5.00	6.00
100 cu.yd. broken stone or gravel	4.00	5.00	4.50
3,700 sq.yd. waterproofing, one ply	.50	.50	1.00
19,000 sq.yd. waterproofing, three ply	2.00	1.50	1.60
100 sq.yd. waterproofing six ply	3.00	3.00	3.00
100 sq.yd. waterproofing dry ply	.25	.25	.50
550 cu.yd. waterproofing brick laid in asphalt mastic	42.00	40.00	40.00
300 lin.ft. cast iron pipe and fittings, 3 in. in place	1.85	1.00	1.00
1,250 lin.ft. cast iron pipe and fittings, 6 in. in place	2.15	2.00	1.60
3,000 lin.ft. cast iron pipe and fittings, 8 in. in place	2.85	2.50	2.20
70,000 duct ft. tunnel ducts in place	.20	.20	.25
460 duct ft. fibre ducts in place	.56	.50	.70
1,156 ton riveted steel, painted and erected	109.00	110.00	100.00
2 ton steel ladders, stairs, railings, etc.	300.00	200.00	200.00
1,800 ton steel beams and shapes, painted and erected	105.30	110.00	100.00
80 ton steel rods and bars, built in concrete	100.00	120.00	90.00
4 ton miscellaneous iron castings in place	150.00	200.00	150.00
10 ton miscellaneous iron furnishings for sewers, manholes, etc.	150.00	200.00	150.00
200 lb. special wire forms, in place	.20	.50	....
1,800 lin.ft. 1¾-in. oak or ash hand rail, in place	.30	.50	.50
3,800 sq.ft. steel gratings for ventilation, in place	3.30	2.00	2.50
1,000 sq.ft. vault lights, in place	2.25	2.00	2.50
1,600 sq.yd. sidewalks restored	1.00	2.00	3.00
14,000 sq.yd. roadway restored asphalt	4.25	4.00	3.00
100 sq.yd. roadway restored granite block	5.00	3.00	3.00
1,100 lin.ft. new bluestone curb in place	1.50	1.50	1.70
400 sq.yd. upper 3-in. concrete walls	1.50	2.00	2.00
5,600 lin.ft. ¾-in. wrought steel electric conduits	.20	.30	.30
50 lin.ft. 1½-in. wrought steel electric conduits	.50	.60	1.00
2,400 lin.ft. 1-in. wrought steel electric conduits	.30	.40	.50
430 cast-iron outlet boxes, in place	1.00	1.50	1.00
10 cast-iron pull boxes in place	3.00	5.00	3.00
100 lin.ft. cast-iron pipe and fittings, 6 in. in place	1.50	2.50	2.00
100 lin.ft. cast-iron pipe and fittings, 3 in. in place	1.00	1.75	1.50
50 lin.ft. cast-iron pipe and fittings, 4 in. in place	1.20	2.00	2.00
50 lin.ft. cast-iron pipe and fittings, 8 in. in place	2.00	3.00	3.40
1,200 lin.ft. sewer pipe 12-in. vitrified	3.00	3.00	2.00
260 lin.ft. sewer pipe 15 in. vitrified	4.00	4.00	4.00
350 lin.ft. sewer pipe 18 in. vitrified	5.00	5.00	5.00
300 lin.ft. sewer pipe 24 in. vitrified	7.00	6.00	6.00
2 ton sewer pipe cast-iron (straight pipe)	100.00	200.00	150.00
1 ton sewer pipe cast-iron (special castings)	150.00	200.00	150.00
450 lin.ft. concrete sewers 3 ft. 6 in. x 2 ft. 4 in.	15.00	12.00	12.00
50 lin.ft. water pipe 6 in.	1.50	2.00	1.50
200 lin.ft. water pipe 8 in.	2.50	3.00	2.15
10 service connections for water pipes	25.00	40.00	35.00
50 lin.ft. cast-iron gas pipe 4 in.	1.00	1.50	1.00
50 lin.ft. cast-iron gas pipe 6 in.	1.50	2.50	1.50
10 service connections for gas pipes	25.00	50.00	30.00
3 ton new cast-iron hub and spigot pipe, straight	65.00	150.00	150.00
2 ton new cast-iron hub and spigot pipe, special castings	175.00	200.00	150.00
100 duct ft. electric ducts and conduits	.50	1.00	1.00
5 service connections for electric ducts	50.00	50.00	35.00
100 duct ft. fibre ducts and conduits	.50	1.00	1.00
Extended totals	$1,725,884	$1,745,730	$1,841,092

Buildings (Continued)

dation, 119 East 124th St. $175,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs.

N. J., Jersey City—Office—See "Industrial Works."

N. J., Paterson—High School—Bd. Educ. having plans prepared by W. T. Fanning, 5 Colt St., 3 story, 250 x 300 ft., brick, steel and stone, plain foundation, Park Ave. and Market St. $1,000,000. F. Sutton, 140 Cedar St., New York City, engr.

Md., Baltimore—Animal House and Aviary—Druid Hill Park Comrs. having plans prepared by T. W. Pietsch, American Bldg., 1 story, 65 x 184 ft., brick, plain foundation, at Druid Hill. $150,000. J. C. Boyd, pres.

Md., Baltimore—Business—G. R. Debnam, Jr., Union Trust Bldg., plans 15-20 story, 75 x 184 ft., brick, Charles and Chase Sts. $1,000,000. Engineer and architect not selected.

D. C., Wash.—Apartment—G. T. Santmyer, archt., 1415 K St., N. W., preparing plans apartment. $250,000. Owners name withheld.

D. C., Wash.—Apartment—Hotel—Stern & Tomlinson, archts., Continental Trust Bldg., preparing plans apartment-hotel. $450,000. Owners name withheld.

D. C., Wash.—Theater and Store—Sonneman & Justeman, Phillips Bldg., preparing plans theatre and store building. $375,000. Owners name withheld.

Tenn., Memphis—Apartment—S. Mitchell, T. R. Klyce and R. B. Spencer, Goodwyn Institute, had plans prepared by latter for 5 story brick and stone, on lot 100 x 100 ft., Poplar and Auburndale Sts. $150,000.

Ky., Lebanon—Church—W. A. Hopkins, pastor of Presbyterian Church, plans church. $150,000. Architect not selected.

Ky., Lexington—Church—St. Peters Catholic Church plans church, Barr St. $200,000. W. T. Punch, pastor. Architect not selected.

Ky., Louisville—Apartment—A. Bass, 201 West Jefferson St., having plans prepared by W. E. Gore, c/o owner, 3 story, 100 x 159 ft., Eastern Parkway and Cherokee Rd. $150,000.

O., Cleveland—Apartments—E. C. Burkhart, 428 Natl. City Bldg., having plans prepared by H. Swigert, 18210 Olmypia Rd., two 2 story and basement, 40 x 106 ft., and 65 x 112 ft, brick, West 80th St. and Detroit Ave. $175,000.

O., Cleveland—Church, School and Parish House—St. Timothys Roman Catholic Church, c/o A. Mulligan, 1017 Superior Ave., having plans prepared by E. T. P. Graham, archt., 171 Newbury St., Boston, Mass., and F. S. Fish, consult. archt., Tenbush Bldg., Cleveland, 2 story brick, steel and concrete, East 131st St. $300,000.

O., Cornersburg (Canfield P. O.)—Hospital—Mahoning Co. (Youngstown), plans election in November to vote on $200,000 bonds 2 story, rein.-con., brick and steel, Craver Farm, near here. Stanley & Scheible, 1301 Wick Bldg., Youngstown, archts.

O., Girard—High School—Bd. Educ. takes bids within 1 or 2 weeks, brick and steel high school. $300,000. Miller & Son, Dollar Bank Bldg., Youngstown, archts.

O., Lakewood (Cleveland P. O.)—Apartment—M. Margolin, c/o J. Laronge Co., Williamson Bldg., Cleveland, plans 119 x 200 ft., Lake and Cook Sts., here. $200,000. Engineer and architect not announced.

Ill., Aurora—Bank and Office—Old Second National Bank having plans prepared by G. G. Elmslee, 1225 Michigan Ave., Chicago, 3 story, 50 x 200 ft., brick, stone and steel, River St., here. $150,000.

Ill., Chicago—Apartment—J. Hocke, archt., 7602 Chappel Ave., preparing plans 3 story, fireproof, South Side. $300,000. Owner's name withheld.

Ill., Chicago—Apartment—M. Schultz, c/o Rawson & Eisenberg, archts., 5 North La Salle St., plans 3 story, fireproof, 69th and Sangamon Sts. $150,000.

Ill., Chicago—Theatre—H. Schoenstadt & Sons, 1118 South Michigan Ave., plans 3 story, fireproof, Archer and Robey Sts. $500,000. Newhouse & Bernham, 4623 Drexel Blvd., archts.

Ill., Evanston—Store and Office—Main St. Building Corp. c/o J. A. Nyden, archt., 190 North State St., Chicago, plans 2 story, 104 x 180 ft., fireproof, Main and Hinman Sts., here. $250,000.

Wis., Madison—Church—First Church of Christ, c/o W. D. Hiestand, chn., 423 Wisconsin Ave., having plans prepared by F. Riley, Conklin Bldg., 2 story and basement, 60 x 150 ft., brick, rein.-con. and steel, plain foundation. Noted Sept. 27.

Wis., Milwaukee—Apartments—J. Hunholz, 2310 Vliet St., plans two 8 story and basement, 50 x 108 ft., brick, tile and concrete, plain foundation, Marshall and Mason Sts. $425,000 each. Private plans.

Ia., Dakotah—Court House—Humboldt Co. defeated $225,000 bonds for court house. Noted Aug. 9.

Kan., Pittsburg—Office—Local Syndicate, c/o C. Denison, Chamber of Commerce, having preliminary plans prepared 8 story, brick, concrete, tile and stone. $350,000. Engineer and architect not selected.

Kan., Salina—School—Election Oct. 23 to vote on $225,000 bonds for school and additions. Engineer and architect not selected.

Mont., Great Falls—Home—Montana Children's Home Finding Society, c/o J. Wuerthner, chn. building comn., 2717 1st Ave., N., plans brick, tile and stone, probably 3 story. $150,000.

Mo., Kansas City—Office—J. A. Bruening, 317 Dwight Bldg., having plans prepared by McKecknie & Trask, 719 Gloyd Bldg., 12 story and basement, 142 x 145 ft., rein.-con., brick and terra cotta, 10th and Wyandotte Sts. $1,500,000. W. W. Huff, 56 Mutual Bldg., mechanical engr.

Tex., Beaumont—Schools—Bd. Educ. plans to vote on $150,000 bond issue for schools. W. L. Fulweiler, city engr.

Tex., Brownwood—Gymnasium, Library, etc.—Howard Paine College plans various buildings, brick, on Campus. $340,000. Engineer and architect not selected.

Tex., Dallas—Church—Central Christian Church had plans prepared by C. C. Bulger, 4020 Swiss St., 2 story, brick, Masten and Patterson Sts. $150,000. G. Frank, pastor.

Tex., Dallas—Office and Bank—W. Davis, et al., 1311½ Main St., having plans prepared by C. D. Hill & Co., Central Bank Bldg., 18-20 story and basement, 97 x 100 ft., brick, steel, concrete and terra cotta, 1305 Main St. $1,000,000.

Tex., Ft. Worth—Club—Moslah Temple Shrine, c/o H. T Pangburn, 4th and Houston Sts., plans club, Lake and Henderson Sts. $1,000,000. Engineer and architect not selected.

Tex., Lubbock—College—Texas Technical College, c/o A. G. Carter, Ft. Worth, having plans prepared by Sanguinet, Staat & Herdick, First Natl. Bank, Ft. Worth, miscellaneous buildings. $800,000. Noted Aug. 30.

Okla., Fairfax—Temple and Store—Grayhouse Lodge 124, soon lets contract 2 story, 60 x 140 ft., brick, plain foundation, Main and Elm Sts. $150,000.

Okla., Norman—Commons—Oklahoma University, c/o D. S. Graham, having plans prepared by Storey & Vahlberg, archts., Norman, 1 story, 100 x 275 ft., brick and stone, concrete foundation, on campus. $350,000.

Calif., Berkeley—Church—Bd. Missions of Methodist Episcopal Church, Nashville, Tenn., had plans prepared by J. A. Baylor, Nashville, Tenn., 4 story and basement, rein.-con., Durant St., here. $250,000.

Calif., Los Angeles—Loft—Western Wholesale Drug Co., 200 South Los Angeles St., having plans prepared by Milwaukee Building Co., Wright-Callendar Bldg., 6 story and basement, rein.-con., San Pedro St. $175,000.

Calif., Los Angeles—Loft and Store—Lloyd & Casler, 409 Junior Orpheum Bldg., having plans prepared 3 story and basement, 100 x 125 ft., rein.-con., Pico and Wall Sts. $150,000. Private plans.

Calif., Richmond—Lodge—Masonic Hall Assn., c/o J. T. Narbett, archt., 910 Macdonald Ave., having plans prepared 2 and 3 story and basement, rein.-con., hollow tile, brick and terra cotta. $150,000.

Calif., Sacramento—Depot—Southern Pacific R.R. Co., 65 Market St., San Francisco, having plans prepared by Bliss & Faville, Balboa Bldg., San Francisco, for passenger depot, here. $1,000,000 or more.

Calif., Sacramento—Store and Apartment—B. S. Berry, 20th Ave. near Cabrillo St., San Francisco, plans 6 story and basement, rein.-con., 12th and L Sts., here. $150,000 or more. Engineer and architect not selected.

Calif., Sacramento—Terminal—San Francisco capitalists organizing building corporation and having preliminary plans prepared by Wollett & Lamb, Mull Bldg., 2 story, on block bounded by 11th, 12th, H and I Sts. $350,000. Foregoing is first unit of project, will erect 2 large wings, later.

Calif., San Francisco—School—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., had plans prepared by Shea & Shea, Chronicle Bldg., 3 story, brick, Church and 22nd Sts. $150,000.

Calif., Stockton—Office and Store—Commercial & Savings Bank Bldg., Main and Sutter Sts., having plans prepared by Bakewell & Brown, 251 Kearny St., San Francisco, 10 story and basement, fireproof, Sutter St. near Main St. $300,000. C. H. Snyder, 251 Kearny St., San Francisco, engr.

Que., Montreal—Schools—Catholic School Comn., 87 St. Catherine St., soon takes bids for school in St. Henry Dist., $150,000; Ste. Cunegonde Dist., $200,000; 2 in Ville Emard Dist., $150,000 and $160,000; Notre Dame de Grace Dist. $160,000. R. Delcourt, accountant.

B. C., Point Grey—Schools—Election Oct. 20 to vote on $330,000 bonds for rein.-con. and brick schools. Engineer and architect not selected.

B. C., Vancouver—Library—University of British Columbia, soon takes bids for concrete and granite. $350,000. Sharp & Thompson, London Bldg., archts. Noted Aug. 23.

BIDS DESIRED

Pa., Burnham—Bank—See "Miscellaneous."

Pa., Drexel Hill—Bank—Oct. 19, by Bunting & Shrigley, archts., 603 Chestnut St., Phila., 2 story and basement, 63 x 108 ft., rein.-con., steel, limestone and granite, Garret Rd. and Runnymeade St., here, for Lansdoon Trust Co. $150,000.

Pa., Swarthmore—Dormitory—Oct. 22, by F. Aydelotte, pres. Swarthmore College, c/o W. T. Karcher and L. Smith, archts., 34 South 17th St., Phila., 3 story and basement 30 x 240 ft., steel, stone and terra cotta. $200,000.

Pa., Tamaqua—Theatre and Hotel—Oct. 24, by Higgins Hotel Corp., 4 story and basement, 54 x 150 ft., rein.-con., brick and steel, Broad and Pine Sts., here. $300,000. W. H. Lee, 1505 Race St., Phila., archt.

N. C., Fayetteville—College—Oct. 23 by Normal & Industrial School dormitory, industrial building, residences for president and vice-president, and laundry, on campus. $250,000. H. L. Cook, chn. building com. J. A. Salter, 102 West Hargett St., Raleigh, archt.

O., Cleveland—Apartment—W. A. Kolar, 3172 Fairfax Rd., taking bids and opens same about Oct. 24, 3 story and basement, 101 x 104 ft., brick, 2709 East 116th St. $150,000. L. R. Walker, and J. L. Mauer, 1900 Euclid Bldg., archts.

Ill., Chicago—Apartment—Leichenko & Esser, archts., 38 South Dearborn St., receiving bids 3 story, 100 x 175 ft., fireproof, Madison and La Vergne Sts., for L. J. Ahern, c/o architects. $300,000.

Ill., Chicago—Apartment—Dubin & Eisenberg, archts., 14 West Washington St., receiving bids 3 story and basement, 207 x 298 ft., fireproof, Woodlawn Ave. near Hyde Park Blvd., for Silverman & Kerman, c/o architects. $700,000. Noted Sept. 6.

Ill., Chicago—Apartment—B. L. Steif, archt., 64 West Randolph St., receiving bids 3 story and basement, 100 x 123 ft., fireproof, 640-46 Buckingham Pl. $170,000. Owner's name withheld.

Ill., Chicago—Apartment—A. Strandin, 4443 North Rockwell St., receiving bids 3 story, 100 x 130 ft., fireproof, Winchester Ave. near Sunnyside Ave. $150,000. E. Benson & Son, 5153 North Clark St., archt.

Ill., Chicago—Apartment—Swanson & House, 7046 Stony Island Ave., receiving bids 3 story, 119 x 166 ft. fireproof, 72nd St. near Constance St. $175,000. Kocher & Larson, 6250 South Halsted St., archts.

Ill., Chicago—Temple—C. Hatzfeld, archt., 7 South Dearborn St., receiving bids 3 story, 92 x 116 ft., fireproof, Addison and Reta Sts., for Wrights Grove Masonic Temple Assn., c/o archt. $300,000. Noted Nov. 17, 1921.

Ill., Evanston—Apartment—H. Rabenov, 3658 West Polk St., Chicago, receiving bids 3 story and basement, 100 x 185 ft., fireproof, 629 Forrest Ave., here. $200,000. R. F. France, 155 North Clark St., Chicago, archt.

Ill., Riverside—Apartment—H. H. Meinke & Bro., 1219 South Grove Ave., Oak Park, receiving bids 3 story, 125 x 150 ft., fireproof, here. $150,000. T. R. Bishop, 35 South Dearborn St., Chicago, archt.

Wis., Appleton—High School—School Bd. and Perkins, Fellows & Hamilton, archts.

Buildings (Continued)

814 Tower Court, Chicago, taking bids two 2 story, brick, tile and concrete, plain foundation. $475,000.

Mo., St. Louis—Primate House—Nov. 1, by Bd. Pub. Serv., 305 City Hall, 110 x 129 ft., brick and rein.-con., for Zoological Bd., Forest Park. $178,000.

Tex., Dallas—Arts—W. C. Everett and associates, 416 East 12th St., taking bids fine arts museum and auditorium, rein.-con. and brick, plain foundation, Commerce St. $750,000. R. H. Hunt & Co., Southwestern Life Bldg., archts.

Tex., Dallas — Church — East Dallas Christian Church, c/o B. F. Erwin, 4327 Tuttle St., taking new bids remodeling and constructing 2 story and basement, 83 x 170 ft., brick and stone addition, Peak and Junius Sts. $200,000. C. D. Hill & Co., Central State Bank Bldg., archts. Noted July 26.

Calif., Riverside — Hospital — M. Hunt, archt., Hibernian Bldg., Los Angeles, receiving bids and opens same about Nov. 1, 1 story, 250 x 350 ft. hollow concrete, for Riverside Community Hospital Assn. Noted June 7.

Calif., Sacramento—Theatre—L. Starks, archt., Ochsner Bldg., receiving bids for rein.-con. and steel, K St. near 10th St., for Paramount Theatre Corp. $350,000. Noted July 12.

BIDS RECEIVED

N. Y., Buffalo—School—Bd. Educ., 1400 Telephone Bldg., Oct. 3, general contract altering and building 2 story and basement, rein.-con. and brick addition to P. S. 42, Grant St., from C. H. Everitt, 295 Auburn Ave., $412,850; heating from C. Bernhardt, 95 Hoyt St., $83,250; plumbing from J. J. Bresnahan, 462 Elk St., $24,868. Noted Sept. 20.

N. Y., New York—Arsenal—Park Bd., Municipal Bldg., Oct. 11, general contract altering arsenal in Central Park near 5th Ave. opposite East 64th St., from J. L. Burke Corp., 51 West 66th St., $159,495. Noted Oct. 4.

Wash., Bremerton—Navy Yard Y.M.C.A., 5 story and basement, 101 x 120 ft. steel and concrete building incl. 50 x 80 ft. gymnasium and 20 x 60 ft. swimming pool, Front and Washington Aves., here, from Parker & Wood, Arcade Bldg., Seattle, $148,000.

CONTRACTS AWARDED

Me., Orono—Arts and Science—University of Maine, 3 story, 68 x 130 ft., brick, semi-fireproof, to O. Nelson Co., 194 Exchange St., Bangor, $170,000.

Mass., Brookline (Boston P. O.)—Synagogue—Congregational Kehillath Israel, 385 Harvard St., 2 story, 70 x 170 ft., rein.-con. and stone, wood pile foundation, Harvard St., to W. H. Whitcomb Constr. Co., 6 Beacon St., Boston, $200,000. Archts. est. $225,000.

N. Y., Brooklyn—Bank—Bank of Manhattan Co., 40 Wall St., New York, 1 story, 50 x 100 ft., brick, steel and stone, plain foundation, St. Johns Pl., near Nostrand Ave., here, to C. T. Wills, 286 5th Ave., New York. Archts. est. $150,000. Noted Sept. 20.

N. Y., Fredonia—Business—W. Russo, 3 story, brick and steel, Main St., to Fred Constr. Co., Buffalo, $260,000.

N. Y., New York—Apartment—A. Capagna, 200 West 72nd St., will build 12 story, brick, steel and stone, plain foundation, Riverside Dr., by day labor. $750,000. R. Candela, 200 West 72nd St., archt. and engr.

N. Y., New York — Apartment — Kraftmore Constr. Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, plain foundation, 177th St., by day labor. $350,000.

N. Y., New York — Apartment — One Thousand Nine Park Ave. Corp., c/o E. Roth, archt., 119 West 40th St., will build 4 story, brick, steel and stone, plain foundation, 1009 Park Ave., by day labor. $500,000. G. Aus Co., 244 Madison Ave., engrs.

N. Y., New York—Apartment—Palfin Building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, 60 x 180 ft., brick, steel and stone, plain foundation, 723 West 167th St., by day labor. $200,000.

N. Y., New York—Office—Amer. News Co., 10 story and basement, 150 x 175 ft., rein.-con., Varick St. between Dominick and Spring Sts., to Turner Constr. Co., 244 Madison Ave. Work will proceed at once under direction of R. G. Cory, archt., 30 Church St.

N. J., Newark—School—Bd. Educ., City Hall, Broad St., general contract 3 story, brick, steel and stone, Webster St., to E. M. Waldron, 27 Central Ave., $187,400; heating and ventilating, to Stewart & Farrell, $42,975. Noted Sept. 27.

N. J., Woodbury—School—Bd. Educ., general contract 2 story and basement, 65 x 74 x 188 x 191 ft., rein.-con., brick, steel and limestone, plain foundation, Delaware and Broad Sts., to T. M. Gibbs Constr. Co., 215 South Broad St., Phila., $296,983; heating, to D. Keating, 2042 Rittenhouse St., Phila., $39,600. Noted Sept. 27.

Md., Baltimore—Store and Office—Methodist Church, 5 story, 28 x 150 ft., brick, plain foundation, 516 North Charles St., to T. Hicks & Son, 106 West Madison St., $150,000. Noted May 31.

W. Va., Huntington — Home — Foster Memorial Home, 3 story and basement, brick, Madison Ave., to C. W. Harer, 1026 Euclid Ave., $163,932.

Miss., Jackson—Office—Lamar Life Insurance Co., general contract, 10 story and basement, 82 x 148 ft., brick, stone and concrete, to Sumner, Sollitt Co., Natl. Bank of Commerce, San Antonio, Tex., $415,934; heating and plumbing, to Beach Heating & Plumbing Co., 300 South Main St., Ft. Worth, Tex., $52,000. Noted Sept. 27.

Tenn., Nashville—Demonstration—Peabody College for Teachers, 3 story, concrete, brick and stone, on Campus, to Hegeman-Harris Constr. Co., 185 Madison Ave., New York City, $700,000.

Tenn., Nashville—Hospital, etc.—J. H. Kirkland, chancellor Vanderbilt University, 5 story, rein.-con. and stone, hospital and power plant ,etc., on campus, to Hegeman-Harris Co., 185 Madison Ave., New York City, $2,000,000. Noted Oct. 11.

O., Cleveland — Apartment — L. Cahn, 10615 Grantwood Ave., 3 story and basement, 50 x 168 ft., brick, Euclid and Stanwood Aves., to J. Kutnick, 5802 Longfellow Ave. Archts. est. $150,000.

Mich., Redford—School—Bd. Educ. general contract 2 story and basement, 66 x 132 ft. rein.-con., brick and steel, plain foundation, Burt St. and Carlton Ave., to Rosewarne, McNabb & Worswick, 33 State St., Detroit. Engrs. est. $150,000. Noted Sept. 27.

Mich., Detroit—Bank—Natl. Bank of Commerce, Fort St., 2 story and basement, 40 x 120 ft., rein.-con., stone and brick, plain foundation, to E. Winters Co, 752 Book Bldg. Archts. est. $150,000. Noted Sept. 13.

Ill., Chicago—Apartment—P. Ferrone, c/o A. V. Capraro, archt., 64 West Randolph St., 3 story and basement, 75 x 125 ft., fireproof, Van Buren and Lockwood Sts., to D. Malpede, 10 South Waller Ave. Archts. est. $150,000. Noted Apr. 12.

Ill., Chicago—Apartment—A. Smith, 1339 South Lawndale Ave., 3 story, 100 x 150 ft., fireproof, Congress and Hamlin Sts., to H. Entin, 2116 Alice Pl. Archts. est. $225,000.

Ill., Chicago—Hotel—S. Dlott, 179 West Washington St., 146 x 275 ft., rein.-con., brick and steel, Bway. and Buena Terrace, to Paschen Bros., 111 West Washington St. Archts. est. $2,250,000.

Ill., Chicago—Office—Standard Corp., 208 South La Salle St., 5 story, 50 x 100 ft., fireproof, 220-24 East Superior St., to Nelson & Lind, 6404 South State St. Archts. est. $250,000.

Ill., Chicago — Store and Apartment — Ecker Bros., c/o Loewenberg, Loewenberg, archts., 111 West Monroe St., 3 story, fireproof, 4768-82 Elston St., to Nelson & Borg, 5853 Glenwood Ave. Archts. est. $150,000.

Ill., Sterling—Theatre and Office—Sterling Theatre Corp., 3 story, brick, stone and rein.-con., to Schmidt Bros. Co., 22 East Huron St., Chicago. Archts. est. $150,000.

Wis., Gratiot—Church—St. Josephs Catholic Congregation c/o A. Garrity, pastor 2 story, 75 x 100 ft., brick, rein.-con. and steel, plain foundation, to R. Conlan, Cuba City. Noted Aug. 30.

Minn., Winona—School—State Bd. Control, St. Paul, 3 story and basement, 200 x 210 ft. school with power plant in basement, rein.-con., brick and tile, at State Teachers College, here, general contract to J. A. McDonald Constr. Co., 750 Builders Exch., Minneapolis, $451,742. Noted Oct. 4.

Kan., Wichita—Club—B.P.O.E., c/o H. G. Boyd, general contract 5 story, 140 x 150 ft., rein.-con. and brick, plain foundation, 1st and Market Sts., to G. H. Siedhoff Constr. Co., Broadview Hotel Bldg., $315,624. Noted Aug. 31.

Mo., Chillicothe — High School — Bd. Educ., general contract 3 story, 200 x 200 ft., rein.-con., brick and stone, West Calhoun St., to S. E. Schultz, Chillicothe, $212,300. Noted Aug. 23.

Tex., Amarillo—Hotel—C. T. Herring, c/o Smith & Townes, archts., Blackburn Bldg., general contract 4 story, brick and concrete, to J. D. Singleton, Amarillo, $120,000.

Tex., Eagle Lake — High School — Bd. Educ., general contract 3 story and basement, brick and concrete to Joplin Marshall Constr. Co., Slaughter Bldg., Dallas, $111,070. Noted Sept. 13.

Okla., Durant—Auditorium—State Bd. of Affairs, Oklahoma City, 3 story, 120 x 180 ft., rein.-con. and brick, plain foundation, on Campus of Southwestern Teachers College, here, to Dougherty, Nichols & Wilson, 416 Equity Bldg., Muskogee, $148,000.

Okla., Tulsa—Bank—Producers National Bank, c/o T. J. Hartman, 640 North Denver St., 2 story and basement, 65 x 75 ft., rein.-con., brick, stone and concrete, plain and concrete pile foundation, general contract to J. W. Wilson, 202 Kendy Bldg., $150,000, terra cotta to Kasas City Terra Cotta & Faienice Co., 19th and Manchester Sts., Kansas City, Mo.

Okla., Ponca City—Lodge—Ponco City Lodge 83 A. F. & A. M., 6 story and basement, 50 x 146 ft., rein.-con., brick and stone, to A. T. Hingle, 908 Mayo Bldg., Tulsa, $199,998. Noted Aug. 21.

Okla., Ponco City—Office and Lodge—Ponco City Masonic Bodies, Blue Lodge, Knights Templar, and Ben Hur Commandery, 6 story, 100 x 140 ft., brick, steel and cement, 3rd St. and Grand Ave., general contract to A. T. Hingles, 908 Mayo Bldg., Tulsa, $178,473; plumbing, to Koller Co., Ponco, $67,000; electric contract to Gaddis-Fentress Co., 221 North Bway., Oklahoma City, $64,527.

Colo., Denver — Apartment — Norman Apartments, Inc., 915 Central Savings Bank Bldg., 6 story, 150 x 150 ft., rein.-con. and brick, Downing Blvd., to G. M. Tamblin, Sweeney Bldg., $500,000.

Colo., Denver — School — School Dist., general contract 2 story, 110 x 236 ft., Fox St. between 1st and 3rd Sts., to P. Morrison, 301 Lincoln St., Denver, $157,933; heating, to J. Pfeiffer Plumbing & Heating Co., Denver, $25,880. Archts. est $225,000.

Calif., Anaheim—Store and Office—S. Kramer, 301 North Los Angeles St., 6 story and basement, fireproof, Center St., to Wilson & Bever, Wilson-Bever Bldg., $250,000. Noted July 19.

Calif., Los Angeles—Dormitory—California School of Christianity, 4220 Monroe St., 3 and 4 story, brick, Melrose and Vermont Aves., to Gauger & Lockwood, Dieta Bldg., $215,000.

Calif., Los Angeles—Office—Los Angeles Gas & Electric Co., 645 South Hill St., 12 or 13 story, Flower St. near 8th St., to P. J. Walker Co., Merchants Natl. Bank Bldg., Los Angeles, and Sharon Bldg., San Francisco, $1,350,000. Noted May 3.

Calif., Los Angeles—Store, etc.—C. H. Crawford, 2 story, brick store and apartment, and frame and plaster bungalow court, Sunset Blvd., to L. L. Moser, 8335 Sunset Blvd., $200,000.

Calif., Oakland—Store and Theatre—G. Moulin, 145 Buena Vista Terrace, San Francisco, rein.-con., Foothill Blvd., here, to G. B. Pasqualetti, 746 Union St., San Francisco, $150,000.

Calif., San Francisco—Hotel and Store—J. Welsh, 597 20th Ave., will build 6 story and basement, rein.-con., Sutter St. near Jones St., by day labor. $175,000. Baumann & Jose, 251 Kearny St., archts.

Calif., San Pedro—Hotel—L. Carlo, c/o L. L. Jones, archt., Grosse Bldg., Los Angeles, 6 story and basement, rein.-con., 7th St., here, to Hayes & Son, 143 East 3rd St., Long Beach, $215,000. Noted Sept. 27.

Federal Government Work

PROPOSED WORK

S. C., North Island—Quarters—Spec. 4920—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans quarters at radio station, here.

Ga., Augusta—Hospital—Spec. 4922—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans group of buildings for U. S. Veterans Hospital, here.

Ky., Louisville—Machinery—U. S. Engineer, P. O. Box 72, plans to purchase machinery incl. main engines, swinging engines, dippers, etc., for 2 dredges.

Calif., Mare Island—Fuel Oil Storage—Spec. 4717—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon takes bids two 50,-

Federal Government Work (Continued)

000 bbl. fuel oil tanks, 3 motor-driven centrifugal oil pumps, 3 brick pump houses and 1 heater house, etc., at Navy Yard, here.

H. T., Pearl Harbor—Generators, Transformers, etc.—Spec. 4924—Bureau Yards & Docks, Navy Dept., plans to purchase generators, transformers, switchboard and substation equipment, for use here.

BIDS DESIRED

Md., Baltimore—Quarters—Nov. 6, by Treas. Dept., Wash., D. C., doctors and Pharmacists quarters, 2 story, concrete and timber, at U. S. Marine Hospital, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Oct. 18.

D. C., Wash.—Pipe, Fttings, Cable, etc.—Oct. 19, by A. L. Flint, general purch. officer, The Panama Canal, Wash., D. C., 3,500 ft. w.i. pipe, c.i. pipe fittings, valves, joints, 10,000 ft. submarine cable, 50,000 lb. 27½ x 72 in. and 100,000 lb. 27½ x 96 in. corrugated roofing, etc.

Ind., Indiana Harbor—Breakwater—Nov. 10, at office U. S. Engineer, 537 South Dearborn St., Chicago, breakwater, here; adv. E. N.-R. Oct. 18.

Neb., Central City—Post Office—Nov. 20 by Treas. Dept., Wash., D. C., construction incl. mechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Oct. 18.

Ark., Hot Springs—Quarters—Nov. 10 by Constructing Quartermaster, Army and Navy General Hospital, National Park, double set non-commissioned officers quarters.

Tex., Galveston—Stone—Oct. 31, at office U. S. Engineer, furnishing 3,400 ton jetty stone at entrance Brazos River, here.

Ia., Carroll—Post Office—Nov. 14, by Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile, here. J. A. Wetmore, acting superv. archt; adv. N-R Oct. 18.

Calif., Presidio (San Francisco P. O.)—Pump, etc.—Nov. 5, by Constructing Quartermaster, Fort Mason, San Francisco, pump and motor, and addition to pump house, here Noted Oct 11.

Alaska, Juneau—Stone—Nov. 1, at office U. S. Engineer, War Dept., Wash., D. C., furnishing and placing 15,000 tons stone in breakwater in Wrangell Harbor, here.

BIDS RECEIVED

Me., Bar Harbor—Garage, etc.—Spec. 4900—Bureau Yards & Docks, Navy Dept., Wash., D. C., garage and repairing administration building at Naval Radio Station, Otter Cliffs, here, (1) work complete, from A. B. and J. R. Hodgkins, 42 Breely Ave., (1) $5,675 (2) $674 (3) $629 (4) $1,079 (5) $100 (6) $0.90. Noted Sept. 20.

N. Y., Brooklyn—Lumber—Bureau Supplies and Accounts, Navy Dept., Wash., D. C., furnishing 64,000 ft. white ash for Navy Yards, here, from Burgess Bros. Co., Inc., 10 Dwight St., $5,960 (3 days).

N. Y., Dunkirk—Superstructure—U. S. Engineer, Buffalo, stone superstructure on breakwater, here, from Amer. Constr. and Dredging Co., Marion Bldg., Cleveland, O., $48,900. Noted Sept. 6.

Calif., Mare Island — Lumber — Bureau Supplies and Accounts, Navy Dept., Wash., D. C., furnishing 60,000 ft. Douglas fir for Navy Yard, here, from H. B. Bond, 732 Stahlman Bldg., Nashville, Tenn., $7,625 (120 days).

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, Providence, dredging 52,500 cu.yd. soft material and 125 cu.yd. boulders in Pawcatuck River, Rhode Island and Connecticut, to Bay State Dredging & Contg. Co., 62 Condor St., East Boston (Boston P. O.), Mass., $29,800. Noted Oct. 11.

Pa., Phila.—Repairs to Roof—Treas. Dept., Wash., D. C., repairs to roof, etc., U. S. Post Office and Court House, here, to Ennis & Hare, 1933 East 31st St., Baltimore, Md., $61,400. Noted Oct. 4.

Pa., Pittsburgh—Lock—U. S. Engineer, constructing new Lock 7, Monongahela River, to Dravo Contg. Co., Diamond Bldg., $738,590. Noted Sept. 13.

D. C., Bellevue—Barracks, etc.—Spec. 4889—Bureau Yards & Docks, Navy Dept., Wash., barracks, garage and generator building at Naval Experiment and Research Laboratory, here, to A. H. Rogers, 616 Colorado Bldg., Wash., $23,400 (120 days). Noted Oct. 4.

Ala., Florence—Lumber—U. S. Engineer, Florence, furnishing 200,000 ft. lumber, various sizes, to Nicola, Stone & Myers Co., Hattiesburg, Miss., $7,942.

Ky., Louisville—Lumber—U. S. Engineer, P. O. Box 72, 500 pieces 12 ft., 500 pieces 16 ft., 1,200 pieces 20 ft. and 400 pieces 22 ft., (all 2 in. x 12 in.) No. 1 common yellow pine, to King Sparrow Lumber Co., Hattiesburg, Miss., $38.70 per M ft. Noted Oct. 4.

Wis., Milwaukee—Breakwater—U. S. Engineer, constructing extension to north breakwater in harbor, here, to E. E. Gillen Co., 288 East Water St., $353,813. Noted Oct. 4.

Wash., Seattle—Dredging—U. S. Engineer, dredging 9,200 cu.yd. rock and 2,300 cu.yd. earth in Willapa River, to Puget Sound Bridge and Dredging Co., Central Bldg., $78,325. Noted Aug. 23.

Virgin Islands—Wharf—Spec. 4878—Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding wharf, here, to West Indian Co., Ltd., St. Thomas, $6,893. Noted July 12.

Miscellaneous

PROPOSED WORK

Shipping Terminal, etc. — Toledo, O. — City plans extensive and complete shipping terminal on river near present Wheeling & Lake Erie bridge, bulk freight terminal, location of mooring basin in Bay View Park, and development of east bay shore for docking and shipping. $11,000,000. W. D. Hudson, Toledo, engr.

Gas Holder — Madison, Wis. — Madison Gas & Electric Co., c/o J. St. John, pres., 100 North Fairchild St., having plans prepared, 60 x 95 ft., brick, rein.-con. and steel gas holder. $50,000. Private plans. Noted Sept. 27.

Subway — Joliet, Ill. — Elgin, Joliet & Eastern R.R., 208 South La Salle St., plans subway under tracks at Bluff Rd. $100,000. A. Montzheimer, ch. engr.

Current Retardments—Sioux City, Ia.—Supervs. Woodbury Co. plan current retardments on Missouri River Impvt. Dist. 1. $75,000. C. Moriarty, Union Bank Bldg., engr.

Transmission Line—Kansas—Kansas Gas & Electric Co., c/o K. P. Horine, Fredonia, soon takes bids 60,000 volt transmission line from Fredonia to Cherryvale, also substations at Fredonia and Buffville. $100,000. Private plans.

Flood Control — Arkansas City, Kan. — Having plans prepared flood control. C. E. Jacoby Eng. Co., 528 Shukert Bldg., Kansas City, Mo., engrs.

Levee—Malta Bend, Mo.—Van Meter Levee Dist. having surveys made for protection of 5,000 acres. C. E. Jacoby Eng. Co., 528 Shukert Bldg., Kansas City, engrs.

Elevating Grader — Ft. Worth, Tex. — Plans to purchase elevating grader for Street Dept. $8,000. P. Gilvin, street comr.

Tunnel—Oregon—Southern Pacific R.R. Co., Southern Pacific Bldg., San Francisco, Calif., had plans prepared 2 mi. concrete lined tunnel through summit of Sierras on Ogden Route between Summit and Lakeview $2,500,000-$3,000,000. G. W. Boschke, ch. engr.

Grade Elimination—San Jose, Calif.—City election Oct. 23, to vote on $100,000 bonds for grade eliminations over Southern Pacific R.R. tracks.

Electrolier System—Taft, Calif.—Plans election to vote on $150,000 bonds for electrolier system.

Pipe — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., takes bids this year furnishing 7,650 ft. 24 in. and 22,540 ft. 20 in. c.i. pipe with necessary fittings also laying 7,650 ft. 24 in. and 24,340 ft. 20 in. pipe. E. S. Stanton, supt. gas distribution.

BIDS DESIRED

Station Finish—Brooklyn, N. Y.—Oct. 26, by Transit Comn., 49 Lafayette St., New York, station finish for part of Bway.-4th Ave. Rapid Transit Railroad Lawrence St. Station, here.

Foundation, etc. — Burnham, Pa. — First National Bank taking bids foundation and stone wall for 3 story and basement, 90 x 120 ft., brick and steel bank, Walnut St. $150,000. I. C. Mayes, cashier.

Ferry Landing—New Orleans, La.—Nov. 15, by Bd. Comrs. of Port of New Orleans, Suite 200 New Court Bldg., erecting ferry landing at foot of Canal St. J. H. Walsh, genl. mgr.; adv. E. N.-R. Oct. 18. Noted July 26.

Levee — New Orleans, La. — Oct. 24, by Bd. Comrs. Atchafalaya Basin Dist., at office of Bd. of State Engineers, New Orleans Court Bldg., constructing new levee on left bank of Atchafalaya River, St. Martins Parish; Sect. 2, Alabama Island levee, 1,000,000 cu.yd. approximate contents. V. M. Lefebre, pres.

Dock—Mackinaw City, Mich.—Oct. 22, by State Hy. Dept., Lansing, 900 ft. approach pier and 200 ft. wharf, 22,000 tons earth and rock fill, 927 cu.yd. rein.-con., 3,186 sq.yd. concrete pavement and walks. $100,000.

Portland Cement—Los Angeles, Calif.—Nov. 26, by Quinton, Code & Hill, consult. engrs., 1106 Hollingsworth Bldg., furnishing quantity of portland cement; adv. E. N.-R. Oct. 18.

Rein.-con. Pipe—St. Lambert, Que.—City taking bids 2,120 ft. 30 in. internal diam. rein.-con. pipe. J. Kellett, engr.

Transformers, etc. — Melbourne, Australia—Jan. 19, by R. Liddelow, secy. State Electricity Comn. of Victoria, Melbourne, for Spec. 24/2 transformers, switchgear and accessories, substation B, for Morwell Power Scheme; adv. E. N.-R. Oct. 18.

BIDS RECEIVED

Greenhouses—New York, N. Y.—Park Bd., Municipal Bldg., Oct. 11, completing greenhouses in Van Cortlandt Park Nurseries, Bronx Boro, from Lord Burnham & Co., $35,617. Noted Oct. 4.

Cement — Milwaukee, Wis. — Central Bd. Purchases, 4,000 bbl. cement for use of Metropolitan Sewerage Comn., from Degentesh Bros., 28th and Forest Home Aves. $2.715.

Levee—Portage, Wis.—Wisconsin State Levee Comn., Madison, enlarging, strengthening and protecting portion of levee system, from M. S. Burgitt, Britt, Ia., $26,150. Noted Oct. 11.

CONTRACTS AWARDED

Seawall—Essex, Mass.—State Hy. Comn., Boston, 250 ft. concrete seawall on pile foundation, with several jetties, here, to Walsh & Monahan, Salem, $68,650.

Subway—Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York, subsurface railroad extending along and under 4th Ave. from 87th to 95th Sts., here, to T. A. Gillespie, 7 Dey St., New York, $1,725,884. Noted Oct. 11.

Foundation — Lansing, Mich. — United Cigar Stores Co., 44 West 18th St., New York City, foundation for 3 story and basement, 75 x 135 ft. office building, South Washington St., to F. H. Davis Constr. Co., Detroit, $25,000.

Coaling Station—Madison, Wis.—Chicago & Northwestern Ry., c/o B. R. Kulp, div. engr., 201 Blair St., 200 ton mechanical coaling station, brick, rein.-con. and steel, to C. M. Gindele Co., 421 Belle Plaine Ave., Chicago. Engrs. est. $75,000. Noted Aug. 2.

Lock, etc.—Illinois—Director Dept. Pub. Wks. and Buildings, Div. Waterways, Springfield, constructing Lockport Lock, to Greene & Sons Co., 705 Tower Bldg., Chicago, $1,460,012. All bids for miter gates rejected, will readvertise next spring. Noted Sept. 27.

Cement—Jefferson City, Mo.—State Hy. Comn., furnishing 400,000 bbl. cement a year at cost for period of 5 years, to W. Volker & Co., 3rd and Main Sts., Kansas City.

Widening Dock—Portland, Ore.—Port of Portland Comrs., Spalding Bldg., widening municipal dock 1, to O. R. Wayman, 231 Worcester Bldg., $72,529. Engrs. est. $75,000.

Cement—Los Angeles, Calif.—Furnishing cement for outfall sewer, 40,000 bbls. to Riverside Portland Cement Co., 724 South Springwell St., $2.55 f.o.b. cars Crestmore, sacks extra with exchange rate of $0.15 each, $0.05 per bbl. discount cash within 10 days from date of invoice; 40,000 bbls. to Southwestern Portland Cement Co., 1719 Industrial St., $3.112 per bbl. Victor brand, $0.15 each sack included, with refund allowed, $0.05 per bbl. discount cash within 10 days from date of invoice, delivery to begin at once and continue shipments as required; 40,000 bbls. to California Portland Cement Co., Pacific Mutual Bldg., $3.15 f.o.b. cars our mill at Colton, credit of $0.15 each sack returned, $0.05 per bbl. discount as provided in specifications, deliveries will be made in any quantity and at any rate required for work.

Foundation — San Francisco, Calif. — Pacific Gas & Electric Co., 445 Sutter St., rein.-con. foundation for 17 story and basement, brick, steel and concrete office, Market and Beale Sts., to I. M. Sommer, Balboa Bldg., $85,000.

Paving Plant—Vallejo, Calif.—City paving plant to E. R. Bacon Co., 17th and Folsom Sts., San Francisco, $15,736. Noted Oct. 4.

CONSTRUCTION NEWS

Engineering News-Record, October 25, 1923

The Construction Barometer

Curtailment in Iron and Steel Output—Drop in Unfilled Tonnage—Bank Debits Gain

CURTAILMENT in iron, steel and textile output reflects the recent falling off in demand. Cement however, is being produced at the highest rate on record and common brick are rapidly heading in the same direction.

Almost all buying is on a strictly conservative basis and confined to actual requirements only. That there has been more activity among purchasers since Summer, is evidenced by the increase in debits to individual accounts, as shown by the chart.

Unfilled steel tonnage has diminished steadily since the March peak and with September ingot production at the lowest point fo. the year, the position of the steel industry, usually considered a barometer of other industries, is clearly shown.

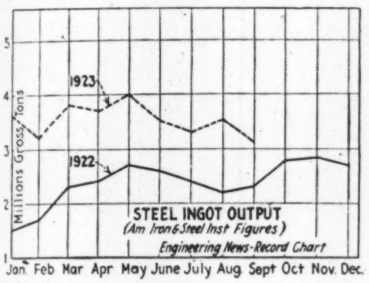
Engineering News-Record Statistics

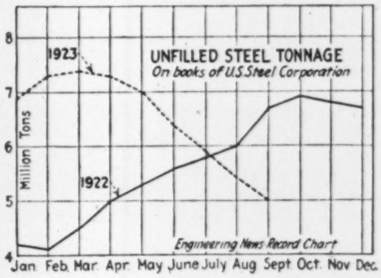
VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

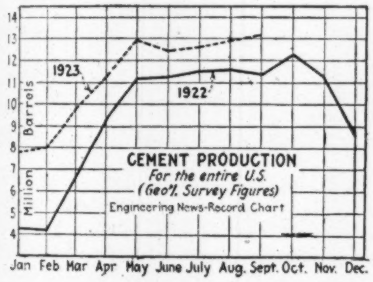
Week Ended	Public Work	Private Work	Total Contracts
Oct. 4	$16,915,000	$17,145,000	$34,060,000
Oct. 11	16,047,000	16,019,000	32,066,000
Oct. 18	17,421,000	44,487,000	61,908,000
3 weeks	$50,383,000	$77,651,000	$128,034,000

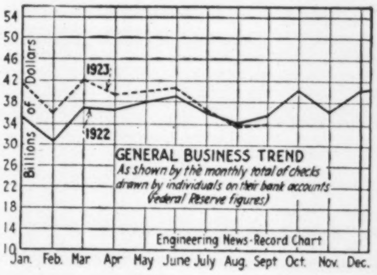
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

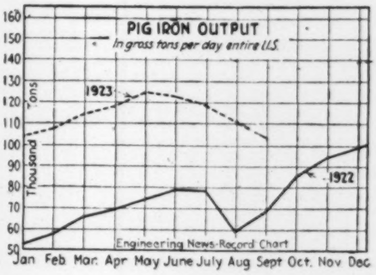
Week Ended	No.	Public Work	No.	Private Work
Oct. 4	12	$4,651,000	33	$12,587,000
Oct. 11	14	3,994,000	33	11,490,000
Oct. 18	9	1,844,000	35	13,968,000
3 weeks	35	$10,489,000	101	$38,045,000











PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Oct. 29	Bethlehem, Pa. Adv. Oct. 18 and 25.	Oct. 18
Oct. 29	West Monroe, La.	Oct. 25
Oct. 30	Washington, Ia.	Oct. 11
Oct. 30	Katonah, N. Y. Adv. Oct. 18 and 25.	Oct. 25
Oct. 30	Oakland, Ia.	Oct. 25
Oct. 30	Albia, Ia.	Oct. 25
Oct. 30	El Segundo, Calif.	Oct. 25
Oct. 31	Buffalo, N. Y.	Oct. 25
Nov. 1	Jamestown, N. Y. Adv. Oct. 18 and 25.	Oct. 25
Nov. 3	McLeansboro, Ill.	Oct. 18
Nov. 5	Haledon, N. J.	Oct. 11
Nov. 5	El Segundo, Calif.	Oct. 25
Nov. 6	Stockton, Calif.	Oct. 25
Nov. 6	Moorehead, Miss.	Oct. 25
Nov. 8	Grand Rapids, Mich. Adv. Oct. 25.	Oct. 25
Nov. 20	Ponchatoula, La. Adv. Oct. 25.	Oct. 25
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Oct. 29	Fond du Lac, Wis.	Oct. 25
Oct. 29	Cuyahoga Heights (Cleveland P. O.), O.	Oct. 25
Oct. 30	St. Louis, Mo.	Oct. 4
Oct. 30	Miami, Fla.	Oct. 25
Nov. 1	Fort Erie, Ont.	Aug. 23
Nov. 2	Milwaukee, Wis.	Oct. 25
Nov. 5	Hollister, Calif.	Oct. 25
Nov. 7	Freehold, N. J. Adv. Oct. 25.	Oct. 25
Nov. 20	Ponchatoula, La. Adv. Oct. 25.	Oct. 25
Dec. 10	New Orleans, La. Adv. Oct. 11 to 25.	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Oct. 30	Indianapolis, Ind.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Oct. 27	Cleveland, O.	Oct. 18
Oct. 29	California	Oct. 11
Oct. 29	New Jersey	Oct. 25
Oct. 30	Alabama	Oct. 4
Nov. 2	Georgia	Oct. 25
Nov. 5	Fremont, O.	Oct. 11
Nov. 6	Quitman, Miss.	Oct. 11
Nov. 6	Florida	Oct. 25
Nov. 7	Minnesota	Oct. 18
Nov. 9	New Jersey Adv. Oct. 25.	Oct. 25
Nov. 12	Jacksonville, Fla. Adv. Oct. 25.	Oct. 25
Nov. 26	Alabama	Oct. 25
Nov. 30	Sydney, Australia	Apr. 19
May 1	Tientsen, North China	Oct. 11

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Oct. 30	Emmetsburg, Ia.	Oct. 25
Nov. 9	Lovelock, Nev. Adv. Oct. 25.	Oct. 25

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 29	Michigan	Oct. 18
Oct. 30	Cheraw, S. C.	Oct. 11
Oct. 30	Michigan	Oct. 18
Oct. 30	Louisiana	Oct. 18
Oct. 30	Saluda, S. C.	Oct. 25
Oct. 30	Louisiana	Oct. 25
Oct. 30	Kountze, Tex.	Oct. 25
Oct. 30	Fort Worth, Tex.	Oct. 25
Oct. 30	St. George, N. Y.	Oct. 25
Oct. 30	New York, N. Y.	Oct. 25
Oct. 31	Jefferson, Tex.	Oct. 11
Oct. 31	Long Island City, N. Y.	Oct. 25
Nov. 1	Claremore, Okla.	Oct. 18
Nov. 1	Oakland, Calif.	Oct. 25

Bids Close		See Eng. News Record
Nov. 1	**New York, N. Y.**	Oct. 25
Nov. 2	Georgia	Oct. 25
Nov. 2	Beloit, **Wis.**	Oct. 25
Nov. 3	Indiana	Oct. 25
Nov. 3	Amarillo, Tex.	Oct. 25
Nov. 5	Okeechobee, Fla.	Oct. 25
Nov. 5	Hondo, Tex.	Oct. 11
Nov. 5	Redwood City, Calif.	Oct. 25
Nov. 5	Riverside, Calif.	Oct. 25
Nov. 6	Marlin, Tex.	Oct. 18
Nov. 6	Washington	Oct. 4
Nov. 6	Stockton, Calif.	Oct. 25
Nov. 6	Sebring, Fla.	Oct. 25
Nov. 6	Louisiana	Oct. 25
Nov. 6	Michigan	Oct. 25
Nov. 6	Center, Tex.	Oct. 25
Nov. 6	Cameron, Tex.	Oct. 25
Nov. 6	New Albany, Miss.	Oct. 25
Nov. 6	Mendota, Minn.	Oct. 25
Nov. 7	Minnesota	Oct. 18
Nov. 7	Clarksville, Tex.	Oct. 25
Nov. 7	Nevada	Oct. 25
Nov. 12	Dallas, Tex.	Oct. 25
Nov. 13	Alabama	Oct. 25
Nov. 14	Coleman, Tex.	Oct. 25

INDUSTRIAL WORK

Nov. 8	Palmyra, N. Y. Adv. Oct. 11 to 25.	Oct. 11
Nov. 8	Vischers Ferry, N. Y. Adv. Oct. 25.	Oct. 25

BUILDINGS

Oct. 27	Syracuse, N. Y.	Oct. 25
Oct. 29	Hicksville, N. Y.	Oct. 25
Oct. 29	Springfield, O.	Oct. 25
Oct. 29	Indianapolis, Ind.	Oct. 25
Oct. 29	Phila., Pa.	Oct. 25
Oct. 30	Lancaster Pa.	Oct. 25
Oct. 30	New York, N. Y	Oct. 11
Oct. 30	Norristown, Pa.	Oct. 11
Oct. 31	Piqua, O.	Oct. 25
Nov. 1	Flourtown, Pa.	Oct. 25
Nov. 1	Palmerton, Pa.	Oct. 25
Nov. 1	Charlotte, N. C.	Oct. 25
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2
Nov. 1	St. Louis, Mo.	Oct. 18
Nov. 1	Hutchinson, Kan.	Oct. 11
Nov. 6	Trenton, N. J.	Oct. 25
Nov. 8	Dayton, O.	Oct. 25
Nov. 12	Cincinnati, O.	Oct. 25
Nov. 12	Appleton, Tex.	Oct. 25
Nov. 13	Brooklyn, N. Y.	Oct. 25
Nov. 30	Maggie, W. Va.	Oct. 4
Dec. 1	Charleston, W. Va.	Oct. 25

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 29	Dredging—New Rochelle, N. Y. Adv. Oct. 4 to 25.	Oct. 4
Oct. 30	Dredging—Norfolk, Va. Adv. Oct. 11 and 25.	Oct. 11
Oct. 30	Steel Barge, etc.—Milwaukee, Wis. Adv. Oct. 18 and 25.	Oct. 25
Oct. 31	Repairing Jetty—Freeport, Tex. Adv. Oct. 4 to 25.	Oct. 4
Oct. 31	Dredging—Galveston, Tex.	Oct. 18
Nov. 1	Pipe Line Dredge—Chicago, Ill. Adv. Sept. 6, 13, 20 and Oct. 25.	Sept. 6
Nov. 1	Catamarans, etc.—Chicago, Ill.	Sept. 20
Nov. 1	Stone—Juneau, Alaska	Oct. 18
Nov. 2	Dredge Pump, etc.—New Orleans, La. Adv. Oct. 11 to 25.	Oct. 11
Nov. 5	Post Office—Hoosick Falls, N. Y.	Oct. 11
Nov. 5	Pump, etc.—Presidio (San Francisco P. O.), Calif.	Oct. 18
Nov. 6	Quarters—Baltimore, Md. Adv. Oct. 18 and 25.	Oct. 18
Nov. 6	Sewer Pipe—American Falls, Idaho	Oct. 11
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 10	Quarters — Hot Springs, Ark.	Oct. 18
Nov. 10	Breakwater—Indiana Harbor, Ind. Adv. Oct. 18 and 25.	Oct. 18
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 14	Post Office—Carroll, Ia. Adv. Oct. 18 and 25.	Oct. 18
Nov. 14	Fuel Oil Storage—Mare Island, Calif.	Oct. 25
Nov. 16	Quarters, etc.—Fort Benning, Ga. Adv. Oct. 25.	Oct. 25
Nov. 20	Post Office—Central City, Neb. Adv. Oct. 18 and 25.	Oct. 18
Nov. 20	Barges—Chicago, Ill. Adv. Oct. 25.	Oct. 25
Nov. 21	Sewer—American Falls, Idaho Adv. Oct. 25.	Oct. 25
Nov. 21	Post Office—Steubenville, O.	Oct. 25
Nov. 23	Barges—Louisville, Ky. Adv. Oct. 25.	Oct. 25
Nov. 24	Dredging—New York, N. Y. Adv. Oct. 25.	Oct. 25
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
Dec. 1	Steel Barges—Mobile, Ala. Adv. Oct. 25.	Oct. 25

MISCELLANEOUS

Oct. 26	Station Finish—Brooklyn, N. Y.	Oct. 18
Nov. 1	Piping, etc.—Jamestown, N. Y.	Oct. 25
Nov. 2	Relocating Entrance, etc. — New York, N. Y.	Oct. 25
Nov. 2	Column Foundations, etc. — Long Island City, N. Y.	Oct. 25
Nov. 2	Station Finish—Brooklyn, N. Y.	Oct. 25
Nov. 6	Sprinkler Truck—Calexico, Calif.	Oct. 25
Nov. 7	Board Walk—Spring Lake, N. J. Adv. Oct. 11 to 25.	Oct. 11
Nov. 12	Tractors—Dallas, Tex.	Oct. 25
Nov. 12	Borings for Subway—Oakland, Calif.	Oct. 25
Nov. 15	Ferry Landing—New Orleans, La.	Oct. 18
Nov. 26	Portland Cement—Los Angeles, Calif.	Oct. 18
Jan. 19	Transformers, etc.—Melbourne, Australia Adv. Oct. 18 and 25.	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Fredonia—Nov. 12 to vote on $187,000 bonds impounding dam on east branch of Canawaywa Creek, 2 mi. 16 in. and ½ mi. 12 in. mains, and chlorination plant at junction. W. H. Shelton, city engr. A. Gregory, Johns Hopkins University, Baltimore, assistant engr.

W. Va., Keyser—City Council takes bids in December or January for filtration plant in connection with waterworks system. Bond issue of $175,000 has been arranged for project.

N. C., Greensboro—Sold $225,000 bonds for waterworks and street improvements. P. C. Painter, city mgr.

N. C., Greensboro—See "Miscellaneous."

S. C., Inman—Election Nov. 13, to vote on $50,000 bonds for waterworks, and $50,000 bonds for sewerage system.

S. C., Westminster—Election Oct. 25, to vote on $150,000 bonds for waterworks, and $50,000 bonds for sewers.

Tenn., Cookeville—Voted $150,000 bonds, waterplant improvements, and sewerage system. Noted Sept. 13.

O., Barberton—Plans election in November to vote on $325,000 bonds 30 mi. water main extensions. H. W. Alcorn, city engr. Noted March 22.

O., Crooksville — Plans complete water system. $400,000. Engineer not announced.

O., Massillon — Massillon Water Supply Co. plans to drill several new wells, install 2 m.g. electric pump, and lay transmission lines, etc. $50,000.

O., Roseville—Plans complete water system. $400,000. Engineer not announced.

Mich., Detroit—Bd. Water Comrs. had plans prepared laying 15,920 lin.ft. 12 in c.i. mains in Courville Ave. and Three Mile Dr., from Mack to Harper Aves. T. A. Leisen, Water Works Park, engr.

Mo., Breckenridge—Defeated $45,000 bonds waterworks and distribution system. This corrects report in Oct. 18 issue.

Mo., Norborne—Voted $57,179 bonds for water system and $33,428 bonds for lighting plant. R. R. McBride, Kansas City, engr. Noted Sept. 20.

Mo., St. Louis—Will probably take bids in February three 66 in. c.i. pipe lines from new water plant at Howards Bend to western city limits, about 14 mi. Alternate plan calls for two 72 in. lines. $2,500,000. E. E. Wall, City Hall, comr. Noted March 8.

Tex., Dallas—See "Miscellaneous."

Tex., Marshall — Voted $80 [illegible] bonds waterworks improvements. H. S. [illegible]ce, city secy. Noted Sept. 13.

Okla., Okemah—Making preliminary surveys reservoir, filtration plant and pumping equipment. $40,000. Holway [illegible] Co., Wright Bldg., Tulsa, engrs.

Calif., Berkeley—Plans installing water mains in various sections of city. $400,000. Burns & McDonnell Eng. Co., Marsh-Strong Bldg. Los Angeles, engrs. J. N. Edy, city mgr.

Ont., Bellville — Soon takes bids pumphouse and gasoline driven fire pump, 3 m.g. capacity. $25,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

Ont., Goderich—Takes bids about Jan. 1, new intake pipe for waterworks, either 22 or 24 in. $75,000. Prices wanted on materials. E. H. Darling, Home Bank Bldg., Hamilton, engr. Noted Sept. 13.

Ont., North Bay—Plans to extend and repair waterworks, 3 mi. c.i. pipe, 6 in. up. $50,000. W. Mackie, Town Hall, engr.

Ont., Port Credit—Gore, Nasmith & Storrie, engrs., Confederation Life Bldg., Toronto, soon take bids 10,000 ft. 6 and 8 in. c.i. main extension for town. $26,000.

BIDS DESIRED

N. Y., Jamestown—Nov. 1, by Bd. Pub. Utilities, c.i. pipe and fittings, Contr. Bd-3-23, Contr. Bd-6-23, and Contr. Bd-4-23, M. O. Swanson, supt.; adv. E. N.-R. Oct. 25.

N. Y., Katonah—Oct. 30, by Bd. Water Comrs., steel standpipe and c.i. pipe line. Fuller & McClintock, 170 Bway., New York City, engrs.; adv. E. N.-R. Oct. 25.

Miss., Moorehead—Nov. 6, by J. J. Henry, mayor and Bd. Aldermen, waterworks. H. A. Mentz, Magnolia, consult. engr.

La., Ponchatoula — Nov. 20, by W. R. Haight, mayor, and Bd. of Aldermen, waterworks improvements. Swanson-McGraw, Inc., 705 United Fruit Bldg., New Orleans, engrs.; adv. E. N.-R. Oct. 25.

La., West Monroe—Oct. 29, by Bd. Aldermen, extending waterworks, 3,200 ft. 10 in., 4,200 ft. 8 in. and 100,000 ft. 6 in. pipe. R. S. Reynolds, city engr.

O., Cuyahoga Heights (Cleveland P. O.) —See "Sewers"

Mich., Grand Rapids—Nov. 8, by W. A. Sperry, dir. Pub. Serv., filter plant extension, Contr. 8. R. E. Harrison, engr.; adv. E. N.-R. Oct. 25.

Ia., Albia—Oct. 30, for impounding dam, 62,000 cu.yd. embankment, 1,000 cu.yd. rein.-con. core wall, spillway and paving (part of general waterworks project). Brown & Cook, Ottumwa, engrs. Noted Sept. 27.

Ia., Oakland—Oct. 30, by G. A. Luxford, city clk., sinking 12 in. well, 1,200 ft. deep. Currie Eng. Co., Webster City, engrs.

Calif., El Segundo—Oct. 30, by V. D. McCarthy, city clk., furnishing 8,400 ft. 4 in. c.i. water pipe.

Calif., El Segundo — Nov. 5, by F. M. Palmer, clk. School Dist., furnishing 86,000 gal. centrifugal pump.

Calif., Stockton — Nov. 6, by E. D. Graham, clk. Bd. Supervs. San Joaquin Co., furnish and erect 1 standard 4 panel type hemispherical bottom steel tank, 50,000 gal. capacity, on 100 ft. steel frame tower.

CONTRACTS AWARDED

Miss., Leland—Waterworks and sewers, general work to Schevenell Contg. Co., Memphis; iron pipe, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala.; sewer pipe, to Southern Sewer Pipe Co., 28th Ave. N., Birmingham, Ala., and Fischer Lime & Cement Co., 269 Walnut St., Memphis; hydrants and valves, to Columbia Iron Wks., 811 Boyce St., Chattanooga, Tenn. Noted Sept. 27.

Mich., Detroit—Bd. Water Comrs., 6,000 lin.ft. 8 in. centrifugal water pipe to Natl. Cast Iron Pipe Co., 1031 Dime Bank Bldg., $2.16 per lin.ft.; 275 tons A.W.W.A. 8 in. c.i. pipe, to Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, $53.70 per ton.

Wis., Algoma — Mains, to E. Olson, Sturgeon Bay, $18,700; elevated water tank, to Chicago, Bridge & Iron Co., 105th and Troop Sts., Chicago, Ill. $8,400.

Tex., Lampasas—For 18,000 ft. miscellaneous mains, to Moore & Johnson, Lampasas, $21,369. Noted Sept. 27.

Ont., Belleville—Extending waterworks, 1,400 ft. 30 in. diam., steel intake pipe to Canadian Des Moines Steel Co., Chatham, $14,722; laying pipe to R. McDonald Co., Crown Office Bldg., Toronto, $39,748; mechanically operated screen to Link Belt Co., 265 Wellington St. W., Toronto, $3,476; hydraulic valve 30 in. diam., to Drummond McCall Co., 373 Front St. E., Toronto, $888.

Sewers

PROPOSED WORK

Conn., **New Britain**—Plans 20 in. sanitary sewer in Mill and Jerome Sts. $25,000. J. D. Williams, city engr.

Va., **Norfolk**—See "Streets and Roads."

W. Va., **Bluefield**—Rejected bids for 14 mi. 6-48 in. sewer pipe, 500 manholes, 100 storm water inlets, etc. Noted Oct. 18.

N. C., **Greensboro**—Lets contract about Dec. 1, outfall sewer and lateral between Randolph Ave. and South Elm St. incl. Glenwood, Spring Garden and Ashboro Sts. $100,000. P. C. Painter, city mgr.

N. C., **Greensboro**—See "Miscellaneous."

S. C., **Inman**—See "Waterworks."

S. C., **Westminster**—See "Waterworks."

Fla., **Sanford**—Voted $80,000 bonds extending sanitary sewers. F. T. Williams, Sanford, engr. Noted Sept. 20.

Tenn., **Cookeville**—See "Waterworks."

O., **Toledo**—City and State plan sanitary sewer. $250,000. State Eng. Dept., Columbus, engrs.

Kan., **Emporia** — Having preliminary plans prepared large disposal plant in southern part of city $100,000, also 1,100 ft. storm sewers in north and west ends $9,000. R. J. Paulette, city engr.

Mo., **Breckenridge** — Defeated $35,000 bonds storm and sanitary sewers. This corrects report in Oct. 18 issue.

Mo., **Norborne**—Voted $39,133 bonds for sewers. R. R. McBride, Kansas City, engr. Noted Sept. 20.

Tex., **Dallas**—See "Miscellaneous."

Tex., **Grandview**—Defeated $30,000 bonds disposal plant. Noted Sept. 13.

Tex., **Waco** — Soon takes bids disposal plant. $350,000 bonds to be sold. V. G. Koch, city engr.

Okla., **Stroud**—Making preliminary surveys 7 mi. sanitary sewerage system and disposal plant. $75,000. Benham Eng. Co., 512 Gumble Bldg., Kansas City, Mo., engrs. Noted Nov. 16, 1922.

Ont., **Oshawa**—Soon takes bids 10,000 ft. 8-12 in. vitr. tile sanitary sewers in Cedarvale. $25,000. W. C. Smith, city engr.

Ont., **Toronto**—Soon takes bids for 12,000 lin.ft. 8-24 in. vitr. tile sanitary and storm sewers in Balmuto St., lane near Bathurst St., Strathmore Blvd., Bodwin Ave., lane near Parkway Ave. and one near St. Clair Ave., $10,115, also Rosedale Heights Drainage System, $22,645. R. C. Harris, city engr.

BIDS DESIRED

N. Y., **Buffalo**—Oct. 31, by Dept. Pub. Wks., Municipal Bldg., sewers in various streets. To exceed $25,000. C. E. P. Babcock, city engr.

N. Y., **New York** — See "Streets and Roads."

N. J., **Freehold**—Nov. 7, by Bd. Freeholders Monmouth Co., Court House, 20 in. storm sewer, etc., on West Long Branch-Interlaken Rd. 41, Sect. 1. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.; adv. E. N.-R. Oct. 25.

Fla., **Miami**—Oct. 30, by F. H. Wharton, city mgr., 27,835 lin.ft. 4-10 in. terra cotta and c.i. pipe sewer, 9,320 ft. oil macadam and 3,000 ft. macadam pavement, etc., in Sewer Dists. 81-89, inclusive, Contr. Sr. 34. C. W. Murray, dir. pub. service.

La., **Ponchatoula** — Nov. 20, by W. R. Haight, mayor, and Bd. of Aldermen, sewerage system improvements. Swanson-McGraw, Inc., 705 United Fruit Bldg., New Orleans, engrs.; adv. E. N.-R. Oct. 25.

O., **Cuyahoga Heights** (Cleveland P. O.) —Oct. 29, by S. E. Clapp, village clk., at office of R. Hecker, village engr., 905 Leader-News Bldg., Cleveland, storm water and sanitary sewers and water mains in Grant Ave. from East 49th to East 65th Sts. Noted May 3.

Wis., **Fond du Lac**—Oct. 29, (extended date) by Bd. Pub. Wks. addition to sewage pumping station. Ejector let to Yeomans Bros. Co., 1433 Dayton St., Chicago, $1,255. Noted.

Wis., **Milwaukee** — Nov. 2, by J. H. Fowles, secy. Sewerage Com., 508 Market St., East High Level Sewer, Sect. 2, in Cambridge Ave. from Brady to Concord Sts., 10,108 lin.ft. 30-84 in. concrete sewer, 1,156 lin.ft. 18-24 in. terra cotta pipe. $645,000. T. C. Hatton, c/o owner, engr.

Tex., **Clarksville**—Oct. 29, by P. Wilson, mayor, Imhoff tanks, mains, disposal plant, etc. $40,000. Koch & Fowler, Central State Bank Bldg., Dallas, engrs.

Calif., **Burbank**—City Trustees receiving bids 8,235 lin. ft. 8 in., 8,775 lin. ft. 10 in., 6,850 lin. ft. 12 in., 2,050 lin. ft. 18 in., 3,825 lin. ft. 21 in. and 138,600 lin. ft. 6 in. vitr. or concrete pipe.

Calif., **Fresno**—City Council taking bids sewers in Monterey St. between H and G Sts., 2,056 ft. 18 in., 1,033 ft. 15 in., 1,200 ft. 12 in., 1,907 ft. 10 in. and 801 ft. 8 in. vitr. pipe, etc. W. Stranahan, city engr. Noted Oct. 11.

Calif., **Hollister**—Nov. 5, by City Trustees, sewage disposal plant. To exceed $30,000. C. F. Smith, 516 Santa Barbara Rd., Berkeley, engr.

BIDS RECEIVED

N. Y., **Albany**—For 1,150 ft. 20 in. tile sewer in Main Ave., from E. H. Welles, Albany, $26,812; grading and laying 890 ft. 20 in. tile sewer in Benson St., from E. B. Stevenson, Albany, $25,384. Engrs. est. $30,000 each.

N. Y., **Brooklyn**—E. Riegelmann, boro pres., Boro Hall, Oct. 17, sewers in **(1)** East 8th St. **(2)** East 82nd St. **(3)** East 27th St. **(4)** East 8th St. **(5)** West 6th St. **(6)** 87th St. **(7)** 86th St., from S. Ambrosio, 1016 60th St., **(1)** 92% engrs. est. ($8,462) **(7)** 92% ($1,008); M. Tozzi, 1362 63rd St., **(2)** 83.95% ($8,215) **(6)** 94.25% ($3,241); F. Merindo Co., 540 17th St., **(3)** 87% ($6,408); B. Peconi & Son, **(4)** 88% ($5,053); Nazzaro & Querriero, **(5)** 87% ($5,010). Noted Oct. 11.

N. J., **Morris Plains**—B. G. Lewis, comr. Institutions & Agencies, State House, Trenton, disposal plant, 152 x 200 ft. concrete tank, 4 sand filters, brick house, etc., from Gray Constr. Co., Franklin St., Morristown, $81,000. Noted Oct. 11.

Md., **Baltimore** — Bd. Awards, sewers listed in Storm Water Contr. 61 and in Sanitary Contr. 206, from D. C. McAleer, Phoenix Bldg., $49,928 and $59,724 respectively.

Ia., **Des Moines**—For Southwest Sewerage System, 44,406 lin.ft. 10-24 in. pipe sewer, 22,402 lin.ft. 30-48 in. circular sewer, one dry weather outfall complete, one inverted siphon, etc., complete, from G. G. Herrick, 607 Observatory Bldg., $626,909. Noted Oct. 11.

CONTRACTS AWARDED

Md., **Baltimore** — Constructing storm water drains and sanitary sewers in Bellwood Ave. near Belair Rd., Storm Water Contr. 64, 900 ft. 6-9 ft. rein.-con. drain and 700 ft. of 18 in. sanitary sewer, etc., to Ryan Constr. Co., Real Estate Trust Bldg., Phila., $33,482. Noted Oct. 11.

Miss., **Crystal Springs**—Concrete storm sewers, to McEachim & McEachim, Little Rock, Ark. $30,000. Noted Aug. 23.

O., **Cleveland**—Segmental block sewers in Ridge Rd. (Sects. 1-7), to Winterbottom & Connelly, 1815 Corning Ave., $193,056. Noted Oct. 11.

O., **Euclid**—Disposal plant for Lake Shore Blvd., to F. B. Stein, Euclid, $190,616. Noted Oct. 11.

Mich., **Detroit**—To Western Constr. Co., 1208 Ford Bldg., Lateral Sewer 3888 $8,990, Lateral 3949 $1,890, Lateral 4013 $8,990, Lateral 4016 $5,190, Lateral 4020 $1,626; to G. Ponterelli, Wolverine Hotel, Lateral 4010 $18,892, Lateral 4017 $25,078; to P. Coppello, Detroit, Lateral 4014 $535; to A. Rossi, 1337 Brady St., Lateral 4015 $599; to F. Mangilavore, Detroit, Lateral 4018 $16,459; to Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., Lateral 4019 $2,300; to W. Blanck Co., 827 Ford Bldg., Lateral 4021 $3,383; to Detroit Drainage Constr. Co., 400 Penobscot Bldg., Lateral 3885 $13,070.

Mich., **Springwells**—To T. D. Nolan, 22 Highland Ave., Highland Park, (Detroit P. O.) 7,290 ft. 12-27 in. vitr. crock sewer in Special Assessment Dist. 23, $14,900; to S. Healy, 400 Penobscot Bldg., Detroit, 2,464 ft. 36-72 in. concrete sewer in Sect. 39, Ford Rd. Sewer, $34,889, 2,470 ft. 36-66 in. concrete sewer in Sect. 40, Donald Ave. Sewer, $34,889. Noted Oct. 18.

Minn., **Tracy**—Sewerage system repairs, extensions, reconstruction installing septic tank, to T. Jensen, Tracy, $25,000. Noted Sept. 27.

Kan., **Hiawatha**—For 1,952 ft. 10-12 in. vitr. and 240 ft. 10 in. c.i. pipe, Imhoff tank, sand and sludge filters, etc., to Warren Constr. Co., Hiawatha, $20,977. Noted Oct. 4.

Tex., **Stamford**—For ⅓ m.g. plant, and Imhoff tanks, to McAman Constr. Co., Stamford, $31,500. Engrs. est. $35,000.

Calif., **San Jose**—Sewers in 26th St. between McKee Rd. and San Antonio St., etc., to A. J. Raisch, 46 Kearny St., San Francisco, 525 ft. 18 in. pipe at $2, 1,009 ft. 20 in. $2.20, 1,845 ft. 24 in. $3.20, 1,367 ft. 27 in. $5, etc.

Waste Disposal

PROPOSED WORK

Wis., **Kenosha**—See "Miscellaneous."

CONTRACT AWARDED

N. Y., **Long Island City**—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., construction and completion building and runway, furnaces, appurtenances, and chimney of Bergen Landing Destructor, 4th Ward, to Hudson City Eng. & Constr. Corp., 25 Hunterspoint Ave., $289,000. Noted Sept. 13.

Bridges

PROPOSED WORK

N. Y., **New York**—Bd. Estimate appropriated $100,000 reinforcing roadway stringers and buckle plates on Queensboro Bridge.

Alabama—State Hy. Dept., Montgomery, rejected bids constructing bridges on road from Lineville to Clebourne Co. line, Federal Aid Project 136, Clay Co. W. S. Keller, state highway engr. Noted Sept. 20.

Alabama — State of Alabama (Montgomery) and Georgia (Atlanta) plan concrete bridge, Federal Aid Project 373, Barbour Co. $152,750.

Kentucky—State Hy. Dept., Frankfort, having plans prepared 100 ft. span, steel and concrete bridge, over Georgas River, Lawrence Co. J. S. Boggs, state highway engr.

Ohio—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, plans one 150 ft. and two 100 ft. steel truss, forty-four 18 ft. 9 in., six 16 ft. 6 in. and one 40 ft. I-beam, also two 12 ft. 6 in. rein.-con. slab spans, over Little River Diversion Channel, Cape Girardeau Co. B. H. Piepmeier, state highway engr.

Calif., **Stockton** — Having preliminary plans prepared concrete bridge or wood bridge, over Mormon Slough. $36,000 and $10,000 respectively. W. B. Hogan, city engr.

BIDS DESIRED

New Jersey—Oct. 29, by State Hy. Dept., Trenton, concrete encased plate girder bridge with concrete abutments of one 69 ft. 8 in. span for 30 ft. roadway and two 8 ft. extensions incl. rein.-con. approaches, temporary bridge, excavation of new channel and removing existing bridge over Bound Brook, M. P. 40.2, State Highway Route 9, Sect. 10, Middlesex Boro, Middlesex Co.; for 15 ft. widening of seven 85 ft. arch, two 65 deck plate girder and one 60 ft. bascule spans, incl. foundations, changes to approaches for distance of 140 ft. on west side and 550 ft., on east side incl. paving, curbing, walks, retaining walls, etc. over Raritan River, M. P. 31.4, Route 1, Sect. 13, in municipalities of New Brunswick and Highland Park, Middlesex Co. J. L. Vogel, 772 Broad St., Newark, bridge engr.

New Jersey—Nov. 9, by State Hy. Dept., Trenton, single leaf overhead counterweight bascule highway span, and temporary bridge over Cedar Bonnet, Manahawken Bay, in municipality of Stafford, Ocean Co.; double leaf bascule highway span, etc., over Inland Waterway Canal, State Highway Route 4, Sect. 21, in Boro of Point Pleasant, Ocean Co. A. L. Grover, ch. clk.; adv. E. N.-R. Oct. 25.

Georgia—Nov. 2, by State Hy. Dept., East Point, 2 bridges on Chattanooga-Trenton Rd., Federal Aid Project 31, Dade Co., 333.6 cu.yd. concrete 39,860 lb. reinforcing steel, etc. W. S. Dennis, Rome, engr.

Florida — Nov. 6, by State Rd. Dept., Tallahassee, constructing approach embankments to Seminole Bridge, 1,500 ft. long, Project 526, on Rd. 15, Pinellas Co.; bridge across Kissimmee River, on Rd. 8, Project 582, Highlands and Okeechobee Counties. J. L. Cresap, acting state highway engr.; adv. E. N.-R. Oct. 25.

Fla., **Jacksonville**—Nov. 12, by Comrs. Duval Co., bridge over McGirts Creek, near here. F. Brown, clk.; adv. E. N.-R. Oct. 25.

Fla., **Jacksonville**—Nov. 12, by Comrs. Duval Co., bridge over Trout Creek, near here. S. Brown, clk.; adv. E. N.-R. Oct. 25.

Alabama—Nov. 11, by State Hy. Comn., Montgomery, 275 ft. concrete bridge, to have nine 28 ft. spans, on road from Phil Campbell to Russelville, Federal Aid Project 136, Sect. A, Franklin Co. W. S. Keller, state highway engr.

Tex., **Kountze**—See "Streets and Roads."

BIDS RECEIVED

New Jersey—State Hy. Comn., Trenton, Oct. 15, 3 ft. 6 in. rein.-con. pipe culvert

Bridges (Continued)

and removing part of existing bridge at M. P. 3.9 Route 13, Sect. 6, and 52 ft. span arch bridge, over Shipetaukin Creek, M. P. 5.7, Route 13, Sect. 6, both Lawrence Twp., also 20 ft. concrete encased I-beam bridge and removing part of existing bridge at overflow to Stony Brook, M. P. 7.9, Route 13, Sect. 6, Princeton Twp., Mercer Co., from L. J. Sieling, Broad St., Red Bank, $41,700; one 50 ft. and one 32 ft. concrete encased bridges over Shabbacong Creek, Route 13, Sect. 5, Princeton Pike, Mercer Co., from Grant & Driver, 56 McKinley Ave., Trenton, $31,982. Noted Oct. 4.

Ohio—See "Streets and Roads."

Ohio — Dept. Highways and Pub. Wks., Columbus, Oct. 16, concrete viaduct on 0.17 mi. Sects. "L and M" Mansfield-Galion Rd., Richland Co., from Galion Constr. Co., Galion, $38,535; bridge and approaches, on 0.127 mi. Hamilton-Eaton Rd., Butler Co., from C. Beatty, Middletown, $25,965; approaches on Sect. "A" Ripley-Hillsboro Rd., Brown Co., also bridge on above road, from F. Tejan, 1536 East 3rd St., Dayton $3,023 each; bridge on Sect. "E" Logan-Lancaster Rd., Hocking Co., from Nealon Bros., Columbus, $7,978; bridge on Sect. "B" Pomeroy-Jackson Rd., Meigs Co., from Ebersbach Co., Pomeroy, $9,337; bridge on Sect. "F" Ohio River Rd., Monroe Co., also bridge over Big Still Water Creek, on Sects. "E and G" New Philadelphia-Uhrichsville Rd., Tuscarawas Co., from B. C. Patterson, Van Atta, $10,574 and $24,750 respectively; bridge over Sugar Creek on Sect. "K" Wooster-Canal-Dover Rd., Tuscarawas Co., from Capital Constr. Co., Columbus, $16,181; concrete bridge on Sect. "C" Zanesville-McConnellsville Rd., Muskingum Co., from E. L. Paul, Zanesville, $7,301; concrete beam bridge, on Sect. "E" New Philadelphia-Uhrichsville Rd., Tuscarawas Co., from H. C. Snyder, New Philadelphia, $24,796. Noted Oct. 4.

Calif., San Francisco — City and San Francisco Co., sub-structure for bridge across Dumbarton Straits, Hetch Hetchy Project, to carry water pipes on series of steel truss spans for part of distance and laying pipe as submerged lines in trenches in bottom of San Francisco Bay for remainder of distance, will include 36 truss spans, each 105 ft. long, on concrete piers, depth of water maximum 25 ft., from Healy-Tibbitts Constr. Co., 64 Pine St., $1,192,484. Noted Sept. 6.

CONTRACTS AWARDED

Pa., Wilkes-Barre — Controller Luzerne Co., Court House, rebuilding bridge over Susquehanna River, to Standard Eng. & Constr. Co., Toledo, O., $161,438. Noted Sept. 27.

Ill., Chicago—Illinois Central R.R., 135 East 11th Pl., concrete approach and 27 caissons at 40th St., to Mid-City Eng. Corp., 104 North Franklin St., $115,000 and $85,000, respectively.

S. D., Wheeler—State Hy. Comn., Pierre, highway bridge over Missouri River, near here, six 256 ft. steel spans with two 65 ft. approach spans, to Kansas Cty Bridge Co., 510 Orear-Leslie Bldg., Kansas City, Mo., 785.2 cu.yd. concrete floor $30, 108,988 lb. steel tubes $0.10, 263,154 lb. steel piling $0.08, 3,180.5 cu.yd. concrete $28, etc., total $370,000. Noted Sept. 20.

Ont., Preston—City, concrete and steel bridge, to Webster & Tory, Galt, $60,000.

Dams

PROPOSED WORK

N. Y., Shushan—State had surveys made for dam, to create lake 7 mi. long, in Battenkill River, for regulating water in Hudson and furnishing hydro-electric power development, 1 mi. north of here. H. L. Cooper, 101 Park Ave., New York City, engr. Noted July 19.

Mich., Marquette—City plans rein.-con. and steel dam and penstock on Dead River for power plant. $50,000. Orbison & Orbison, engrs., 812 College Ave., Appleton, do not expect to have specifications prepared before Jan. 1. Noted Jan. 27.

Calif., Los Angeles — Supervs. Los Angeles Co. appropriated $50,000 for exploration of site for proposed dam at forks of San Gabriel River. Tentative plans prepared for dam 450 ft. high, 1,400 ft. long at top, to impound flood waters of San Gabriel River for entire San Gabriel Valley. Total cost $20,000,000. If location is found feasible for dam the county will be asked to vote bonds.

BIDS DESIRED

Calif., Merced—Dirs. Merced Irrigation Dist., takes receiving bids and opens same about Nov. 8, constructing Exchequer Dam, (1) dam of 280,000 cu.yd. of concrete or more (2) dam of less than 280,000 cu.yd. but more than 240,000 (3) dam less than 240,000 cu.yd. but more than 200,000 (4) dam less than 200,000 cu.yd. but more than 160,000 (5) dam less than 160,000 cu. yd. but more than 140,000. Starr, Thebo, Anderton, Sharon Bldg., San Francisco, engrs. Decision to construct by day labor abandoned. Noted Aug. 23.

Quebec—Provincial Government, Quebec, damming Metis River for development of water power in Matane, Rimouski, Matapedia, Gaspe and Bonaventure Counties, to Newton Dalsin Constr. Co., 10 Cathcart St., Montreal, $109,558. Noted Oct. 11.

Railways

PROPOSED WORK

California—Orange Co. Harbor Comrs., Santa Ana, plan to vote on $50,000 bonds for belt line railroad at Newport Beach harbor.

California—Pacific Distributing Co., 85 2nd St., San Francisco having plans prepared 8 mi. narrow gauge railroad between Soda Lake and Tremblor Grade. W. B. Burch, San Luis Obispo, consult. engr.

CONTRACTS AWARDED

California—City and San Francisco Co. furnishing and delivering track materials for municipal railway to United States Steel Products Co., Rialto Bldg., $43,429.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Madison—See "Streets and Roads."

Ia., Emmetsburg—Oct. 30, by Supervs. Palo Alto Co., improvements in D.D. 147, incl. 6,100 ft. main ditch, 20-36 in. tile, and 7,900 ft. laterals, 8-24 in. tile, etc. W. T. Krieger, aud. G. R. Campbell, engr.

Calif., Newport Beach—Orange Co. Harbor Comrs., Santa Ana, plan to vote on $150,000 bonds to dredge entrance of Newport Beach harbor to 30 ft.; $400,000 bonds deepening east jetty of Newport Beach to 30 ft.; $200,000 bonds extending and reinforcing west jetty of Newport Beach.

BIDS DESIRED

Wis., Milwaukee—See "Industrial Works under Proposed Work."

Nev., Lovelock—Nov. 9 (extended date) by J. B. Daniel, secy., Lovelock Valley D. D. 1, drainage canals, 336,495 cu.yd. excav., etc., adv. E. N.-R. Oct. 25.

BIDS RECEIVED

Calif., Byron — Byron-Bethany Irrigation Dist., concrete lining (a) 6,852 ft. ditch with 2½ in. lining (b) 1,800 lin.ft. ditch with 3 in. lining, from J. Kristich, Knightsen, (a) $0.1433 (b) $0.145; J. S. Graves, Sacramento, (a) $0.125 (b) $0.125 (informal bid). Noted Oct. 4.

CONTRACTS AWARDED

Wis., Elkhorn—Walworth Drainage Bd., tile and open ditch drainage, to Wisconsin Drainage Co., Elkhorn, $30,799. Noted Sept. 20.

Ia., Mason City—Cerro Gordo Co., for Joint D. D. 95, Cerro Gordo Co., and 67, Worth Co., main section 13,650 lin.ft. 7-36 in. tile, Sect. 2, 20,850 lin.ft. 6-24 in. tile, Sect. 3, 23,400 lin.ft. 6-20 in. tile, to W. W. Codner Parkersburg, $28,267. Noted Sept. 27.

Minn., Windom — Cottonwood Co., construction Judicial Ditch 2, tile material to Minnesota Pine & Tile Co., Mankato, $23,000; labor to M. Sorenson, Windom, $16,692.

Mont., Hamilton—Bitter Root Irrigation Dist., repairs and reconstruction work on irrigation system, incl. canal excav., concrete work, timber flume and steel work, near here, to A. W. Quist, Hoge Bldg., Seattle, Wash., $274,326. Noted Sept. 20.

Calif., Byron—Byron-Bethany Irrigation Dist., furnishing and installing centrifugal pump, 9 sec.ft. capacity, 15 ft. head, 12 in. discharge, to Byron-Jackson Iron Wks., Sharon Bldg., San Francisco, $3,561; 12,618 lin.ft. ditches, portion to E. T. Hansen, Byron, $0.20 per cu.yd., and portion to G. Morgan, Byron, $0.20; furnishing and laying 6,124 ft. 12-42 in. rein.-con. pipe, to J. Kristich, Knightsen, $10,705. Noted Oct. 4.

Streets and Roads

PROPOSED WORK

Conn., Hartford—Plans widening Capitol Ave. from Main to Trinity Sts. $[illegible],000. R. N. Clark, city engr.

Virginia — State Hy. Dept., Richmond, plans grading 23.01 mi. Project 302, Roanoke and Franklin Counties. $153,120.

Va., Norfolk—Will issue $1,[illegible]95,000 bonds for street work, drainage and sewers.

N. C., Greensboro—See "Waterworks."

Georgia—State Hy. Dept., Atlanta, plans asphalt macadam surfacing 4.74 mi. Project 371, Cobb Co., $122,074; plain concrete surfacing 0.6 mi. Project 362, Richmond Co., $19,250; pebble surfacing 12.41 mi. Project 375, Mitchell Co., $45,390; topsoiling 8.7 mi. Project 372, Elber Co., $67,753.

Fla., Center Hill — Election Nov. 12, to vote on $66,000 bonds paving various streets.

Fla., Frostproof — Election Nov. 12, to vote on $26,000 bonds paving 7,400 sq.yd. Palm and F Sts.; $25,000 8,000 sq.yd. 9th St.; $30,000 9,900 sq.yd. 3rd, 6th and 14th Sts.; $26,000 8,000 sq.yd. H St.; $40,000 1,800 sq.yd. Reedy Blvd.; $26,000 8,100 sq. yd. Orange and B Sts.; $26,000 8,500 sq.yd. Clinch Blvd.; $33,000 11,000 sq.yd. Wall and Clinch Sts.; $50,000 23,000 sq.yd. Scenic Highway; $25,000 9,000 lin.ft. concrete curbing and guttering and storm drains in various streets. C. G. Benson, Frostproof, engr.

Fla., Homestead—Sold $25,500 bonds constructing concrete sdewalks.

Alabama—State Hy. Dept., Montgomery, rejected bids improving 14.293 mi. road from Lineville to Cleburne Co. line, Federal Aid Project 136, Clay Co. W. S. Keller, state highway engr. Noted Sept. 20.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, having surveys made 11 mi. highway from Davidson Co. to Dickson Co. Lines, Cheatham Co. J. G. Creveling, highway comr.

Tenn., Columbia—Maury Co. election Nov. 15, to vote on $492,000 bonds approximately 190 mi. highway system, probably limestone macadam and gravel. Wilkes, Court House, co. engr.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing 10.16 mi. Scottsville-Glasgow Rd., 18 ft., Allen Co.; grading 2.26 mi. Jenkins-Virginia State Line, State Project 6, Sect. B, Letcher Co., 24 to 28 ft., J. S. Boggs, state highway engr.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing 17.082 mi. Owenton-Georgetown Rd., 14 ft., State Project 49, Sect. A, Owen Co. J. S. Boggs, state highway engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened Oct. 16, grading, bridging and paving 2.392 mi. Sect. "S-2" Ashland-Medina Rd., Medina Co., also grading 4.773 mi. roads in Williams Co. Noted Oct. 4.

O., Akron—Plans extending ¾ mi. South Portage Path, 50 ft., $50,000-$60,000; grading, laying sidewalks and paving ½ mi. Bates St., 40 ft., $32,500. E. A. Kemmler, City Bldg., engr.

O., Lisbon—Columbiana Co., State, and Townships plan paving 3 mi. Rogers-Middleton Rd., 16 ft., bituminous macadam $92,000, concrete $100,000, or macadam $100,000. L. C. Kirk, Court House, engr.

Indiana—State Hy. Dept., Indianapolis, plans paving 4.6 mi. road in Sullivan Co., brick and bituminous macadam, Project 64. $92,838. J. D. Williams, dir. State Hy. Comn.

Ill., East St. Louis—Soon takes bids asphalt resurfacing 8 blocks 10th St., and rein.-con. paving 2 blocks McCasland Ave., both 30 ft., $32,280 and $11,587 respectively. Noted July 26.

Ill., East St. Louis—St. Clair Co., Belleville, had preliminary plans prepared 700 ft. rein.-con. subway to carry National Old Trails Rd. (North 9th St.), under Pennsylvania R.R., here, will have two 20 ft. roadways and two 5 ft. sidewalks. $480,000-$500,000. Railroad will be called upon to pay major portion of cost. D. O. Thomas, Belleville, engr.

Michigan — State Hy. Dept., Lansing, soon takes bids grading 10 mi. Federal Aid Project 82, Sect. B, Washtenaw Co. F. F. Rogers, State comr.

Wis., Madison—Plans to extend University Ave. to Capitol Sq., 30 ft., probably concrete or asphalt. $500,000. H. C. Buser, city clk. Engineer not selected.

Ia., New Hampton—Making plans 40,000 sq.yd. paving $125,000. C. L. Pillsbury Co., 1200 2nd Ave., S. Minneapolis, Minn., engrs

Streets and Roads (Continued)

Missouri — State Hy. Dept., Jefferson City plans grading 3.856 mi. Federal Aid Project 228, Route 2, Sect. A, 34 ft., Lafayette Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 3.9 mi. Sect B, and 4,204 mi. Sect. D, Route 2, Federal Aid Project 228, 34 ft., Lafayette Co. B. H. Piepmeier, state highway engr.

Mo., New Franklin—Oct. 30, to vote on $30,000 bonds grading, macadamizing or otherwise improving Bway., Missouri, Howard, Pearl and Union Aves. C. E. Smith & Co., Ry. Exch., St. Louis, engrs.

Tex., Amarillo—Potter Co. making plans grading and gravel surfacing 6 mi. D. C. D. Highway, 18 ft. $75,000. O. A. Seward, co. engr.

Tex., Beaumont—Plans surfacing Emma, Magnolia, Victoria Sts., etc., rock asphalt on shell and concrete. To exceed $25,000. R. M. Fulweiler, city engr.

Tex., Benjamin—Knox Co. plans $300,000 bond issue hard surfacing 62 mi. various roads chiefly between Brazos and Little Wichita River. N. S. Kilgore, Benjamin, co. judge. Engineer not announced.

Tex., Brady—McCulloch Co. making plans grading, gravel surfacing and bridging 4.7 mi. road from San Saba River to Mason Co. line, 16 ft. $47,000. E. A. Burrows, co. engr.

Tex., Dallas — Plans drives, walks and landscape architecture in Oakland Cemetery. $80,000. Address W. H. Wray, 2607 Forest Ave. Engineer not announced.

Tex., Dallas—See "Miscellaneous."

Tex., Ft. Worth—Hammond & Hammond, F. & M. Bldg., having plans prepared paving, curbing and guttering new addition. $25,000. Baker & Von Zuben, Ellison Bldg., engrs.

Tex., Galveston — Had plans prepared rock asphalt or other bituminous paving Ave. J, from F to 25th Sts. To exceed $25,000. C. A. Holt, Jr., city engr.

Tex., Georgetown—Williamson Co. making plans grading and gravel surfacing 11.35 mi. Taylor-Thorndale Rd., 16 ft. $105,820. R. A. Nichols, co. engr.

Tex., Greenville—Hunt Co. plans bituminous topping 11.14 mi. Dallas-Greenville Rd., 16 ft. $90,000. J. D. Metcalfe, engr. in charge. Construction of base now under way.

Tex., Jacksboro—Jack Co., election Nov. 10, to vote on $400,000 bonds, hard surfacing State Highways 25 and 39. J. C. Newcomb, co. judge. Engineer not announced.

Tex., Jasper—Jasper Co. soon takes bids gravel surfacing 16.22 mi. State Highway 7, 16 ft. $92,000. C. P. Hunter, co. engr.

Tex., Navasota—Grimes Co. election Nov. 10, to vote on $450,000 bonds, constructing Austin Huntsville Rd. and miscellaneous hard surface roads. R. M. West, co. judge. Engineer not announced.

Tex., New Boston—Bowie Co. soon takes bids grading, gravel surfacing and 1 in. bituminous topping 3.63 mi. State Highway 5, 16 ft. $56,000. F. E. Hess, Medical Arts Bldg., Dallas, engr. Noted Sept. 27.

Tex., Van Zandt—Van Zandt Co. making preliminary plans, grading and 6 in. concrete paving 7.5 mi. State Highway 15, 9 ft. $120,000. H. R. McClure, Canton, engr.

Okla., Muskogee—Plans grading and paving 15 blocks Bway., Cherry, Oklahoma and 24th Sts., 13,850 sq.yd. asphalt, 3,200 sq.yd. concrete, 9,600 lin.ft. concrete curbing, 5,800 cu.yd. excav. $105,000. J. R. March, City Hall, engr.

Okla., Oklahoma City—Plans grading and paving 11 blocks 11th, 44th, 45th and F Sts., 11,500 sq.yd. asphalt, 6,600 lin.ft. concrete curbing, 6,600 lin.ft. concrete gutter, 4,000 cu.yd. excav. $40,000. B. M. Hait, City Hall, engr.

Okla., Shawnee—Plans grading and paving 5 blocks Chapman St. from Highland to Wallace St., 6,200 sq.yd. asphalt, 1,500 cu.yd. excav. $28,500. F. D. Brown, Shawnee, engr.

Okla., Wewoka—Plans grading and paving 18 blocks Walnut, Okfaskey and Mikosuey Sts., 32,000 sq.yd. vertical fibre brick, 14,000 lin.ft. curbing, 10,000 cu.yd. excav. $175,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ore., Portland—Plans widening Sandy Blvd., East Burnside and East Gluron Sts., $610,000. O. Laurgaard, city engr.

California—State Hy. Dept., Sacramento, plans concrete paving 1.39 mi. State Project 120, Ventura Co. $421,520. R. M. Morton, state highway engr.

Calif., Auburn—Rejected bids for asphalt and concrete paving approaches to various highways entering city. Noted Oct. 18.

Ontario—Provincial Government, Northern Development Branch, Toronto, plans 150 mi. gravel road from North Bay to Temiskaming and Cochrane. $500,000. C. H. C. Fullerton, Parliament Bldg., Toronto, engr.

Ont., Niagara Falls—Soon takes bids 12,000 sq.yd. asphalt pavement and 6,500 lin. ft. concrete curbs and gutters on Main St. $48,802. T. S. Scott, city engr.

Ont., Toronto—York Twp., 40 Jarvis St., soon takes bids 6 mi. concrete sidewalks, 4 ft. 6 in. to 6 ft. wide, on Wynevor and Scott Rds., Bicknell, Raymond, May, Hopewell, Wiley, Gamble, Glebemount, Rochdale, Sammon, Westlake and Pinewood Aves., $48,585, 2,100 sq.yd. asphalt pavement on Robina Ave. $12,150, 2,000 sq.yd. Winnett Ave. $10,360, 900 sq.yd. bituminous concrete on Hillholm Rd. $4,100. F. B. Goldike, twp. engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving Slauson Ave., 15,365 cu.yd. excav., shaping 5,270 lin.ft. roadbed, 12,882 sq.yd. 6-8 in. concrete, etc. To exceed $30,000.

Calif., San Diego—Had plans prepared improving Renyard Way, State and Goldfinch Sts., 20,554 sq.yd. 2 in. asphaltic concrete on 4 in. concrete 2,152 lin. ft. concrete curbing, 2,048 sq.ft. concrete sidewalk. F. A. Rhodes, city engr.

Calif., Santa Barbara—Santa Barbara Co. plans election to vote on bonds (exceeding $100,000) for improving Harris-Lompoc Rd. Noted Oct. 11.

Calif., Stockton—Plans concrete paving, curbing and guttering Wilson St. betwe n Main St. and Atchison, Topeka & Santa Fe tracks, $33,000; Wilson St. between Atchison, Topeka & Santa Fe tracks and Jefferson St. and between Jackson St. and Charter Way, $25,600. W. B. Hogan, city engr.

BIDS DESIRED

N. Y., Long Island City—Oct. 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on 101st (Jerome) Ave.; paving from 77th to 88th Sts. within railroad area with granite block on concrete, within city area sheet asphalt on concrete.

N. Y., New York—Oct. 30, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving West 49th St. and Tiemann Pl.; widening and repaving 56th and 60th Sts., sheet asphalt; 58th St. stoned filled sheet asphalt; repaving Dyckman St. granite block on concrete.

N. Y., New York—Nov. 1, by H. Bruckner, pres. Bronx Boro, Borough Hall, Tremont and 3rd Aves., grading, setting curb, laying sidewalks, etc., and paving with asphalt on concrete, roadway of Davidson Ave., grading for width of 30 ft. centrally located, building inlets, etc., in Colden Ave.; grading, setting curb, laying sidewalks, etc., in West 195th St.; sewers and appurtenances in 176th and 180th Sts., Montgomery, Popham and Davidson Aves.; furnishing 25,000 gal. bituminous road surfacing material.

N. Y., St. George — Oct. 30, by J. A. Lynch, pres. Richmond Boro, Borough Hall, grading, paving with bituminous macadam, constructing concrete curb, vitr. brick gutter, and 5 ft. concrete sidewalk, etc., on Forrest Ave.

S. C., Saluda — Oct. 30, by Saluda Co. Highway Comn., improving 10.1 mi. State Route 39, Federal Aid Project 214, 34,249 cu.yd. excav., 24,870 cu.yd. sand clay surfacing, etc., $29,800; 2.39 mi. State Route 12, Federal Aid Project 141 A, 11,214 cu.yd. excav., 5,896 cu.yd. sand clay surfacing, etc., $9,800.

Fla., Okeechobee — Nov. 5, by Comrs. Okeechobee Co., improving 5.61 mi. Opal Rd., 65,000 cu.yd. embankment, 70,000 cu. yd. excav., etc. $35,000.

Fla., Sebring—Nov. 6, by Highlands Co. Comn., 37,000 sq.yd. 6 in. rock base on Lake Annie-Parker Island Rd. $25,000. Peacock & Hood, Avon Park, engrs.

Alabama—Nov. 13, by State Hy. Dept., Montgomery, grading and surfacing 0.778 mi. Anniston-Camp McCullan Rd., Federal Aid Project 138, Calhoun Co., 9,128 sq.yd. cement concrete base, 8,719 sq.yd. 2 in. bituminous concrete surfacing, etc. $50,000.

Miss., New Albany—Nov. 6, by Highway Comrs. of Separate Rd. Dists. of Superv. Dists. 1, 2 and 3, hard surfacing about 20 mi. road incl., 10,298 cu.yd. common excav., 17,389 cu.yd. borrow, 28,100 cu.yd. gravel 1 mi. haul, 354,706 half mi. units gravel over haul, etc., also bids for furnishing gravel f.o.b. nearest unloading points. C. E. Downing, New Albany, engr.

Louisiana—Oct. 30, by State Hy. Comn., Baton Rouge, constructing $ mi. Sect. A and 6 mi. Sect. B Winnsboro-Delhi Highway, Franklin Parish, State Project 336. J. M. Fourmy, state highway engr. Notea Oct. 18.

Louisiana—Nov. 6, by State Hy. Comn., Baton Rouge, constructing 5.72 mi. Oak Grove-Arkansas State Line Highway, State Project 48, Sects. A and B, West Carroll Parish. J. M. Tourmy, state highway engr.

Kentucky—Nov. 2, by State Hy. Dept. Frankfort, constructing and surfacing 10.09 mi. Newport-Falmouth Rd., State Project 21, Sect. A, Campbell and Pendleton Counties, 2.83 mi. Owingsville-Sharpsburg Rd., State Project 61, Sect. A, Bath Co., 3.16 mi. Newport-Falmouth Rd., State Project 21, Sect. B, Campbell Co., 12.6 mi. Winchester-Clay City Rd., State Project 4, Sect. A, Clark Co.; surfacing 723 ft. street in Somerset, State Project 22, Sect. C, Pulaski Co.; grading 6.34 mi. Covington-Falmouth Rd., State Project 62, Sect. C, Kenton Co. J. S. Boggs, state highway engr. Noted Oct. 11.

Indiana—Nov. 3, by Joint Bds. of White Co. (Monticello) and Benton Co. (Fowler) improving 36,799 ft. County Line Highway, $50,837. S. N. Geary, aud. Benton Co., and F. E. Vinson, aud. White Co.

Michigan—Nov. 5, by State Hy. Dept., Lansing, 54,394 sq.yd. gravel surfacing, 27,742 cu.yd. earth excav. on State Trunk Rd. 32-6, Montgomery Co. F. F. Rogers, state comr.

Michigan—Nov. 6, by State Hy. Dept., Lansing, grading and surfacing 3.034 mi. State Trunk Line Rd. 10-22, Alpena Co., 6,940 cu.yd. excav., 28,475 sq.yd. gravel. F. F. Rogers, state comr.

Wis., Beloit—Nov. 2, 13,500 sq.yd. gravel surfacing, 7,300 cu.yd. grading, 8,500 ft. concrete curb and gutter, on Merrill, Portland and Middle Sts. $25,000. G. E. Heebink, city engr.

Minnesota—Nov. 7, by State Hy. Dept., St. Paul, 7 mi. State Project 1-39, Div. B, Federal Aid Project 296, Steele Co., 116,000 cu.yd. excav.; 15 mi. State Project 3-34, Federal Aid Project 303, Houston Co., 300,000 cu.yd. excav., three 30 ft. beam span bridges, one 40 ft. truss and one 50 ft. truss; State Project 5-34, Federal Aid Project 92, Anoka Co., 126,000 cu.yd. concrete paving, 11,700 cu.yd. gravel surfacing; 17 mi. State Project 16-21, Federal Aid Project 314, Cottonwood Co., 338,000 cu.yd. excav. State Highway Dept., St. Paul, engrs.

Minn., Mendota—Nov. 6, by Auditor Hennepin Co. (Minneapolis) grading 3½ mi. approach to south end of proposed bridge over Minnesota River, here. $70,000. J. W. Shaffer, co. surv.

Tex., Amarillo—Nov. 3, by S. B. Matlow, judge Potter Co., grading and gravel surfacing 6.13 mi. Bushland Rd., State Highway 13, State Aid Project 430, 16 ft. O. A. Seward, co. engr.

Tex., Cameron—Nov. 6, by City Com., 50,000 sq.yd. 2 in. Uvalde rock asphalt on 8 in. gravel. $120,000. A. F. Mitchell, Cameron, engr.

Tex., Center—Nov. 6, by D. R. Taylor, judge Shelby Co., grading and paving with rein.-con. 3.08 mi. State Highways 8 and 22, State Aid Project 367 18 ft. $85,000. Titus & Dillon, Center, engrs.

Tex., Center—Nov. 6, by J. W. Shotwell, city secy., improving various streets, incl. 22,290 sq.yd. 1 or 2 course 6 in. concrete, etc. $75,000. Titus & Dillon, Center, engrs. Noted Aug. 16.

Tex., Clarksville—Nov. 7, by G. Morrison, judge Red River Co., grading and clay surfacing 5.95 mi. State Highway 37, Federal Aid Project 406, 24 ft. $28,246. J. B. Rieman, co. engr. Noted July 12.

Tex., Coleman—Nov. 14, by Comrs. Coleman Co., grading and gravel surfacing, etc. 4 mi. Colorado Rockwood Rd.; resurfacing with gravel 4 mi. Highway 7A; grading 2½ mi. Coleman Glen Cove Rd. Cost to exceed $75,000. W. E. Dickerson, Coleman, engr.

Tex., Dallas—Nov. 12, by Comrs. Dallas Co., grading, paving, etc., 12.7 mi. Richardson Pike, 18 ft., brick, bituminous or concrete. $600,000. Former bids rejected. Nagle, Witt & Rollins, Court House, co. engrs. Noted Aug. 23.

Tex., Ft. Worth—Oct. 30, by City Com., 7,080 sq.yd. bituminous or brick paving. 4,700 ft. curb and gutter, etc., on Virginia Pl., etc. $28,000. D. L. Lewis, city engr.

Tex., Houston—Taking bids paving West Alabama St., various types of bituminous. $25,000. J. C. McVea, city engr.

Tex., Kountze—Oct. 30, by F. F. Teel, judge Hardin Co., grading and gravel surfacing 11.2 mi. State Highway 40, Federal Aid Project 355 B, 16 ft., $102,000 4.43 mi. State Highway 8, Federal Aid Project 354 B, 16 ft., $49,360, 9.45 mi. State Highway

Streets and Roads (Continued)

8, Federal Aid Project 354 A, 16 ft., $89,127, grading gravel surfacing and bridging 1.31 mi. State Highway 8, State Aid Project 410, 16 ft., $52,800. G. C. Brown, co. engr. Noted Oct. 11.

Tex., Pharr — Taking bids bituminous paving, curbing and guttering 8 blocks Cage, Park, 3rd and 5th Sts. $25,000. P. S. Devine, Pharr, engr.

Okla., Oilton—Oct. 29, (extended date) by C. Patchin, city clk., grading and paving 8 blocks Main St., 14,175 sq.yd. concrete, 4,850 lin.ft. curbing, 3,250 cu.yd. excav. $65,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs. Noted Sept. 27.

Nevada—Nov. 7, by State Hy. Comn., Carson City, improving 3.25 mi. road from Lawtons to point 2 mi. east of Verdi, Washoe Co., 62,000 cu.yd. excav., 158,375 sta.yd. overhaul, etc.; grading and gravel surfacing 11.81 mi. road from Eastgate to east county line (Carroll Summit) Churchill Co. 133,100 cu.yd. excav., 25,753 sta.yd. overhaul, 6,400 cu.yd. loading and screening gravel, 9,100 yd. mi. hauling gravel and 6,400 cu.yd. spreading gravel, etc. G. W. Borden, state highway, engr.

Calif., Fresno—City Council taking bids improving McKinley Ave., 182,530 sq.ft. grading, 144,798 ft. asphalt, 12,958 lin.ft. gutter, 6,898 lin.ft. curb, 25,132 sq.ft. walks, etc. W. Stranahan, city engr. Noted Oct. 11.

Calif., Los Angeles—Oct. 29, by Bd. Pub. Wks., improving Denison Ave., 114,800 sq. ft. 5 in. concrete, 6,275 ft. curb, 36,081 sq.ft. walks, etc.

Calif., Oakland—Nov. 1, by City Council, improving 8th Ave. 119,520 sq.ft. grading, 110,744 sq.ft. 6 in. cement base with 2 in. Warrenite bitulithic surface, etc.; portions of 64th Ave., 10,800 sq.ft. grading, 9,562 ft. oil macadam pavement, etc.; Porter St., 6,107 sq.ft. grading, 3,370 sq. ft. oil macadam pavement, 1,353 sq.ft. concrete walks. W. W. Harmon, city engr.

Calif., Redwood City—Nov. 5, by Supervs. San Mateo Co. improving streets in Lomita Park. 16,000 cu.yd. excav., 542,900 sq.ft. 1½ in. warrenite bitulithic on 4 in. concrete, etc. G. A. Kneese, co. surv.

Calif., Riverside—Nov. 5, by Superv. Riverside Co., grading, curbing and paving Beaumont-Moreno Grade Rd. Project. A. C. Fulmor, co. surv. Noted Oct. 4.

Calif., Stockton—Nov. 6, by Supervs. San Joaquin Co., improving 2½ mi. Kettleman Rd., 2,700 cu.yd. grading, 7,300 tons rock, 700 bbls. oil. F. E. Quail, co. surv.

BIDS RECEIVED

Rhode Island — State Bd. Pub. Wks., Providence, Oct. 17, paving 3.04 mi. Pontiac Rd., 18 ft., in Cranston and Warwick, also 3.09 mi. Cumberland-Wrentham Rd., 18 ft., in Woonsocket, bituminous macadam, penetration method, from D'Alora & McCarthy, Woonsocket, $87,860 and $95,653 respectively. Noted Oct. 4.

N. Y., Albany—See "Sewers."

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Oct. 17, paving with permanent asphalt on concrete **(1)** Douglas St. **(2)** East 14th St. **(3)** East 19th St. **(4)** Suydam St. **(5)** West 27th St. **(6)** 46th St. **(7)** 77th St. **(8)** 77th St. **(9)** 83rd St.; grading, curbing annd flagging **(10)** East 19th St.; regrading and paving with permanent asphalt on concrete **(11)** Kingston Ave.; grading, curbing, flagging and constructing steps on **(12)** Warehouse Ave., etc., from Uvalde Asphalt Paving Co., 1 Bway., New York, **(1)** $7,462 **(4)** $5,997 **(11)** $18,696; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., **(2)** $8,161 **(3)** $10,913 **(5)** $9,883; G. M. Mandatto, 129 29th St., **(10)** $3,435; Cranford Co., 52 9th St., **(6)** $5,681 **(7)** $18,977 **(8)** $9,602 **(9)** $8,971. Noted Oct. 11.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, Oct. 22, concrete sidewalks on Curtis Ave. from Arco Constr. Co., 31 Nassau St., New York, $4,844; concrete repaving Center and Moore Sts., from J. Johnson Sons, 455 Bway., West New Brighton, $21,598; grading Shaughnessy Lane, from J. Kelly, 1150 Forest Ave., West New Brighton, $6,731. Noted Oct. 18.

New Jersey—State Hy. Dept., Trenton, Oct. 22, paving Route 8, Sect. 2, Montclair to Verona, Essex Co., 3,960 sq.yd. rein.-con. and 310 sq.yd. sheet asphalt, from F. Cannova, Lodi, 87% engrs. est. ($36,886). Noted Oct. 4.

Pa., Phila. — Dept. Pub. Wks., asphalt paving **(1)** Bigler, Sydenham and 16th Sts. **(2)** Columbia St. **(3)** Pratt St. **(4)** 17th St.; granite block paving **(5)** 49th St. bridge; furnishing **(6)** central mixed concrete **(7)** 30,000 vitr. paving blocks **(8)** ten thousand five hundred 4 x 4 in. and eleven thousand 3 x 4 in. wood blocks from Barber Asphalt Co, 239 North 30th St., **(1)** $12,272; Eastern Paving Co., 401 Colonial Trust Bldg., **(2)** $6,831 **(3)** $4,459 **(4)** $4,537; Acchione Caruso Paving Co., 804 South Broad St., **(5)** $13,179; West Jersey Sand and Supply Co., Delaware Ave. and Marlborough St., **(6)** $3,200; J. S. E. Pardee, Head Bldg., **(7)** $1,455; J. Meehan & Son, 916 West Dakota St., **(8)** $89 and $71 respectively. Noted Oct. 11.

Md., Baltimore — Bd. Awards, Oct. 17, grading, curbing and paving on concrete base streets in Contr. 245-OCOANA, 3,290 sq.yd. vitr. brick, 14,760 cu.yd. grading, etc., from D. C. McAleer, Phoenix Bldg., $68,390; paving streets in Contr. 246-OANA, 22,170 sq.yd. asphalt, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $96,284. Noted Oct. 11.

Louisiana — State Hy. Comn., Baton Rouge, Oct. 11, constructing 11.57 mi. Winnfield-Colfax Highway in Union Parish, Federal Aid Project 139A, alternates (1), (2) and (3), from F. D. Harvey, 688 South Bellevue St., Memphis, Tenn., (1) $72,007 (2) $65,486 (3) $68,371; constructing 7.12 mi. Winnfield-Colfax Highway, Winn Parish, Federal Aid Project 139B, combinations (1), (2) and (3), from Grant Parish Constr. Co., Colfax, (1) $53,614 (2) $51,843 (3) $52,751. Noted Sept. 27.

Louisiana—State Hy. Comn., Baton Rouge, Oct. 11, constructing 4.98 mi. Bossier-Doyline-Minden Highway, Webster Co., Project 381, from W. D. Frasier, Minden, combination (1) $12,944, (2) $12,686, furnishing 5,165 cu.yd. washed gravel for surfacing from Louisiana Sand and Gravel Co., Monroe, $2.18; Arcadia-Shreveport Highway, State Project 82-C from Blodgett Constr. Co., Shreveport, 152.92 yd. concrete $37.50, 83.34 yd. concrete $30, 30,387 lb. steel $0.065, 50,000 lb. fabricating steel $0.0925; Ruston-Arcadia Highway, Lincoln Co., Federal Aid Project 110-A-1, from Blodgett Constr. Co., Shreveport, 234,84 yd. concrete $36.50, 38,897 lb. steel $0.065. Noted Sept. 27.

Ohio — Dept. Highways and Pub. Wks., Columbus, Oct. 16, grading, bridging and paving **(1)** 4.856 mi. Sect. "E" Cincnnati-West Union Rd., Adams Co. **(2)** 1.092 mi. Sect. "H" Lima-Delphos Rd., Allen Co. **(3)** 2,897 mi. Sect. "E-1" Lima-Bellefontaine Rd., Allen Co. **(4)** 5.099 mi. Sects. "M-2" and part of "N" Niles-Ashtabula Rd., Ashtabula Co. **(5)** 9.889 mi. of Sects. "N, O, P, Q and R," Niles-Ashtabula Rd., Ashtabula Co. **(6)** 3.463 mi. Sect. "J-1" Twinsburg-Elyria Rd., Cuyahoga Co. **(7)** 1.827 mi. Sect."J-2" Twinsburg-Elyria Rd., Cuyahoga Co. **(8)** 4.087 mi. Sect. "O-1" Columbus-Lancaster Rd., Fairfield Co. **(9)** 1.279 mi. Sect. "G" Springfield-Xenia Rd., Greene Co. **(10)** 3.134 mi. Sect. "D" Steubenville-Hammondsville Rd., Jefferson Co. **(11)** 1.6 mi. Sect. "E-1" Medina-Norwalk Rd., Lorain Co. **(12)** 6.76 mi. Sects. "A, B and Plymouth" Shelby-Plymouth Rd., Richland Co. **(13)** 2.632 mi. Sect. "T" Niles-Ashtabula Rd., Trumbull Co. **(14)** 3.249 mi. Sect. "L" New Philadelphia-West Lafayette Rd., Tuscarawas Co. **(15)** 1.184 mi. Sect. "C" Stryker-Evansport Rd., Williams Co. **(16)** 2.58 mi. Sect. "D" Stryker-Evansport Rd., Williams Co., grading **(17)** 4.008 mi. Sect. "C-2" Celina-Van Wert Rd., Mercer Co., with **(a)** waterbound macadam **(b)** bituminous macadam, asphalt **(c)** bituminous macadam, tar **(d)** Kentucky rock asphalt **(e)** rein.-con. **(f)** plain concrete **(g)** brick **(h)** asphaltic macadam **(i)** waterbound macadam and Kentucky rock asphalt **(j)** waterbound macadam and bituminous concrete **(k)** bituminous concrete **(l)** tar macadam, from J. O. Petrie, Logan, **(1a)** $102,696; L. L. Clymer, Bluffton, **(2b)** $16,148 **(2d)** $17,186 **(3d)** $60,260; . B. Walther, Lima, **(2c)** $18,751; R. Stone, Lima, **(3b)** $53,018 **(3c)** $54,365 **(10b)** $66,704 **(10c)** $68,176 **(15h)** $26,143 **(15l)** $26,715; Hill & Hill, Elyria, **(4e)** .$157,617; Seiple & Wolfe, Youngstown, **(4b)** $144,366; Mahoning Constr. Co., Warren, **(4c)** $147,869 **(5b)** $301,809 **(5c)** $303,368 **(13b)** $87,696 **(13c)** $87,696; Ohio Contg. Co., Cleveland, **(5e)** $329,813; D. Aller, Findlay, **(6e)** $164,254 **(7e)** $91,738 **(8e)** $135,543 **(8f)** $132,059; W. D. Winchell Co., 337 Winchell St., Columbus, **(8g)** $163,496 **(13e)** $98,597; Lewis & Copeland, Lima, **(9e)** $39,240; C. J. Uible, Hillsboro, **(9b)** $34,911 **(9c)** $35,153; Elyria Constr. Co., 220 Elyria Blk., Elyria, **(11c)** $45,222; Highway Constr. Co., 903 Lorain Co. Bldg., Elyria, **(11h)** $37,253; N. B. Putnam, Van Wert, **(12i)** $112,378; H. P. Streicher Co., 319 Terminal Bldg., Toledo, **(12j)** $121,310 **(15k)** $32,959 **(16k)** $66,386; G. Hadley, Goldberg Bldg., Canton, **(14g)** $153,480; C. G. Fuller, Dover, **(14e)** $117,763; Homes Constr. Co., Wooster, **(14d)** $117,866; A. Langendefer, Toledo, **(15d)** $32,001 **(16d)** $64,104 **(16h)** $52,548; Frost Constr. Co., Findlay, **(15e)** $34,714; Newell & Smith, Defiance, **(16e)** $66,729; Lynn Constr. Co., Paulding, **(17)** $18,881. Noted Oct. 1.

Michigan — State Hy. Dept., Lansing, grading and surfacing 5.148 mi. Federal Aid Project 57, Sect. D, Kent Co., 58,110 cu.yd. excav., 54,503 sq.yd. concrete, from Marsman & Tabor, 211 Ashton Bldg., Grand Rapids, $140,097; 9,509 mi. State Trunk Line Rd. 27-6, Huron Co., 88,755 sq.yd. gravel from Bad Axe Constr. Co., Bad Axe, $96,031, 99,086 sq.yd. concrete from Meredith & McVaugh, 220 Horton Ave., Detroit, $216,024. Noted Sept. 27.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.11 mi. State Trunk Line Rd. 51-6, Ottawa Co., 13,173 sq.yd. concrete, from Cook & Clark, Grand Haven, $28,527. Noted Oct. 11.

Tex., Barstow—Ward Co., grading and gravel surfacing 5.5 mi. State Highway 1, Federal Aid Project 391 A, 18 ft., from Valient and Toomey, 1703 F & M Bank Bldg., Ft. Worth, $43,435. Engrs. est. $45,184. Noted Sept. 20.

Tex., Hillsboro — Hill Co., grading and gravel surfacing 5.65 mi. State Highway 2-E, Itasca Dist., 16 ft., from Womack Constr. Co., Sherman, $31,753, 14,195 cu.yd. gravel to be furnished by county, engrs est. $66,000; 4.85 mi. State Highway 2-E, Covington Dist., 16 ft., from Buchanan & White, Temple, $28,409, 12,617 cu.yd. gravel to be furnished by county, engrs. est. $64,000. Both projects will be surfaced later with bituminous topping. Noted Sept. 20.

Arizona—State Hy. Dept., Phoenix, grading, surfacing, etc., **(1)** Tucson-Nogales Highway, Federal Aid Project 66 **(2)** Tucson-Nogales Highway, Federal Aid Project 75 **(3)** grading, surfacing, buildings, bridges, etc., on Tucson-Nogales Highway, Federal Aid Project 25-B, **(4)** structures adjacent to Federal Aid Project 66, from Shumway Constr. Co., Mesa, **(1)** $17,847 **(2)** $21,208; Lown & Woods, Nogales, **(3)** 15,637 cu.yd. borrow $0.20, 1,274 cu.yd. gravel surfacing $0.75, 1,418 cu.yd. excav. $0.90, 1,140 cu.yd. Class A concrete $9.95, etc., total $37,090 **(4)** $3,029.

Wash., Seattle — Grading and paving Avalon Way et al., from Olympic Constr. Co., 1326 Northlake Ave., 4,812 lin.ft. asphaltic concrete curb $0.70, 24,490 lin.ft. concrete curb $0.50, 3,200 lin.ft. concrete sidewalk $1.50, 118,000 cu.yd. earth excav. $0.60 per cu.yd., 41,144 sq.yd. 7 in. concrete $2.20 per sq.yd., 17,490 sq.yd. 6 in. concrete $1.93 per sq.yd., total $315,321 for clay and $315,866 for concrete. Noted Oct. 4.

Calif., Glendale—Improving portions Winchester and 4th Sts., 4,156 lin. ft. grading, 125,787 sq.ft. 3 in. macadam, 3,482 ft. curb, 15,195 sq.ft. walks, 4,223 ft. of 4 in. c.i waterpipe, from W. J. Curren, 379 West Patterson St., $25,150.

Calif., Riverside—Riverside Co. improving Elsinore-Corona Highway, 12,914 cu.yd. excav., shaping 15,624 lin.ft. road bed, 249,983 sq.ft. 5 in. macadam with asphalt surface, etc., from Hall-Johnson Co., P. O. Box 51, Inglewood, $37,197.

Que., Montreal—From Sicily Asphaltum Paving Co., 60 St. Viateur St., improving Delormier Ave., 5,700 ft. granite curb at $2.50 per ft., 15,000 sq.yd. grading $0.85, 15,000 sq.yd. concrete foundation $1.55, 15,000 sq.yd. 3 in. asphalt $1.50, etc., total $77,759, paving with 3 in. asphalt 7,300 sq.yd. 9th Ave., $38,000, 3,600 sq.yd. Chabot St., $15,563, 2,550 sq.yd. Cartier St., $11,520; from B. Brault, 2855 Rosemount Blvd., paving with 3 in. asphalt 5,000 sq.yd. Bordeaux St., $25,025; from Quinlan Robertson & Janin, Ltd., 50 Notre Dame St. W., improving Sherbrooke St. from Canadian Pacific R.R. to Maisonneuve limits, 6,862 lin.ft. granite curb straight $2.70, 1,764 lin. ft. granite curb circular $3.50, 24,316 sq.yd. grading $1.25, 12,316 sq.yd. concrete foundation $1.75, 12,000 sq.yd. rein.-con. foundation $2.25, 23,916 sq.yd. 3 in. asphalt $1.60, etc., total $145,365, Sherbrooke St. from Delormier Ave. to Wurtele St., 5,310 lin.ft. granite curb straight $2.70, 16,990 sq.yd. grading $1.75, 8,990 sq.yd. concrete foundation $1.75, 8,000 sq.yd. rein.-con. foundation $2.25, 16,650 sq.yd. 3 in. asphalt $1.60, etc., total $110,892; from Duranceau & Duranceau, 127 Hamilton St., 1,138 sq. yd. concrete sidewalks on St. Pascal St., $6,070; from Rondou Corlier & Cie, 3506 Christophe Colomb St., 7,000 sq.yd. concrete sidewalks on De Gaspe St., $26,254.

Que., Montreal—Paving Gouin Blvd. from St. Lawrence St. to Cartierville, from B. Brault Ltd., 2855 Rosemount Blvd., 38,535 sq.yd. grading $1.35, 16,000 ft. cement curb straight $1.70, 1,080 ft. granite curb circular $3.50, 38,535 sq.yd. 3 in. asphalt $1.95, etc., total cost. $234,999.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, paving 3.986 mi. Project 368 in Barnstable Co., to Lane Constr. Co., 37 Colony St., Meriden, Conn., 46,950 sq.yd. 4 in. bitumi-

Streets and Roads (Continued)

nous concrete, $1.55 per sq.yd., 11,320 cu.yd. excav. $1.50, etc., total $170,086. Noted Sept. [illegible]

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., paving Valentine Ave., sheet asphalt, and East 178th St., bituminous concrete, to C. D. Beckwith, Inc., 2875 Bway., $16,427 and $6,298 respectively; Oak Terrace, sheet asphalt, to J. Gaffney, 438 East 91st St., $1,871; Faile St., sheet asphalt, and Sherman Ave., bituminous concrete, to Interboro Asphalt Co., 2306 Creston Ave., $13,554 and $27,626 respectively; East 204th St., sheet asphalt, to Asphalt Constr. Co., 208 Bway., $9,970; grading, curbing, laying sidewalks on Montgomery Ave., to Spedero & Turriamo, 3185 East Tremont Ave., $4,730; Purdy St., to F. Hanratty, $5,134; steps and appurtenances on Transverse Rd., to J. V. Timoney Constr. Co., 220 East 201st St., $6,798; sewer in Grand Blvd., to F. Gabrielle, $5,576; sewer in East 155th St., and 5 x 5 ft. rein.-con. culvert on Ludlow Ave., to M. Del Balso, 660 East 221st St., $1,978 and $14,957 respectively. Noted Oct. 18.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., sheet asphalt repaving 26th St., to W. J. Fitzgerald, 547 West 45th St., $38,181; East 31st, East 33rd, and East 49th Sts., to Sicilian Asphalt Paving Co., 41 Park Row, $16,447, $17,934 and $10,721 respectively; 73rd and 148th Sts., to J. E. Gaffney, 438 East 91st St., $15,489 and $16,475 respectively; widening and granite block repaving Bway. 35th St., to Burnside Contg. Co., 270 Burnside Ave., $5,437. Noted Oct. 18.

N. Y., Niagara Falls — Paving Pierce Ave., brick, to Read-Coddington Eng. Co., 238 Portage Rd., $49,566. Engrs. est. $52,000.

N. J., Trenton—Concrete and granite block paving Superior and West Hanover Sts., to A. DeLucia, 52 Bayard St., $2,014 and $12,798 respectively; Princeton Ave., to Trenton & Mercer Co. Traction Co., Broad St. Bank Bldg., $13,050.

W. Va., Huntington—Brick surfacing on new concrete, asphalt filler, 8th St., 3rd and 4th Aves., to Harrison & Dean, Huntington, $225,480. Noted Oct. 4.

N. C., Greensboro—Guilford Co., waterbound macadam surfacing 2.8 mi. McConnell Rd. from Greensboro to Buffaloe Creek, 16 ft., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh. Engrs. est. $36,100.

N. C., Troy—Montgomery Co. topsoiling 7 mi. road, to Harris & Moore, Mt. Gilead, $28,000. Noted Oct. 4.

Fla., Inverness — Citrus Co. improving 17.7 mi. Crystall River-Inverness Rd., 160,000 sq.yd. lime rock-sand clay asphalt, 64,000 cu.yd. grading, to Barns & Smith, Inverness, $225,000. Noted Sept. 27.

Fla., Miami—For highway improvement H 205, 7,400 sq.yd. sheet asphalt, 1,200 lin.-ft. curb and gutter, etc., to Morgan Hill Paving Co., Miami, $37,000. Noted Sept. 20.

Miss., Lexington—For 14,304 sq.yd. brick asphalt binder and coat, to E. A. Finch, Greenwood, $1.82 per sq.yd., about $26,000. Noted Sept. 27.

Louisiana—State Hy. Comn., Baton Rouge, 6.111 mi. Lafayette-Broussard Rd., Lafayette Parish, to Lafayette Constr. Co., Lafayette, $33,795.

Michigan — State Hy. Dept., Lansing, grading and surfacing 0.601 mi. Sect. A and 0.508 mi. Sect. B State Trunk Line Rd. 60-4, Berrien Co., Sect. A to Williston Constr. Co., South Bend, Ind., $19,382, Sect. B to R. C. Atkinson, Niles, $15,778; 5.421 mi. State Trunk Line Rd. 40-6, Sect. B, Van Buren Co., to Wilder, Gould & Cross, 877-11th St., Grand Rapids, $60,579; 6 mi. State Trunk Line Rd. 25-2, Sect. A, Luce Co., to Luce Co. Roads Comn., Newberry, $76,000; 5.696 mi. Federal Aid Project 89, Sect. D, Jackson Co., to Rockford Constr. Co., Rockford, O., $124,396. Noted Oct. 11 and 18.

Mich., Detroit—To Detroit Asphalt Paving Co., 20 McGraw Bldg., grading and paving with 3½ in. sheet asphalt on 8 in. concrete Covington Dr. $66,022, Mackie St. $24,570, Rochester Ave. $7,797, Wisconsin Ave., Sect. 2 $29,996; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Nevada Ave. $30,836, Pilgrim Ave. $11,401.

Ia., Des Moines—Paving various streets to G. F. Lambert, 208 Observatory Bldg., 854 sq.yd. concrete $2.67, and 3,526 sq.yd. concrete $2.54; to Des Moines Asphalt Paving Co., 2nd and New York Sts., 1,310 sq.yd. asphalt $2.84; to Wright Constr. Co., [illegible] Flynn Bldg., 7,853 sq.yd. asphalt $2.79 and 2,864 sq.yd. brick $3.64.

Ia., Waterloo—Black Hawk Co., grading and paving (1) 13.8 mi. Project 200, from Waterloo to Benton Co. Line (2) 11.45 mi. Project 201, Waterloo-Janesville Rd. (3) 6.89 mi. Project 202, Waterloo-Hudson Rd., to Bryant Paving Co., Waterloo, (1) grading $0.90, paving $2.39 total $377,982; to Moore-Young Constr. Co., Waterloo (2) and (3) grading $0.70 paving $2.54, totals $313,616 and $188,717 respectively. Noted Oct. 4.

Minnesota — State Hy. Dept., St. Paul, gravel surfacing 20,500 cu.yd. State Project 2-24, Federal Aid Project 129, between Moorhead and Glyndon, Clay Co., to Stevens Bros., Piedmont Bldg., $46,580. Noted Oct. 11.

Minn., Faribault — Rice Co., Job 2310, State Rd. 33, 150,860 cu.yd. earth excav., 2,400 cu.yd. loose rock and 652 cu.yd. solid rock excav., 199,737 cu.yd. overhaul, to Nolan Bros., 18 North 2nd St., Minneapolis, $55,000. Noted Aug. 23.

Minn., St. Paul—Paving Lexington Ave. between Summit Ave. and St. Clair St., 12,070 sq.yd. sheet asphalt, 3,690 lin.ft. straight curb, 915 lin.ft. radius concrete curb to Thornton Bros., 306 Central Bank Bldg., $41,047; oil asphalt paving 4½ mi. Crocus Hill Dist. and 1 mi. Juliet St. between Snelling and Fairview Aves., to Fielding & Shepley, 216 University Ave., $137,564 and $31,874 respectively. Noted Oct. 4.

Minn., St. Paul—Ramsey Co., grading and paving Project 23-69, Lake Phelan Blvd. between city limits and Minnesota Trunk Highway 1, 3,910 cu.yd. excav., 19,177 sq.yd. asphaltic concrete on broken limestone, 11,566 lin.ft. concrete curb, etc., to Hanlon & Okes, 338 Lumber Exch., Minneapolis, $61,157. Noted Sept. 20.

Kan., Oberlin—Decatur Co. grading Kansas City Denver Air Line, Federal Aid Project 165, Sect. A, to Bump Constr. Co., Prairie View, $50,165. Noted Sept. 27.

N. D., Wahpeton—Richland Co. gravel surfacing 8 mi. Federal Aid Project 71, to Cudd & Hidlebaugh, Foxholm, Minn., $39,236. Noted Oct. 11.

Tex., Cisco—Brick paving 90,000 sq.yd. West 6th and Front Sts., to Jordon Constr. Co., Electra, $280,000.

Oklahoma — State Hy. Dept., Oklahoma City, grading and paving 7.28 mi., road from Cyril to Cement, Coddo Co., 76,880 sq.yd. gravel, 46,199 cu.yd. earth and 12,050 cu.yd. rock excav., to A. A. Davis & Co., Grain Exchange Bldg., Oklahoma City, $90,361; 15.24 mi. highway from Dewey to state line, 18 ft., Federal Aid Projects 106 and 107, Washington Co., 160,512 sq.yd. Bates type concrete, 45,000 cu.yd. excav., to Greene-Beehman Co., First Natl. Bank Bldg., Oklahoma City, $480,035.

Okla., Muskogee—Grading and paving 10 blocks 7th and Omulgee Sts., 11,680 sq.yd. asphalt, 3,800 cu.yd. excav., to General Constr. Co., Herskowitz Bldg., Oklahoma City, $57,397.

Okla., Sand Springs—Improving 20 blocks in business section, 22,000 sq.yd. concrete, 5,600 cu.yd. excav., to Comstock-Smedley, Tulsa, $141,225.

Okla., Sapulpa—Grading and paving 8 blocks 9th and Central Sts., 9,000 sq.yd. concrete, 5,600 lin. ft. curbing, 2,800 cu.yd. excav., to Klinglesmith Eng. and Constr. Co., Drumright, Okla. $39,962.

Okla., Tahlequah—Curbing and plain concrete paving 14,000 sq.yd. in Dist. 1, to H. Tidd, 607 North Main St., Hutchinson, Kan., $60,536.

Wash., Seattle—Bd. Pub. Wks., paving and cluster lights on Denny Way et al., to D. A. Traphagen, Walker Bldg., $35,509. Engrs. est. $35,963. Noted Oct. 18.

Wash., Waterville—Douglas Co., improving 4.35 mi. Coulee-Mansfield Highway, to H. R. McGee & Co., Spokane, 16,512 cu.yd. earth excav. $0.30 per cu.yd., 10,556 cu.yd. loose rock $0.60, 6,098 cu.yd. solid rock $1.50, 6,448 cu.yd. crushed rock surfacing $2.10, total $36,699.

Calif., Los Angeles—Grading, curbing guttering, sidewalks and concrete paving Bellevue Ave., to G. A. Constantine, Haas Bldg., $37,858.

Calif., South Pasadena (Pasadena, P. O.) —Curbing, guttering, macadam paving and laying sidewalks on Gravelia St., to Pasadena Paving Co., Pasadena, $15,000; guttering, concrete paving, laying walks and sewers on Fremont St., to Ducey & Bernstein, Pasadena, $23,000. Noted Sept. 27.

Que., Montreal—To Quinlan, Robertson & Janin, Ltd., 50 Notre Dame St. W., paving with 3 in. asphalt 4,700 sq.yd. Fabre St. $22,615, 9,500 sq.yd. Marquette St. $45,745, 4,100 sq.yd. Garnier St. $20,225; to B. Brault, Ltd., 60 St. Viateur St., paving with 3 in. asphalt 4,550 sq.yd. Parthenais St. $18,052; to F. Lapan, 601 Lacordaire St., concrete sidewalks on 2,240 sq.yd. 9th Ave. $8,719, 2,500 sq.yd. Hector St. $11,180; to Leger & Lamoureux, St. Denis Bldg., concrete sidewalks on 640 ft. Pie 1X Blvd. $1,817, 3,250 sq.yd. 8th Ave. $12,470, 1,340 sq.yd. 5th Ave. $5,180; to Rondou Corlier & Cie, 3506 Christophe Colomb St., concrete sidewalks on 1,200 sq.yd. Lajeunesse St. $7,295, 820 ft. Drolet St. $1,961, 1,945 ft. Rivard St. $2,134, 1,350 ft. Baby St. $2,425, Hanatoux St. $7,294; to J. Toralli, 186 St. Marguerite St., concrete sidewalks on 370 ft. Chambord St. $1,552, 450 ft. Lacasse St. $1,450. Noted Sept. 6.

Que., Montreal—City will pave with asphalt 1,200 ft. Addington St., 30 ft., $12,580, 2,800 ft. Angers St., 30, 36 and 52 ft., $48,377, 1,121 ft. Villemarie St., 30 ft., $19,424, 117 ft. Adam St., 44 ft., $2,450, 900 ft. Nicolet St., 30 ft., $10,745, 980 ft. Hochelaga St., 36 ft., $17,748; 5 ft. concrete sidewalks on 500 ft. Villemarie St. $1,337, 1,100 ft. Nancy St. $4,031, 935 ft. Madison St. $2,246, 1,480 ft. Patricia St. $2,424, 620 ft. Rachel St. $1,926, by day labor. E. Gauthier, assist. city clk. Noted Sept. 6.

Que., Montreal—Paving 15,000 sq.yd. Delormier Ave., asphalt, to Sicily Asphaltum Paving Co., 60 St. Viateur St., $77,759; 1,138 sq.yd. concrete sidewalks on St. Pascal St., to Duranceau & Duranceau, 127 Hamilton St., $6,070.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, paving 2 mi. macadam road, 20 ft. wide, in Joyceville, to McGinnis & O'Connor, Joyceville, also ½ mi. macadam base course in Kingston, to McLean & Stidwell, Cornwall. Total est. $45,000.

Ont., Ottawa — Asphalt paving Carling Ave. from Preston St. to Fairmont Ave., to O'Leary Bros., Rideau St., $41,000.

Industrial Works

PROPOSED WORK

Conn., Hartford — F. C. Wales, archt., Trumbull St., preparing plans 1 story and basement, 100 x 100 ft. garage, brick and steel, plain foundation, Capitol Ave. $40,000. Owner's name withheld.

N. Y., Green Island (Troy P. O.)—J. A. Manning Paper Co., 68 George St. having plans prepared 1 story 38 x 150 ft., brick and timber factory, plain foundation, George St. $350,000. J. Foy, master mechanic.

N. Y., Newburgh—Crawshaw Carpet Co., 635 Bway., retained Lockwood-Green, archts. and engrs., 101 Park Ave., New York City, to submit report for new plant additions.

N. Y., New York—City of New York, Bellevue and Allied Hospitals, East 26th St., having plans prepared refrigerating plant, rein.-con., brick and steel, plain foundation, East 26th St. $65,000. Private plans. A. Judd, chn. building com.

N. Y., Niagara Falls—See "Miscellaneous."

N. Y., Penn Yan—Penn Yan Boat Co. plans 50 x 100 ft. storehouse. Will mature in spring.

N. Y., Ridgewood (Brooklyn P. O.)—H. C. Bohack, Inc., Metropolitan Ave. and Flushing St., soon takes bids rein.-con., brick and steel bakery, plain foundation, $450,000. Koch & Wagner, 32 Court St., Brooklyn, archt. and engr.

W. Va., Belington—City plans to rebuild power plant recently destroyed by fire. $40,000.

Ky., Covington—Louisville & Nashville R.R. Co., 10th and Bway, Louisville, plans freight station, here. $150,000. W. H. Courtnay, ch. engr. Noted Aug. 9.

O., Cleveland—City Ice & Fuel Co., c/o C. C. Coneby, constr. mgr., Cadillac Bldg., having revised plans prepared by Arctic Ice Machine Co., 920 Market Ave. S., Canton, 1 story, 66 x 184 ft., brick, steel and concrete plant, East 124th St. and Union Ave. $60,000. Noted Oct. 11.

O., Cleveland—B. Ris, c/o A. N. Ferguson Co. archts., 12821 Phillips Ave., had plans prepared 2 story and basement, 40 x 156 ft., brick and timber factory, 3035 St. Clair Ave. $60,000

O., Cleveland—White Motor Co., 842 East 79th St., having plans prepared by Watson Co., 4614 Prospect Ave., 1 story, 100 x 100 ft., brick, steel and concrete factory addition. $50,000.

Mich., Detroit—Baxter, O'Dell & Halpin, archts., 1024 Hammond Bldg., takes bids about Oct. 25, 2 story, 78 x 101 ft. addition to factory, brick and steel, plain foundation, 2nd and Amsterdam Aves., for Caille Bros. Co., 6210 2nd Ave.

Mich., Detroit—Michigan Stamping Co., 11031 Mack Ave., had plans prepared by A. Kahn, Marquette Bldg., 1 and 2 story addition, adding 1 bay and making all 5 story, rein.-con. building, Hart Ave. $75,000.

Industrial Works (Continued)

Mich., Detroit—P. Rossello, archt., 406 Congress Bldg., preparing plans 6 story and basement, 50 x 100 ft., rein.-con., brick and steel warehouse, plain foundation, West Side. $250,000. Owner's name withheld.

Wis., Friesland—Friesland Canning Co. had plans prepared by J. E. Hennen, South Main St., Fond du Lac, 2 story, brick and timber cannery.

Wis., Milwaukee—School Bd., 10th and Prairie Sts., had plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 2 story, 147 x 172 ft., brick and concrete warehouse, plain foundation, 11th St. Bids Nov. 1 for excavation. $175,000.

Wis., Milwaukee—Republic Building Co., 204 11th St., had plans prepared by M. Tullgren & Sons, 425 East Water St., 1 story and basement, 55 x 150 ft., brick and concrete addition to film storage building, plain foundation, Wells St. $40,000.

Wis., Waukesha — Thompsons Malted Food Co., Riverside Dr., had plans prepared by H. J. Esser, 82 Wisconsin St., Milwaukee, 3 story, 52 x 60 ft., brick and concrete addition, plain foundation. $40,000.

Mo., Norborne—See "Waterworks."

Mo., St. Louis—Jersey Farm Dairy Co., 1007 Russell Ave., having plans prepared by Larkin Eng. Co., archts. and engrs., 424 North Third St., 2 story and basement, 50 x 80 ft., rein-con. plant, plain foundation. $40,000.

Tex., Haskell—Western Cotton Oil Co. plans to rebuild mill recently damaged by fire. $75,000. Engineer and architect not selected.

Tex., Magnolia Park—City having plans prepared by Jones & Lewis, engrs., San Francisco, and H. Culpepper, city engr., gas works and 30 mi. mains. $300,000 bonds voted.

Tex., Mildred—Humble Oil & Refining Co., Great Southern Life Bldg., Dallas, had plans prepared casing head gasoline plant, here. $200,000. Private plans.

Ore., Portland—City Comrs. plan garage and machine shop, Montgomery and Larabee Sts. $150,000. O. Laurgaard, city engr.

Calif., Fresno — Farmers Dairy, 1515 Bway. St., plans milk pasteurizing plant. To exceed $40,000.

Calif., Long Beach—F. A. McKenzie Co., 212 Locust St., having plans prepared by H. L. Gogerty, 239 East Bway., 1 story, 50 x 150 ft. auto service building, brick, American Ave.

Calif., Long Beach—Southern Service Co., 925 West 7th St., having plans prepared by Wright & Gentry, Marine Bank Bldg., 2 story, 50 x 80 ft. shop addition, and 1 story, 80 x 125 ft. laundry addition, both brick, Bway. and Mitchell Sts.

Calif., Los Angeles—Industrial Stores Co., c/o C. C. Rittenhouse, archt., Wilcox Bldg., having plans prepared 1 story, 150 x 225 ft., brick garage, East 7th St.

Calif., Los Angeles—Solar Lighting Co., 219 East 4th St., having plans prepared by W. D. Lee, Sun Bldg., 2 story, 50 x 150 ft. brick factory, Los Angeles St.

Calif., Newport Beach—Orange Co. Harbor Comn., Santa Ana, plans to vote on $75,000 bonds for warehouses and wharves at harbor, here.

Calif., Oakland — E. H. Vincent, 3121 Humboldt Ave., plans factory. To exceed $40,000.

Calif., Paso Robles—Pioneer Garage (W. C. Henderson), having plans prepared by Miller & Warnecke, Perry Bldg., Oakland, 2 story, garage addition. $40,000.

Calif., San Diego—Atchison, Topeka & Santa Fe Ry. Co., Kerchkoff Bldg., Los Angeles, having plans prepared creosoting plant, power house and tanks, here. To exceed $200,000. D. Murry, c/o owner, engr.

Ont., Galt—P. W. Gardiner & Sons plan to rebuild planing mills, recently destroyed by fire. $100,000.

BIDS DESIRED

Conn., Hartford—B. A. Sellew, archt., 721 Main St., taking bids and opens same about Oct. 23, 1½ story, 90 x 90 ft. garage, brick and steel, plain foundation, Walnut St. $40,000. Owner's name withheld. Noted Oct. 11.

N. Y., Vischers Ferry—Nov. 8, by E. S. Walsh, comr. Canals and Waterways, Albany, superstructure of power house and work incidental thereto, at dam, here, Contr. B-4; adv. E. N.-R. Oct. 25.

Pa., Phila.—Oct. 18, by L. Rothschild, 215 South Broad St., 1 story 26 x 53 x 76 x 102 x 125 x 211 ft. garage, rein.-con., brick and steel, Carlisle St. near Montgomery Ave., for L. Friedman, Inc., Agent, 251 South 15th St. $175,000.

La., Baton Rouge—Baton Rouge Ice Co., Repentance St., taking bids 3 story, 100 x 100 ft. cold storage and ice plant, concrete and brick. G. E. Wells & Co., Baton Rouge, archts.

O., Steubenville—F. Scott (Studebaker Agency), taking bids 2 story and basement, brick and rein.-con. auto service and sales building. $75,000. W. S. Ferguson Co., 1900 Euclid Ave., Cleveland, archts.

Wis., Sheboygan—D. & D. Hanger Panel Co., c/o H. Davis, pres., 721 Jefferson St., taking bids 2 story, 80 x 87 ft., brick, rein.-con. and steel, factory, plain foundation, $50,000. W. C. Weeks, 720 Ontario Ave., archt.

Wis., Spring Green—Spring Green Canning Co., c/o W. P. McDonnell, chn., taking bids 2 story, 30 x 140 ft., brick and rein.-con. factory, plain foundation. $50,000. Private plans. Noted Oct. 18.

Wis., Waukesha—H. J. Esser, archt., 82 Wisconsin St., Milwaukee, taking bids and opens same about Oct. 29, 2 story, 52 x 64 ft. addition to factory, brick and concrete, plain foundation, also 1 story, 50 x 100 ft. concrete garage, for Thompson Malted Food Co., Riverside Dr. $40,000 each. Noted Oct. 25.

Calif., Bakersfield—Engineering Dept. of Atchison, Topeka & Santa Fe Ry., Kerckhoff Bldg., Los Angeles, receiving bids 50 x 500 ft. foundation, platform and oil storage basement and store house. Bids for superstructure to be taken later.

Ont. Walkerville — Berry Bros. Inc., Walker Rd., receiving bids 3 story and basement, 60 x 100 ft., factory addition, brick and rein.-con., Walker Rd. $60,000. Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, Mich., archts. Noted Oct. 4.

CONTRACTS AWARDED

Conn., Bridgeport—R. Wallenta, Maple Ave., 2 story, 60 x 90 ft. factory, brick and steel, plain foundation, Maple Ave., to Lawrence & Coe Constr. Co., 372 Trumbull St., Hartford. Archts. est. $45,000.

Conn., Hartford — Skayef Ball Bearing Co., 330 New Park Ave., 2 story, 50 x 80 ft., brick and steel factory, plain foundation, New Park Ave., to Industrial Constr. Co., 721 Main St. Archts. est. $40,000.

N. Y., Brooklyn—W. Feistag, c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build 1 story, 100 x 150 ft., brick, steel and stone, plain foundation, Liberty Ave., by day labor. $50,000.

N. Y., Penn Yan—Penn Yan Boat Co., 1 story, 50 x 186 ft. tile, steel and concrete factory, and retaining wall along water front, to W. A. Randall, Penn Yan, $40,000.

Pa., Phila.—Delaney & Co., Cottman and Milnor Sts., 2 story, 140 x 180 ft., brick and timber factory, plain foundation, Cottman and Milnor Sts., to A. Raymond Raff Co., 1635 Thompson St., $60,000.

Pa., Phila. — Amer. Ice Co., 121 North Broad St., 3 story, 57 x 150 ft. ice storage and manufacturing plant, 17th and South Sts., to Sutton & Stephensen, 13th St. and Washington Ave.

Pa., Phila.—Koelle-Greenwood Motor Co., 6025 Germantown Ave., 2 story and basement, 70 x 209 ft. garage, Chelton Ave. east of Wayne St., to Turner Constr. Co., Presser Bldg. Archts. est. $100,000. Noted Aug. 9.

Md., Baltimore—G. R. Callis, Jr., archt., Amer. Bldg., 6 story, 60 x 150 ft., concrete plant, concrete pile foundation, Commerce and Pratt Sts., to Frainie Bros. & Haigley, 19 West Franklin St., for Baltimore News & American, Fayette and Calvert Sts. $300,000. Noted Sept. 27.

N. C., Greenville—Teachers Training College, additional power plant, to Dermott Heating Co., Durham, $122,750.

Tenn., Jacksonville—Du Pont Fibre Silk Co., Du Pont Bldg., Wilmington, Del., will build first unit of $4,000,000 plant, here, by day labor. Construction will begin about Nov. 1. Noted July 26.

Tenn. Nashville—Nashville Paper Stock Co., 4 story brick warehouse, 2nd and Church Sts., to Mangrum & Bell Constr. Co., Murfreesboro, $40,000. Noted Oct. 11.

Tenn., Nashville—Turner, Day & Woolworth Handle Co., Inc., 1404 Adams St., 2 story, 60 x 145 ft., rein.-con. and brick factory (first unit) to H. P. Jacobs Constr. Co., Independent Life Insurance Bldg., $40,000. Noted Oct. 18.

O., Cleveland—H. D. Koblitz, Osborn Bldg., 1 story, 89 x 116 ft., brick and steel garage and commercial building, 2118 East 55th St., to A. Bloom, 10621 Canfield Ave. Archts. est. $50,000. Noted Sept. 13.

O., Cleveland — Miller-Becker Co., 6411 Central Ave., 2 story and basement, 60 x 128 ft. bottling plant, brick and steel, 6317 Central Ave., to J. Miller, 10819 Drexel Ave. Archts. est. $60,000.

Ind., Evansville—International Harvester Co., 101 North Garvin St., 1 story, 80 x 125 ft. warehouse, brick, Garvin Ave., to M. J. Hoffman Constr. Co., Furniture Bldg., $40,000.

Mich., Detroit — F. L. Bromley, 2642 East Grand Blvd., 1 story, 75 x 340 ft. and 40 x 80 ft. brick and steel factory buildings, rein.-con. loading docks and depressed tracks, Unit 2, to Everett Winters Co., 751-754 Book Bldg., $125,000.

Mich., Detroit—Towson Body Co., 1424 Aberle St. additon to plant, brick and rein.-con., plain foundation, to H. G. Christman Co., 315 Stevens Bldg. $160,000.

Ill., Chicago—Western Electric Co., 22nd St. and Cicero Ave., 4 story, 160 x 180 ft., fireproof warehouse, Kostner St. near Ogden Ave., to J. Bhedden & Co., 100 North La Salle St. Archts. est. $1,000,000.

Wis., Arlington—E. A. Banks, Cambria, will build 2 story, 60 x 90 ft., brick, rein.-con. and steel factory, plain foundation, by day labor. $50,000. Noted Sept. 13.

Wis., Deerfield—Deerfield Canning Co., c/o G. O. Bergland, will remodel 2 story, brick and timber cannery, by day labor. $50,000. Private plans.

Wis., Elkhorn—G. A. Van Velzer, Williams Bay, 1 story, 52 x 100 ft., brick and concrete garage, plain foundation, to Morrissey Bros., Elkhorn. $40,000. Noted Oct. 4.

Wis., Green Bay—Badger Show Case Co., 133 North Pearl St., 2 story, 60 x 162 ft., brick and timber factory, plain foundation and 37 x 42 ft. boiler house and dry kiln, brick, to F. De Coster, 1011 Mather St. Archts. est. $50,000.

Wis., Kenosha — Amer. Brass Co., 570 Elizabeth St., taking bids 1 story, 222 x 542 ft., brick and steel mill, plain foundation. Private plans Steel, to Amer. Bridge Co., 30 Church St., New York.

Wis., Madison—Chicago & Northwestern Ry., c/o B. R. Kulp, engr., 201 South Blair St., 2 story, 50 x 100 ft. machine and repair shop, brick, rein.-con. and steel, plain foundation, to G. W. Gindele Co., 4217 Belle Plains Ave., Chicago. Engrs. est. $40,000. Noted Sept. 13.

Wis., Medford—Medford Canning Co., c/o J. B. Weix, mgr., Oconomowoc, will build 3 story, 50 x 120 ft. main factory, 1 story, 100 x 128 ft. warehouse and 1 story, 40 x 40 ft., power house, brick and timber, plain foundation, here, by day labor. Private plans.

Wis., Milwaukee—Finkler Motor Car Co., 924 3rd St., 1 story, 62 x 100 ft., brick and concrete addition, plain foundation, to E. Dreyer, 1008 6th St. $40,000.

Wis., West Bend—Atlantic & Pacific Products Co. 1 story, 100 x 172 ft., brick and timber addition, plain foundation, to West Bend Constr. Co., West Bend. $60,000.

Minn., Bemidji—Blue Valley Creamery Co., 700 South Clinton St., Chicago, 2 story, 60 x 140 ft. plant, brick and concrete, general contract to S. H. Des Marais, Staples, $31,449. Noted Oct. 4.

Kan., Topeka—G. L. Jordan Bakery Co. general contract 3 story, 75 x 100 ft., brick and rein.-con. bakery, to Sonne Constr. Co., Topeka. Noted Sept. 27.

Mo., Cape Girardeau—Groves Motor Co., 2 story, 100 x 100 ft., brick and concrete garage and sales building, Prague and Spruce Sts., to J. W. Gerhart Constr. Co., Cape Girardeau. Archts. est. $50,000.

Mo., St. Louis — Quick Meal Stove Co., Kingshighway and Daggett St., 1 and 2 story, 83 x 316 ft., brick and rein.-con. factory, Wilson Ave., to Kellerman Constr. Co., Victoria Bldg. Archts. est. $75,000.

Calif., Long Beach—California Seamless Shoe Corp., 2234 Dayton St., Los Angeles, 1 story, brick factory, here, to Moran Co., Kerckhoff Bldg., Los Angeles, $40,000.

Calif., Los Angeles—Hanna, Butterworth & Turner, 2 story, 100 x 145 ft. factory, brick, Wall St. near 10th St., to Moran Co., Kerckhoff Bldg., $75,000.

Calif., Santa Ana—Excelsior Creamery Co., 1012 East 1st St., 1 story, 50 x 100 ft. creamery, steel, to Austin Co. of California, Bartlett Bldg., Los Angeles.

Buildings

PROPOSED WORK

Mass., Chelsea (Boston, P. O.)—High School—Pub. Wks. Dept. rejected bids Oct 4 constructing high school. Will take new bids within month. Noted June 7.

Buildings (Continued)

Mass., Holyoke — Church — Holy Cross Church plans church, Dwight St. $150,000. J. C. Ivers, pastor.

Conn., Bristol—Telephone—Southern New England Telephone Co., 14 Summer St. plans 4 and 5 story, brick and steel, Main St. $200,000.

Conn., Derby—Nurses Home—Griffin Hospital, Seymour Ave., plans 3 story, brick and stone, plain foundation, Seymour Ave. $200,000. Engineer and architect not selected.

Conn., Hartford—Apartment—Ferrigno & Perrone, 44 Garden St., plan brick, Farmington Ave. $200,000. Engineer and architect not selected.

Conn., Hartford—Business—H. Zinman, 38 Oakland Terrace, plans 4 story, brick, plain foundation, Broad St. $150,000. Golden-Storrs & Co., 1127 Main St., archts.

N. Y., Brooklyn—Apartment—Abraham Lincoln Apt. Inc., c/o S. Malkind, archt. and engr., 16 Court St., having plans prepared 4 story, 250 x 350 ft., steel and stone, plain foundation, Bay Parkway. $900,000.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York, had plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York, brick, steel and stone, plain foundation, 16th Ave. and 71st St., here. $187,000.

N. Y., New York—Apartment—F. Morell, c/o G. F. Petham, archt. and engr., 200 West 72nd St., soon takes bids brick, steel and stone, plain foundation, West 71st St. $350,000.

N. Y., New York—Apartment—F. Starkman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., soon takes bids brick, steel and stone, plain foundation, East 38th St. $350.000.

N. Y., New York — Apartment — Three Hundred Two-Four West 75th St. Corp., c/o R. T. Lyons, archt. and engr., 342 Madison Ave., soon takes bids 15 story, brick, steel and stone, plain foundation, West 75th St. $750,000. Noted March 29.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon takes bids brick, steel and stone, plain foundation, 368 East 150th St. $270,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs.

N. Y., New York—Loft—A. Greenbaum, c/o E. Roth, archt. and engr., 119 West 40th St., preparing plans brick, steel and stone, plain foundation, 256 West 38th St. $350,000.

N. Y., New York—Loft—L. Wintner, c/o G. and E. Blum, archt. and engr., 505 5th Ave., having plans prepared 16 story, brick, steel and stone, plain foundation, West 35th St. $750,000.

N. Y., New York—Office, etc.—Northern Union Gas Co., Webster Ave., having plans prepared by Jardine, Hill & Murdock, archts. and engrs., 347 Madison Ave., 4 story office building and shops, rein.-con., brick and steel, plain foundation, East Kingsbridge Rd.

N. Y., New York—Theatre—Picadilly Holding Co., 1650 Bway., having plans prepared by Schloss & Orlando, archts. and engrs., 105 West 40th St., brick, steel and stone, plain foundation, 1662-66 Bway. $350,000.

N. Y., Niagara Falls—Store—Beir Bros., Falls St., plan 4 story, 66 x 132 ft. addition. $150,000. Engineer and architect not announced.

N. J., Irvington—High School—Bd. Educ. had plans prepared by D. Barber, archt and engr., 101 Park Ave., New York City, brick, steel and stone, plain foundation, Clinton Ave. $500,000.

Pa., Altoona — Bank — First National Bank, 11th Ave. and 12th St., plans 3 story and basement, 75 x 120 ft., rein.-con. brick, tile and stone. $200,000. Architect not selected.

Pa., Johnstown—Safety—H. L. Opperman, supt. Dept. Pub. Safety, receiving sketches 2 story and basement, 100 x 120 ft., rein.-con., brick and steel, Washington St. $150,000.

Pa., Mahanoy City—Theatre—Chamberlain Amusement Enterprises, Inc., Shamokin, having plans prepared by W. H. Lee, 1505 Race St., Phila., 3 story, 70 x 161 ft., Main and Market Sts., here. $250,000.

Pa., Shamokin—High School—Bd. Educ. having plans prepared by W. H. Lee, 1505 Race St., Phila., 3 story an basement, brick and steel, East Coal Dist., Coal Twp.

Va., Virginia Beach — Hotel — Pennsylvania R.R., Broad St. Sta., Phila., Norfolk & Western R.R., Norfolk, Norfolk & Southern R.R., Norfolk, and Norfolk & Washington Steamship Line, Front St., Norfolk, are promoting construction of $3,000,000 tourist hotel, here.

W. Va., Beckley—Schools—Bd. Educ. sold $450,000 bonds for schools.

N. C., Asheville—Court House—Buncombe Co. plans court house. $200,000. E. M. Lyda, chn. of comrs.

N. C., Chapel Hill—Dormitories—University of North Carolina, plans 3 dormitories, brick, on campus. $336,000. J. Sprunt Hill, Durham, chn. building com.

N. C., Greensboro—Apartment—Greensboro Apartment House Corp., plans 5 story and basement, fireproof, Carolina Ave. $400,000. Engineer and architect not selected. Address H. R. Bush, c/o Chamber of Commerce.

N. C., Greensboro—Temple—Greensboro Masonic Temple Co. plans temple. $200,000 or more. L. H. Hole, chn. of temporary com.

N. C., Wilmington—Hotel—Cape Fear Hotel Co. soon takes bids 8 or 10 story, 2nd and Chestnut Sts. $850,000. G. L. Preacher & Co., Commercial Bank Bldg., Raleigh, and Healy Bldg., Atlanta, Ga., archts.

Ga., Atlanta—Hotel—H. R. and C. R. Cannon having plans prepared by G. L. Preacher & Co., Healy Bldg., 12 story, basement and sub-basement, 115 x 143 ft., Peachtree and Cain Sts. $1,250,000.

Tenn., Memphis—Hotel—Southern Hotel Co. Inc., 257 South Main St., lets contract about Dec. 10, 12 story, South 2nd, Union and 3rd Sts. $3,000,000. Clearing contract let to W. J. Newman Co., 210 North Curtis St., Chicago. Noted July 28.

Ky., Louisville — Hospital — Kosair Temple, Mystic Shrine, plans convalescent home for crippled children, cottage institutional plan. $170,000.

O., Arcadia—School—Bd. Educ. having plans prepared by T. D. McLaughlin, Savings Bldg., Lima, 2 story and basement, brick and concrete. $150,000.

O., Cleveland — Apartment — Euclid-84th Co., c/o J. J. Klein of Klein & Harris, Engineers Bldg., plans 4 or 6 story, brick, East 84th St. and Euclid Ave. $600,000. Engineer and architect not selected.

O., Cleveland — Commercial and Apartment—S. Deckelbaum, 11502 Hopkins Ave., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 85 x 165 ft., brick, Euclid Ave. $200,000.

O., Cleveland—Office and Retail—Cleveland Window Glass & Door Co., c/o W. K. Palmer, pres., 209 Champlain Ave., having preliminary plans prepared by Allen-Osborn Co., Rose Bldg., 3 story, brick, steel and concrete, on lot 99 x 180 ft., 1200 Bolivar Rd. $150,000.

O., Columbus — Archiological — Bd. Trustees Ohio State University, had revised plans prepared by J. N. Bradford, c/o owner, 4 story and basement, brick, stone and concrete, on campus. $238,000.

O., Dayton—Sales, etc.—Dayton & Troy Auto Co., 2nd and St. Clair Sts., plans 10 story and basement, 60 x 200 ft. auto sales and repair shop, rein.-con. and brick, plain foundation. $500,000. Engineer and architect not selected.

O., Lakewood (Cleveland P. O.)—Apartment—M. Narosny and S. Liebhaber, 11523 Tuscora Ave., Cleveland, having plans prepared by L. R. Walker and J. L. Mauer, 1900 Euclid Ave., Cleveland, 3 story and basement, brick, Clifton Blvd. near Cove Ave., here. $150,000.

O., Sylvania—High School—Bd. Educ. having plans prepared by T. McLaughlin, Savings Bldg., Lima, 2 story and basement, rein.-con. and brick. $150,000. Noted July 12.

Mich., Detroit—Apartment—J. L. Weinberg, archt., 401 Congress Bldg., preparing plans 3 story and basement, 100 x 100 ft., brick and steel, plain foundation, Grand River Ave. $150,000. Owner's name withheld.

Mich., Detroit—Church—Associated Methodist Episcopal Church, having plans prepared, c/o P. R. Rossello, archt., 406 Congress Bldg., 2 story, 80 x 120 ft., brick, steel and stone, plain foundation, Frederick and St. Antoine Sts. $300,000.

Mich., Detroit—Community Hall—Edmonton Building Corp., c/o Beckett & Akitt, archts., 73 Monroe Ave., having plans prepared 5 story and basement, 100 x 200 ft. rein.-con. and brick, plain foundation, Grand River and Linfield Aves.

Mich., Detroit — Hotel — J. Barlum, 206 East Grand River Ave., having plans prepared by Bonnah & Chaffee, 528 Farwell Bldg., 8 story and basement, 50 x 200 ft. rein.-con. and brick, plain foundation, Woodward Ave.

Mich., Detroit—Morgue—Wayne Co., c/o Bd. Wayne Co. Auditors, County Bldg., having plans prepared by A. H. Gould & Son, 602 Empire Bldg., 2 story, 85 x 136 ft. brick and steel, plain foundation, Lafayette and Brush Sts. $150,000.

Mich., Eloise—Infirmary—Eloise Hospital having plans prepared by MacFarlane, Maul & Lentz, 1257 David Whitney Bldg., 4 story, rein.-con., brick and steel addition, plain foundation. $900,000.

Mich., Grosse Pointe—School—Consolidated Grosse Pointe School Dist. having plans prepared by G. J. Haas, 1101 Kresge Bldg., Detroit, 2 story and basement, 100 x 150 ft., brick, steel and rein.-con., plain foundation. $200,000.

Mich., Redford—School—Bd. Educ. having plans prepared by Verner, Wilhelm & Molby, archts., 602 Book Bldg., Detroit, 2 story and basement, 48 x 152 ft., brick, steel and concrete, plain foundation, Grand River Ave. $150,000.

Ill., Chicago—Apartment—J. S. Smith, c/o J. Hocke, archt., 7602 Chappel Ave., plans 3 story and basement, fireproof, 67th and Clyde Sts. $350,000.

Ill., Chicago — Club — Iroquois Club, 26 North Dearborn St., plans 21 story, fireproof, Michigan Blvd. and Lake. $3,500,000. J. Hunt, 30 East Ontario St., archt.

Ill., Des Plaines—Temple—Des Plaines Masonic Temple Assn., 1st Natl. Bank Bldg., plans 3 story, 82 x 142 ft., fireproof, Lee and Milnar Sts. $150,000. C. Hatzfeld, 7 South Dearborn St., Chicago, archt.

Ill., Wheaton—High School—Bd. Educ. plans 3 story high school, fireproof. $160,000. J. C. Llewellyn, 38 South Dearborn St., Chicago, archt.

Wis., Bloomington—School—Bd. Educ. having plans prepared by J. R. and E. J. Law, 1st Central Bldg., Madison, 2 story, 60 x 150 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Kenosha—Hotel and Store—F. and E. Dayton, Palace Theatre Bldg., having revised plans prepared by White & Co., Pub. Serv. Bldg., 8 story, 42 x 100 ft. and 25 x 70 ft., brick, tile and concrete, plain foundation. $200,000.

Wis., Madison — Memorial — University Union having plans prepared by A. Peabody, archt., Capitol, and Eschweiler & Eschweiler, associated archts., 210 Mason St., Milwaukee, 4 story and basement, 176 x 260 ft., stone and concrete, plain foundation, Langdon St. $1,200,000. Takes bids this winter on foundation and excavation.

Ia., Dubuque — Nurses Home — Finley Hospital having plans prepared by F. K. Seam, Dubuque, 3 story and basement, 50 x 150 ft., stone and tile, Dollin and Allison Pl. $150,000.

Ia., Sioux City—High School—Bd. Educ. having plans prepared by Beuttler & Arnold, 407 rain Exch. Bldg., 3 story and basement, 230 x 230 ft., rein.-con., brick, tile and stone. $400,000.

Minn., Redwood Falls—School—Bd. Educ. having plans prepared by G. Pass & Son, Mankato, 2 story and basement, 147 x 150 ft., rein.-con., brick and tile. $150,000. H. M. Aune, clk.

Kan., Baldwin—College—Baker University having preliminary plans prepared by T. W. Williamson & Co., Central Natl. Bank Bldg., Topeka, 2 story and basement. rein.-con., brick and stone, plain foundation. $300,000.

Tex., Dallas—Theatre—Flint & Broad, archts., Andrews Bldg., prepared plans concrete, brick and steel, Commerce St. $200,000. Owner's name withheld.

Tex., San Antonio — Y. M. C. A. takes bids Nov. 1, 8 story, rein.-con., brick and stone, plain foundation, Martin St. $400,000. W. E. Simpson, N. B. C. Bldg., engr. Adams & Adams, 517 Gibbs Bldg., archts. Excavation let to city.

Tex., Waxahachie — Dormitory, etc. — Trinity University plans dormitory, gymnasium, chapel and science hall. $450,000. J. H. Burma, pres.

Wash., Seattle—Auditorium—Election in spring to vote on $750,000 bonds for municipal auditorium.

Ore., Portland — School — School Bd. Dist. 1 takes bids about Dec. 11, 2 story and basement, rein.-con. and stucco, Glenco, here, $200,000. A. E. Doyle, Worcester Bldg., archt.

Calif., Antioch—Hotel, Store and Office—Building corporation being organized and having preliminary plans prepared by W. O. Lewis, 460 Montgomery St., San Francisco, 2 story, brick. $150,000.

Calif., Glendale—Store and Theatre—J. Russell, et al., 208 South Brand Ave., hav-

Buildings (Continued)

ing plans prepared by Lindley & Selkirk, Amer. Bank Bldg., Los Angeles, rein.-con. To exceed $200,000. Coast Theatre Co., Knickerbocker Bldg., Los Angeles, lessee.

Calif., Gridley—High School—Gridley High School Dist. defeated $150,000 bonds for new high school.

Calif., Los Angeles—Apartment—Eastin Realty Co., 2106 West Pico St., had plans prepared 3 story and basement, brick, Pico and Wilton Sts. $150,000. Private plans.

Calif., Los Angeles — Office — Syndicate having plans prepared by Curlett & Beelman, 408 Union Bank Bldg., 13 story, 100 x 120 ft., brick and steel, 5th and Hill Sts. $1,500,000.

Calif., Los Angeles—Store and Office—F. E. Keeler, et al., Pacific Mutual Bldg., having preliminary plans prepared by Curlett & Beelman, Union Bank Bldg., rein.-con. and steel, 5th and Hill Sts. To exceed $750,000.

Calif., Los Angeles—Store, Office and Apartment—Conway Co., 823½ West Pico St., having preliminary plans prepared by W. F. Bowen, Union League Bldg., 3 story and basement, 115 x 115 ft., brick and steel, Pico and Harvard Sts.

Calif., Sacramento—Church—First Congregational Church having preliminary plans prepared by E. C. Hemmings and L. F. Starks, Ochsner Bldg., 1 story, rein.-con. and brick, L and 29th Sts. $150,000.

Calif., San Francisco — Hospital — City and San Francisco Co. takes bids about Feb. 1, group of six 2, 3 and 4 story, hospital buildings, rein.-con., incl. ward and administration buildings, etc. $1,750,000. J. Reid, Jr., 1st Natl. Bank Bldg., archt.

Calif., San Jose—Lodge—Scottish Rite Temple Assn. having revised plans prepared by C. Werner, Santa Fe Bldg., San Francisco, 2 story and basement, rein.-con., 3rd and St. James Sts. $200,000. Former bids rejected. Noted May 10.

Ont., London — Seminary — St. Peters Seminary, Dufferin Ave., having plans prepared by Pennington & Boyd, Bartlett Bldg., Windsor, brick, steel and stone, $500,000.

Ont., Ottawa — Archives — Dept. Pub. Wks. soon takes bids 4 story addition, rein.-con., brick and stone, Sussex St. $400,000. R. C. Wright, c/o Dept. Pub. Wks., archt.

Ont., Ottawa—Home—Ottawa Protestant Orphans Home plans rein.-con. and brick, plain foundation, Carling Ave. $150,000. Engineer and architect not selected.

BIDS DESIRED

N. Y., Brooklyn—High School—Nov. 13, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., addition to Erasmus Hall High School, Bedford Ave., for Bd. Educ., 500 Park Ave., New York. Noted Dec. 22.

N. Y., Hicksville—High School—Oct. 29, by Bd. Educ., brick, steel and stone, plain foundation. $200,000. Coffin & Coffin, 522 5th Ave., New York City, archts. and engrs. Noted Sept. 21.

N. Y., Syracuse—School—Oct. 27, by Bd. Contr. & Supply, 2 and 3 story, rein.-con., brick and steel, Seymour St. J. A. Randall, S. A. and K. Bldg., archt. W. J. Burns Co., Keith Theatre Bldg., (low bidder) at opening Oct. 8, withdrew bid claiming mistake in bid price. Noted Sept. 20.

N. J., Trenton—Nov. 6, by J. O. Hunt, archt., 219 East Hanover St., 4 story, brick and steel, for Y. W. C. A., 141 East Hanover St. $600,000. Former bid rejected. Noted Sept. 20.

Pa., Flourtown—High School—Nov. 1, by Springfield Twp. School Bd., Springfield Twp. Bldg., Bethlehem Pike, Erdenheim, 2 story and basement, concrete, brick and steel, here. $200,000. Ritter & Shay, North Amer. Bldg., Phila., archts.

Pa., Lancaster—School—Oct. 30, by Bd. Educ., 3 story and basement, 148 x 210 ft., rein.-con., brick and steel, West Walnut and Nevin Sts. $600,000. C. E. Urban, 442 Woolworth Bldg., archt. Noted Sept. 27.

Pa., Palmerton—High School—Nov. 1, by L. J. Kemmerer, secy. Bd. Educ., 3 story and basement, 139 x 165 ft., rein.-con., brick, steel and stone, 3rd and Lafayette Sts., here. $300,000. W. H. Lee, 1505 Race St. Phila., archt. Noted Oct. 4.

Pa., Phila.—Theatre—Oct. 29, by F. Seeburger & C. F. Rabenholde, archts., 1524 Chestnut St., 1 story, 81 x 126 ft., with 31 x 75 ft. lobby, brick, steel and stone, plain foundation, 56th and Beaumont Sts. $200,000. Owner's name withheld.

W. Va., Charleston—Capitol—Dec. 1, by E. F. Morgan, governor, 4 story, Duffy St. $2,500,000. C. Gilbert, 244 Madison Ave., New York City, archt.

W. Va., Huntington—School—Bd. Educ. taking bids and opens same about Dec. 1, 3 story, 146 x 230 ft., steel. $200,000. R. M. Bates, 416 11th St., archt.

N. C., Charlotte—Theatre and Office—Nov. 1 (extended date), by W. L. Stoddard, archt. and engr., 9 East 40th St., New York City, for 3 story, for J. H. Cutter, Commercial Bank Bldg. Noted Oct. 11.

Ky., Louisville — Hotel — Citizens Hotel Co., receiving bids and opens same about Nov. 10, 12 story, 124 x 150 ft., brick and stone, 5th and Walnut Sts. $2,300,000. B. B. Davis, Norton Bldg., archt. Noted May 10.

O., Cincinnati—School—Nov. 12, by Business Manager Bd. Educ., 511 West Court St., 2 story, 64 x 120 ft., rein.-con., brick and terra cotta, plain foundation, Tremont St. $180,000. A. L. Fechheimer, 325 East 4th St., archt.

O., Cleveland—Apartment—M. H. Price Realty & Investment Co., Ulmer Bldg., taking bids and opens same about Oct. 30, 2 story and basement, 32 x 86 x 87 ft., brick and timber, Euclid and Sheldon Aves. $150,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Dayton — School — Nov. 8, by Bd. Educ., 2 story, rein.-con. and brick, plain foundation, Hickory St. $570,000. Gebhart & Schaeffer, 507 Keith Bldg., archts. Noted Aug. 9.

O., Piqua — Schools — Oct. 31, by Bd. Educ., two 3 story, 60 x 260 ft., brick and rein.-con., plain foundations. $325,000. Schenk & Williams, Mutual Home Bldg., Dayton, archts. Noted March 1.

O., Springfield—School—Oct. 29, by Bd. Educ., 2 story and basement, 71 x 163 ft., rein.-con. and brick. $154,000. W. C. Findt, Springfield, archt.

Ind., Indianapolis—Theatre and Office—Oct. 29, by Monument Circle Realty Co., Fletcher Bldg., brick, stone and steel, plain foundation, Monument Circle and Market St. $1,500,000. A. W. Johnson, 247 Park Ave., New York City, archt.

Mich., Detroit—Hotel—Varney & Varney, archts., 1422 Washington Blvd., taking bids and opens same about Nov. 1, 8 story and basement, 90 x 150 ft. rein.-con., brick and steel, plain foundation, Alexandrine Ave. $400,000. Owner's name withheld. Noted Sept. 13.

Ill., Chicago — Apartment — Rissman & Hirschfield, archts., 64 West Randolph St., receiving bids 3 story, 120 x 256 ft., rein.-con., brick and steel, 1034-40 Sheridan Rd., for Spanish Manor Co. c/o architects. $300,000.

Ill., Chicago—Apartment—Z. E. Smith, archt., 305 East 55th St., receiving bids 3 story, rein.-con., brick and steel, 76th and Kingston Sts., for L. M. Cull, c/o architect. $180,000.

Ill. Chicago—Church—Dubin & Eisenberg, archts., 14 West Washington St., receiving bids 3 story, 75 x 125 ft., fireproof, Springfield and Congress Sts., for Aagrod Vilno Congregation, c/o architects. $150,000.

Wis., Appleton—High Schools—Nov. 12, by School Bd., two 3 story and basement, brick, tile and concrete. $450,000. Perkins, Fellows & Hamilton, 814 Tower Court, Chicago, archts. Noted Oct. 18.

Wis., Madison—Church—F. Riley, archt., Conklin Bldg., taking bids 2 story, 60 x 150 ft., brick, rein.-con. and steel, plain foundation, for First Church of Christ. $200,000. Noted Oct. 18.

Tex., Brownsville—Hotel—Green Hotel Co., c/o J. H. Green, taking bids 6 story and basement, concrete and brick. $375,000. Everson & Co., Chicago, engrs. and archts.

Tex., Tyler—High School—Bd. Educ. taking bids remodeling old structure and constructing new brick and concrete building. $250,000. De Witt & Lemon, Southwestern Life Bldg., Dallas, engrs. W. B. Ittner, Bd. Educ. Bldg., St. Louis, Mo., archts.

Calif., Los Angeles —Home — Johnson, Kaufman & Coate, archts., Union Bank Bldg., receiving bids 5 story, 50 x 50 ft., with 30 x 60 ft. wing, rein.-con., Eucas St., for Good Samaritan Hospital, 1243 Orange Ave.

Calif., Los Angeles—Store and Loft—K. Macdonald, archt., 1305 Brack-Shops Bldg., taking bids 11 story and basement, 100 x 150 ft., Bway. between 9th and 10th Sts., for A. C. Blumenthal and associates. $700,000.

Calif., Oakland—Store and Loft, etc.—Schirmer-Bugbee Co., archts., Thayer Bldg., receiving bids 3 story and basement, store, loft and dance hall, rein.-con., downtown dist. $175,000. Owner's name withheld.

BIDS RECEIVED

N. Y., Brooklyn—Schools—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Oct. 16, constructing schools, (a) completion of work 410 days (b) completion work 365 days (alternate a) substitution of face brick for common brick (b) substitution of cut cast marble for terra cotta (c) substitution of limestone for terra cotta (d) substitution of solid plaster partitions for hollow tile partition, for P. S. 205, 20th Ave. from 67th to 68th Sts., from G. F. Driscoll, 115 Schermerhorn St, (a) $995,995 (b) $1,025,995 (alternate a) add $14,840; P. S. 210, Rochester Ave. from Park Pl. to Prospect Pl., from G. Colon & Co. 81 East 125th St., New York, (a) $1,030,000 (b) $1,070,000 (alternate a) deduct $6,441 (b) deduct $19,200 (c) add $6,100 (d) add $1,000. Noted Oct. 4.

N. J., Clifton—High School—Bd. Educ., Oct. 17, 4 story, brick, Main Ave., from T J. O'Halloran, Newark, $575,000. Noted Oct. 4.

O., Ridgeville (North Ridgeville P. O.)—Schools—Bd. Educ. general contract two 2 story, brick, steel and concrete, from J. Kaiser & Bro., Elyria, $125,000.

CONTRACTS AWARDED

Conn., Hartford—Bank—Mechanics Savings Bank, Pearl St., 50 x 70 ft., brick, steel and stone, plain foundation, Pearl St., to M. Eidlitz & Son, 750 Main St. Archts. est. $300,000. Noted Oct. 18.

N. Y., New York—Apartment—Evander Childs Realty Corp., c/o G. E. Miller, archt. and engr., 1482 Bway., will build 6 story brick, steel and stone, plain foundation, University Ave., by day labor. $300,000.

N. Y., New York—Apartment—Five Fourteen West End Ave. Corp., c/o G. Ajelton, archt. and engr., 52 Vanderbilt Ave., will build brick steel and stone, plain foundation, West End Ave., by day labor. $650,000.

N. Y., New York — Apartment — Nine Thirty-Three Park Ave. Corp., c/o Sugarman, Hess & Berger, archts. and engrs., 18 East 43rd St., will build brick, steel and stone, plain foundation, Park Ave., by day labor. $600,000.

N. Y., New York—Apartment—M. Solomon, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 5 story, Marsy Pl. near Jerome Ave., also 5 story, Clarke Pl., both brick, steel and stone, plain foundation, by day labor. $200,000 each.

N. Y., New York—Apartment—H. and S. Sonn, Inc., c/o Margon & Glaser, archts and engrs., 2804 3rd Ave., will build 14 story, 75 x 175 ft., brick, steel and stone, plain foundation, 39th St. and Park Ave., by day labor.

N. Y., New York—Hospital—Phipi. Surge. Lhue, Inc., 18 East 41st St., brick, steel and stone, plain foundation, 72nd St. and West End Ave., to Natl. Constructors & Engineers, Inc., 18 East 41st St. Archts. est. $1,000,000.

N. Y., Northport—School—Bd. Educ., 2 story, brick, steel and stone, plain foundation, Laurel Ave., to W. Kennedy Constr. Co., 215 Montague St., Brooklyn. Archts est. $275,000. Noted May 24.

N. Y., Schenectady—Club—Mohawk Golf Club, Schenectady-Troy Rd., rebuilding golf club, to Dubois-Bennett & Son, McClellan St. Archts. est. $150,000. Noted May 3.

Pa., Middletown — Home — Independent Order of Odd Fellows of Pennsylvania, 17th and Tioga Sts., Phila., 3 story and basement, 157 x 299 ft., rein.-con., brick and steel, here, general contract to Shamokin Lumber and Constr. Co. Shamokin, $309,000; heating to Hersh Bros., Allentown, $36,320; plumbing to T. H. Williams, 735 South 26th St., Harrisburg, $30,625.

W. Va., Institute—Administration—State Bd. Control, Charleston, administration school building, here, to Charlottesville Lumber Co., Charlottesville, Va., $362,700. Noted Aug. 9.

N. C., Fayetteville—Hotel—Fayetteville Hotel Co., 8 story and basement, brick and stone, general contract to J. A. Jones Constr. Co., Realty Bldg., Charlotte, $249,000; heating and plumbing to Toomey Plumbing and Heating Co., 29 South Church St., Charlotte, $49,790. Noted Sept. 20.

N. C., Greensboro—Office—Cone Export & Commission Co., 3 story, 100 x 100 ft., brick and limestone, to J. Fanning, Inc., Asheville, $200,000. Noted July 12.

N. C. Raleigh—Gymnasium—North Carolina College of Agriculture & Engineering, concrete, steel, brick and tile, on campus, to Gaskill Constr. Co., Wilson, $215,000. Noted Apr. 4.

Ky., Louisville—Hospital—St. Josephs Infirmary, 637 4th St., 7 story hospital, Eastern Parkway and Preston St., to Struck Constr. Co., 147 North Clay St., Louisville. archts. est. $1,500,000. Noted July 5.

O., Cincinnati—School—Bd. Educ., 511 West Court St., general contract 2 story, 75 x 109 ft. addition to Avondale School, Reading Rd., to M. Penker & Sons, 123 Valencia St., $119,932. Noted Aug. 2.

Mich., Detroit—Art—Detroit Art Comn., Art Museum, Jefferson Ave., 2 story and basement, 148 x 195 ft., 112 x 148 ft. and 95 x 290 ft. rein.-con., brick and stone, plain foundation, Woodward Ave., to

Buildings (Continued)

Bryant & Detwiler Co., 2336 Dime Bank Bldg., $448,364. Noted Sept. 13.

Mich., Detroit—Sales and Show Rooms—Packard Motor Co., 574 East Woodbridge St., 2 story, 104 x 144 ft. rein.-con., brick and steel, plain foundation, Jefferson Ave., to Malow-Barry Co., 2631 Woodward Ave., Archts. est. $150,000.

Ill., Belleville—Hall—Belleville Turners Society, general contract 2 story and basement, 106 x 189 ft., to C. H. Schenk, 1329 South 6th St., Springfield. Archts. est. $150,000.

Ill., Chicago—Apartment—E. J. Patelski, archt., 157 West Randolph St., 3 story, 100 x 250 ft., rein.-con., brick and steel, 2214-22 North Kedzie Ave., to H. Stone, 2647 Crystal St. Archts. est. $200,000. Owner's name withheld.

Ill., Chicago — Clubhouse — Glen Oak Country Club, c/o H. K. Nicol, 122 South Michigan Ave., 2½ story, 61 x 200 ft., fireproof, Glen Oak, to H. C. Hass, 7407 Madison St., Forrest Park. Archts. est. $150,000.

Ill., Chicago—Hospital—Lakeside Hospital, 3410 Rhodes St., 4 and 5 story and basement, fireproof, Rhodes and 34th Sts., to B. W. Constr. Co., 111 North Dearborn St. Archts. est. $200,000. Noted Oct. 4.

Ill., Peoria—Apartment—Main and Perry Building Co., general contract 4 story and basement, brick and rein.-con., Main St., to Jobst & Sons, Lehman Bldg. Archts. est. $200,000.

Wis., Milwaukee—Apartment—W. Hoffmann, 5522 Washington Blvd., will build 3 story and basement, 84 x 100 ft., brick and concrete, plain foundation, Grand Ave., by day labor. $150,000. O. Webb, 544 49th St., archt.

Tex., Dallas—Dormitory—Buckners Orphans Home general contract 4 story and basement, to Christman & Nesbit, Slaughter Bldg., $140,000. Noted July 12.

Okla., Norman—Medical and Engineering—State Bd. Pub. Affairs, c/o B. Lafayette, chn., general contract 3 story and basement, 50 x 145 ft. medical building, also 3 story and basement, 50 x 150 ft., engineering building, both rein.-con., brick and stone, plain foundation, on University Campus, to Kreipke-Schafer Constr. Co., 616 Herskowitz Bldg., Oklahoma City, $150,000 each.

Okla., Tulsa—Church—First Presbyterian Church, 7th and Boston Sts., 1 story and basement, 75 x 150 ft., brick and stone, rein.-con. foundation, to A. T. Hingle, 608 Mayo Bldg., $300,000. Noted Aug. 9.

Ore., Astoria—Club—Elks Assn., Elks Temple; general contract 3 story, 75 x 100 ft., brick, rein.-con. and terra cotta, to H. J. Settgrun, Elks Temple, $136,740. Noted Apr. 12.

Calif., Los Angeles—Bank and Offices—J. Toplitsky, H. W. Hellman Bldg., 12 story, rein.-con., brick and steel, Spring and 7th Sts., to Scofield Eng. & Constr. Co., Pacific Finance Bldg., about $1,250,000, fixed fee, guaranteed cost basis. Noted July 19.

Calif., Los Angeles—Church—St. Vincents Church, 1887 South Grand Ave., rein.-con. and brick, Adams and Figueroa Sts., to Wurster Constr. Co., Union Terminal Bldg., $432,000. Noted Oct. 4.

Ont., Ottawa—Bank—Canadian Bank of Nova Scotia, 320 Bloor St. W., Toronto, 3 story 66 x 99 ft., rein.-con., brick and stone, Sparks St., to Carswell Constr. Co., 58 Wellington St., Toronto. Archts. est. $200,000. Noted Apr. 26.

Ont., Toronto—Office—Canada Life Assurance Co., Canada Life Bldg., 3 story, 100 x 120 ft., rein.-con., brick and steel, plain foundation, Gerrard and Yonge Sts., general contract to P. H. Secord & Son Constr. Co. Ltd., Temple Bldg., structural steel, to McGregor & McIntyre, 1139 Shaw St. Total est. $200,000.

Federal Government Work

PROPOSED WORK

Ky., Louisville—Machinery—U. S. Engineer, P. O. Box 72, plans to purchase operating machinery incl. 39,000 lb. structural steel, 75,000 ton cast steel, 55,000 lb. cast iron, 2,200 lb. phosphor bronze, etc., for Dams 44 and 45, Ohio River.

Ky., Louisville—Steel Barges—U. S. Engineer, P. O. Box 72, plans to purchase two 120 x 36 x 7½ ft., two 100 x 25 x 5 ft. and sixteen 110 x 26 x 6½ ft., steel barges.

Montana—Roads—U. S. Bureau Pub. Rds., Missoula, plans gravel surfacing 27.6 mi. Project 152, Blaine and Phillips Counties, and 11 mi. Project 208, Glacier Co.

California — Road — Constructing Quartermaster, Fort Mason, San Francisco, having surveys made paving 15,500 lin.ft. road to Gigling Reservation, oil macadam, 18 ft., Monterey Co.

BIDS DESIRED

N. Y., New York—Dredging—Nov. 24, at office U. S. Engineer, 2nd Dist., Army Bldg., dredging in Newark Bay, N. J.; adv. E. N.-R. Oct. 25.

Ga., Fort Benning—Quarters, etc.—Nov. 16 at office Constructing Quartermaster, 6 double sets officers quarters and hospital buildings, incl. heating plant, etc.; adv. E. N.-R. Oct. 25.

Ala., Mobile—Steel Barges—Dec. 1, at office U. S. Engineer, Mobile, construction 5 steel barges; adv. E. N.-R. Oct. 25.

Ky., Louisville—Barges—Nov. 23 at office U. S. Engineer, 20 steel barges; adv. E. N.-R. Oct. 25.

O., Steubenville—Post Office—Nov. 21, by Treas. Dept., Wash., D. C., for U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Ill., Chicago—Barges—Nov. 20, at office U. S. Engineer, 537 South Dearborn St., 3 steel barges; adv. E. N.-R. Oct. 25.

Wis., Milwaukee—Steel Barge, etc.—Oct. 30, at office U. S. Engineer, constructing steel barge and installing steel derrick, etc.; adv. E. N.-R. Oct. 25.

Idaho, American Falls—Sewer—Nov. 21 by U. S. Bureau Recl., American Falls, sewerage system in Reclamation Addition to this city, Minidoka Project. D. W. Davis, comr.; adv. E. N.-R. Oct. 25. Noted Oct. 11.

Calif., Mare Island—Fuel Oil Storage—Spec. 4717—Nov. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., two 50,000 bbl. fuel oil tanks, 3 motor driven centrifugal oil pumps, 3 brick pump houses and 1 heater house, etc., at Navy Yard, here. Noted Oct. 18.

BIDS RECEIVED

Md., Anapolis—Water Supply Improvements—Spec. 4890—Bureau Yards & Docks, Navy Dept., Wash., D. C., improvements to water supply at high power radio station, here, (1) work complete, from A. Pope, 4722 15th St., Wash., D. C., (1) $19,800 (2) $16,750 (3) $21,350 (4) $20,350 (5) $20,600 (6) $50. Noted Oct. 4.

Ga., Dawson—Post Office—Treas. Dept., Wash., D. C., construction U. S. Post Office, here, from A. M. Lundberg, Times Bldg., St. Louis, Mo., $42,000. Noted Sept. 20.

Fla., Pensacola — Distribution System, etc.—Spec. 4715—Bureau Yards & Docks, Navy Dept., Wash., D. C., steam distribution and heating systems, at Naval Air Station, here, (1) work complete, from W. G. Cornell Co., 19 Patterson St., N.E., Wash., D. C., (1) $13,159 (2) $6,644 (3) $12,138. Noted Oct. 4.

La., Carville — Buildings — Treas. Dept., Wash., D. C., construction except mechanical equipment, additional buildings incl. patients' cottages, infirmary, recreation building, kitchen, mess hall, all terra cotta and stucco, storehouse and officers' quarters, timber construction, at National Home for Lepers, here, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $465,410. Noted Sept. 20.

La., Carville—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment of additional buildings incl. patients' cottages, recreation building, kitchen, mess hall, store house, and officers' quarters; extension and remodeling outside services incl. heating, electric, water supply, sewage disposal, refrigeration, etc., and constructing power house, complete incl. mechanical equipment, National Home for Lepers, here, from S. Faith & Co., 2427 Penn Ave., Phila., Pa., $287,000. Noted Sept. 20.

Ky., Louisville—Steel Hulls—U. S. Engineer, P. O. Box 72, six steel derrick boat hulls, from Dravo Contg. Co., Diamond Bldg., Pittsburgh, $88,200.

Ind. Newburg—Dwellings—U. S. Engineer, P. O. Box 72, Louisville, Ky., 2 lockkeepers dwellings at Dam 47, here, from C. Kanzler & Son Co., Furniture Bldg., Evansville, $22,450. Noted Sept 20.

Ark., North Little Rock—Building, etc.—F. T. Hines, dir. U. S. Veterans Bureau, at office Constructing Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for disturbed patients' building, 2 continued treatment buildings, recreation building, tuberculosis cottage, male attendents' quarters, additions to nurses quarters, and to kitchen and mess, all rein.-con., brick and tile; together with road, water, sewer and electric lines serving same (1) work complete from Herman & McCain, Little Rock, (1) $614,000 (2) $30,300 (3) $30,100 (4) $128,000 (5) $140,500 (6) $51,000 (7) $57,000 (8) $46,500 (9) $11,500 (10) unit prices (a) $7.30 (b) $0.83 (c) $7.60 (d) $4.50 (e) $1 (f) $2 (g) $2.50 (h) $3 (i) $2.75 (j) $2.25 (k) $11.50 (l) $15 (m) $86 (n) $72 (o) $3 (p) $145 (q) $145 (r) $145. Noted Sept. 20.

Wash., Puget Sound — Radio Masts — Spec. 4897—Bureau Yards & Docks, Navy Dept., Wash., D. C., three 200 ft. radio masts at Navy Yard, here, from Pole & Tube Wks., 907 Evans Bldg., Wash., D. C., $8,965. Noted Sept. 20.

CONTRACTS AWARDED

Mich., Detroit—Post Office—U. S. Treas. Dept., Wash., D. C., 2 story and basement, 100 x 100 ft., brick, steel and concrete branch Post Office, Cass and Baltimore Aves., here, to R. D. Brown, 1033 North Meridian St., Indianapolis, Ind. Archts. est. $150,000.

Ky., Louisville—Steel Hulls—U. S. Engineer, P. O. Box 72, 9 steel derrick boat hulls, to Dravo Contg. Co., Diamond Bldg., Pittsburgh, $130,140 (270 days).

Miscellaneous

PROPOSED WORK

Dock, etc.—Niagara Falls, N. Y.—Tonawanda Iron Corp. plans large dock, also improvements and enlargements to plant. $250,000. Engineer not announced.

Power Development—Shushan, N. Y.—See "Dams."

Transmission Lines—Massillon, O.—See "Waterworks."

Suburban Development — Greensboro, N. C.—Southern Real Estate Co. and others, forming corporation to be known as Sedgefield Co. Inc., and plan development of 3,655 acres, incl. country club, golf links, tennis courts, residential development, driveways, water sewers, etc. $150,000.

Terminals—Norfolk, Va. — Will issue $2,000,000 bonds for port terminals.

Gas Mains, etc.—Sarasota, Fla.—McAnsh Co. plans gas mains, etc. $60,000.

Levee—Clarksdale, Miss.—Yazoo-Mississippi Delta Levee rejected bids enlarging 5 mi. old Ward Lake Levee, 75,000 cu.yd. banquette enlargement and 10,000 cu.yd. topping. Contract was not awarded as bonds providing for project were not sold. W. L. Heach, ch. engr. Noted Sept. 27.

Tunnel—Port Huron, Mich.—Detroit Edison Co., 2000 2nd Blvd., Detroit, preparing plans 500 ft. concrete tunnel, 7½ ft. diam., 45 ft. deep, under Black River, to carry gas mains and electric cables. Private plans.

Trucks, etc.—Kenosha, Wis.—City plans to purchase following equipment during 1924, 2 trucks for Garbage Dept., $4,500 and $2,300 each; 2 trucks for Street Dept. $3,500 and $2,300 each; tractor for Street Dept. $4,250; street sweeper $6,000; concrete mixer $1,200; machine to clean catchbasins $4,500; 2 road graders $1,500. B. W. Bolerjack, city purch. agt.

Foundation—Madison, Wis.—See "Streets and Roads."

Park—Dallas, Tex.—Plans new 60 acre park in Oak Cliff, incl. paving, curbing, guttering, sewerage, water, lights, tennis courts, etc. $50,000. E. A. Kingsley, city engr.

Gas Mains—Magnolia Park, Tex.—See "Industrial Works."

Street Sweeper—Hanford, Calif.—City plans to purchase motor driven street sweeper. B. Duffield, city engr.

Lighting System—Los Angeles, Calif.—Los Angeles Co. having prepared lighting system, concrete standards, in Washington Blvd. $40,000.

Wharves—Newport Beach, Calif.—See "Industrial Works."

Dock—Richmond, Calif.—City plans additional dock at municipal wharf. To exceed $150,000. H. Chapman, city engr.

Fire Alarm System—San Mateo, Calif.—Plans installing fire alarm system, underground system in downtown section, and over-head system in residential section. $30,000. G. S. Whitehead, city engr.

Stadium—London, Ont.—Western University Governors, plan steel and concrete stadium, 5,000 seating capacity. $80,000 A. T. Little, chn.

Ice Rink—Niagara Falls, Ont.—Election Dec. 3, to vote on $30,000 bonds for artificial ice rink.

BIDS DESIRED

Station Finish—Brooklyn, N. Y.—Nov. 2, (extended date), by Transit Comn., 49 Lafayette St., New York, station finish work for part of Bway.-4th Ave. Rapid Transit R.R. Lawrence St. Station, here. G. McAneny, chn.

Piping, etc.—Jamestown, N. Y.—Nov. 1, by M. O. Swanson, supt. Bd. Pub. Utilities, furnishing power house piping Contr. J-13-23, erecting same Contr. J-14-23, traveling water screens Contr. J-15-23, turbogenerator Contr. J-8-23, condenser and auxiliaries Contr. J-9-23, all to be installed in Steele St. lighting plant. L. T. Kaluder, Pennsylvania Bldg., Phila., consult. engr.

Column Foundations, etc.—Long Island City, N. Y.—Nov. 2, by Transit Comn., 49 Lafayette St., New York City, column foundations and structural steel, for part of Rapid Transint R.R., Flushing Route, here. G. McAneny, chn.

Bituminous Road Material—New York, N. Y.—See "Streets and Roads."

Miscellaneous (Continued)

Relocating Entrance, etc.—New York, N. Y. — Nov. 2, by Transit Comn., 49 Lafayette St., relocating entrances to 157th St. Station of Manhattan-Bronx Rapid Transit R.R., Agreement "CR"; frogs, switches and tracks and preparation of tracks for storage of cars, 180th St. Yard, White Plains Rd. Line, Route 18. G. McAneny, chn.

Concrete Mixers—Greensboro, Fla.—Electric Mfg. & Developing Co. in market for concrete mixers and allied equipment.

Tractors—Dallas, Tex.—Nov. 12, by C. E. Gross, aud. Dallas Co., one or more 5 ton caterpillar tractors. Nagle, Witt & Rollins, co. engrs.

Engines, etc. — Ennis, Tex. — City Com. taking bids two 5 hp. electric belt driven engines Y type, two 5 in. 2 stage centrifugal pumps, 700 g.p.m. against 150 ft. head, fittings, etc. H. McCanless, city engr.

Sprinkler Truck—Calexico, Calif.—Nov. 6, by City Trustees, furnishing and delivering 5 ton street sprinkling truck with flusher attachment, 1,500 gal. capacity. P. B. Steintorf, clk.

Electrolier System—Fresno, Calif.—City Council receiving bids electrolier system in Bway. et al. To exceed $25,000. W. Stranahan, city engr.

Borings for Subway—Oakland, Calif.—Nov. 12, by Supervs. Alameda Co., drill test borings in connection with Estuary subway btween Oakland and Alameda, bids to be received as follows: (1) drill and sample holes 1 to 8,525 lin.ft. (2) drill and sample holes 9-16, 630 lin.ft. (3) drill and sample holes 17-30, 325 lin.ft. (4) 300 special samples (5) price per hour for crew and equipment. G. A. Posey, co. surv.

BIDS RECEIVED

Underground Fire Alarm System—New York, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., Oct. 17, part of underground fire alarm system in Bronx Boro, from W. F. Kenny Co., 44 East 23rd St., Item 1 $10,914; J. Sudgen Co., 100 5th Ave., Item 2 $62,775. Noted Oct. 11.

Tunnel—Phila., Pa.—Comrs. Fairmount Park, City Hall, constructing street railway tunnel and approaches beneath Parkway at Art Museum, involving 950 ft. subway and 500 ft. of open cut for approaches, from A. J. O'Neill Co., Weightman Bldg., $320,000. Noted Oct. 4.

Lighting System—Santa Ana, Calif.—Installing ornamental lighting system in West 4th and West 5th Sts., from W. A. McNally, 517 South Bway., Pasadena, $54,800. Noted Mar. 29.

Gate Valves—Montreal, Que.—Furnishing two 48 in. and four 48 in. gate valves from Dominion Eng. Wks., Lachine, $6,500 and $11,850, respectively; five 36 in., one 30 in. and one 24 in. gate valves from Drummond McCall & Co., 28 Victoria Sq., $7,515, $1,105 and $635 respectively.

CONTRACTS AWARDED

Sand, Cement, etc.—New York, N. Y.—Bd. Purch., Municipal Bldg., cement, to Jameson & Bond, Far Rockaway, $0.7875; coarse sand and broken stone, to C. & C. Contg. Co., 324 Jay St., Brooklyn, $2.04 and $2.64 respectively; broken stone, to Knickerbocker Supply Co., 149 Church St., $4.49. Noted Oct. 4.

Coal Tipple—Dawson Springs, Ky.—Dawson Daylight Coal Co. new coal tipple, crushing outfit, loading booms, etc., to develop new coal lands, to Morrow Mfg. Co., Wellston, O., Engrs. est. $30,000. Noted Oct. 11.

Ornamental Lighting System—Bexley (Columbus, P. O.) O.—S. W. Roderick, village clk., ornamental street lighting system, lights will be placed 100 ft. apart on main thoroughfares, and 200 ft. apart on other thoroughfares, to Johns Electric Co., Chicago, Ill., $76,000. Noted Sept. 27.

Steel—Kenosha, Wis.—See "Industrial Works" under "Bids Desired."

Gas Holder—Madison, Wis.—Madison Gas & Electric Co., 100 North Fairchild St., 186 x 186 ft. gas storage holder, to J. H. Findorff, 601 West Wilson St. Engrs. est. $45,000. Noted Oct. 18.

Cement—Milwaukee, Wis.—For 4,000 bbl. cement, to Degentesh Bros., 28th and Forest Home Aves., $2.715 per bbl. Noted Oct. 18.

Heating Plant—Sheboygan, Wis.—City will build central heating plant at city farm by day labor. Will purchase equipment. R. R. John, City Hall, engr. Noted Sept. 27.

Gravel—Houston, Tex.—For 5,000 tons gravel, to Starkey & Brown, West Bldg., $12.947.

Mud Shell—Houston, Tex.—Harris Co. 17,000-23,000 cu.yd. mud shell for ballast on railroad classification yard Turning basin Ship Channel, to Horton & Horton, McKinney Ave., $0.78 per cu.yd. Noted Sept. 27.

Ornamental Lights—Seattle, Wash.—See "Streets and Roads."

OFFICIAL PROPOSALS

Bids: Nov. 20.

Sewerage System

Ponchatoula, La.

The Mayor and Board of Aldermen of the Town of Ponchatoula, Louisiana, will receive bids at the Town Hall until Two O'clock P.M. **November 20th, 1923,** for material and labor necessary in the building of the Sewerage System Improvements.

The contemplated improvements requires approximately the following:

Disposal Works consisting of Pumping Plant, Imhoff Tank with Dosing Chamber, Sprinkling Filter Bed and Sludge Bed.

48 Feet of 18 in. Class "B" B. & S. Cast Iron Pipe.
19000 Feet of 8 in. Vitrified Sewer Pipe.
7000 Feet of 10 in. Vitrified Sewer Pipe.
1500 Feet of 15 in. Vitrified Sewer Pipe.
3100 Feet of 18 in. Vitrified Sewer Pipe.
With branches, tees, etc.,

or

The same quantities and sizes of Concrete Sewer Pipe, with branches, tees, etc.
2000 Feet of 10 in. Class "A" B. & S. Cast Iron Pipe.
2000 Feet of 10 in. Wood Stave Pipe.
Trenching, laying and back filling.
Manholes, lampholes, etc.

Plans and specifications will be on file at the office of the Town Clerk, Ponchatoula, La., and at the office of the ENGINEERS. All bids must be submitted on blanks for that purpose furnished with the specifications.

Plans and specifications with bid sheets can be obtained from the ENGINEERS, SWANSON-McGRAW, INC., 705 UNITED Fruit Building, New Orleans, La., by depositing Twenty-five Dollars ($25.00), Seventeen Dollars and fifty cents ($17.50) of which deposit will be returned to bona fide bidders, or if the plans and specifications are returned to the ENGINEERS prior to the date set for receiving bids.

Each bid must be accompanied by a certified check (Bidder's bond not acceptable) in an amount of five per cent (5%) of the gross amount bid, but in no event shall check be in less amount than Fifty Dollars ($50.00) as evidence of good faith.

The right is reserved to reject any or all bids, waive any or all formalities, or accept any bid or bids which in the opinion of the Board appear to be to the best intesest of the Town.

W. R. HAIGHT.
Mayor.
E. D. PARKER,
Clerk.

SWANSON-McGRAW, INC.,
Consulting Engineers.
United Fruit Building.
New Orleans, La.

Bids: Nov. 7.

Storm Sewer

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the construction of 20 in. storm sewer, manholes, cross drains and catch basins on the W. Long Branch-Interlaken Rd. No. 41, Sect. 1—Total Length, 2973 Lin. Ft. and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey on Wednesday, Nov. 7, 1923, at **11**:00 A.M.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.

BRYANT B. NEWCOMB,
Director.

ATTEST:
CHARLES E. COLE, Clerk.
Freehold, N. J., Oct. 17, 1923.

Bids: Nov. 9.

State Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Friday, November 9th, 1923 at the hours named below, and will be opened and read immediately thereafter.

BIDS AT 12:00 NOON (STANDARD TIME)

Construction of an 80 ft. single leaf overhead counterweight bascule highway span for a 30 ft. roadway over a 50 ft. channel together with concrete piers, timber bents, two 36 ft. timber testle approaches, fender racks and temporary bridge over Cedar Bonnet, Manahawken Bay on the road between Manahawken and Beach Haven, in the Municipality of Stafford, County of Ocean.

BIDS AT 12:10 P.M. (STANDARD TIME)

Construction of a 65 ft. double leaf bascule highway span with a 30 ft. roadway and two 5 ft. 6 in. roadway extensions over a 50 ft. channel together with two 40 ft. encased plate girder approach spans, concrete piers, abutments, retaining walls, standard approach slabs, roadway pavement, fenders over Inland Waterway Canal, M. P. 66.6, State Highway Route No. 4, Section No. 21, in the Borough of Point Pleasant County of Ocean.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as required in and in accordance with the provisions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

CONSTRUCTION NEWS

Engineering News-Record, November 1, 1923

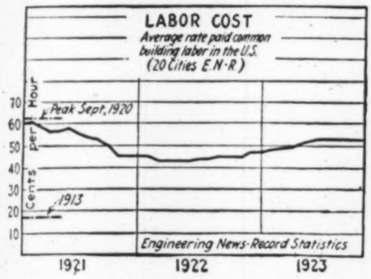
The Construction Barometer

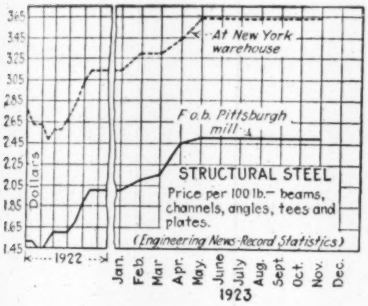
Prices Stable—Seasonal Slowness Pervades Market—Buyers Covered on Basic Materials

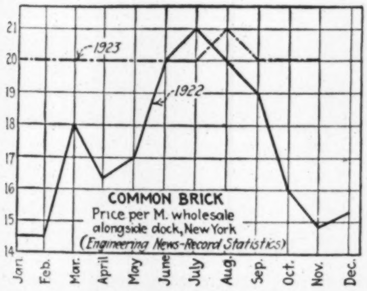
WHILE there has been a certain amount of price recession in building materials, during the last two weeks, the items affected were mainly those used in frame building construction. Steel structurals, cement and pine timbers have remained firm at present levels, during the last month. Douglas fir, however, shows a slight upward trend due to the influence of Japanese demand.

The volume of pig-iron buying has not been large enough to justify a maintenance of the recent high production rate, hence, the weakness in price.

The average common labor rate (54c. per hr.) has not varied since June. Meanwhile, wage schedules for the skilled trades have been steadily advancing. Higher wages are offset by the slight downward trend in certain prices. New buying is slow, however, owing to seasonal influences and the fact that purchasers are covered for months ahead on basic materials.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Oct. 11	$16,047,000	$16,019,000	$32,066,000
Oct. 18	17,421,000	44,487,000	61,908,000
Oct. 25	8,452,000	16,583,000	25,035,000
3 weeks	$41,920,000	$77,089,000	$119,009,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

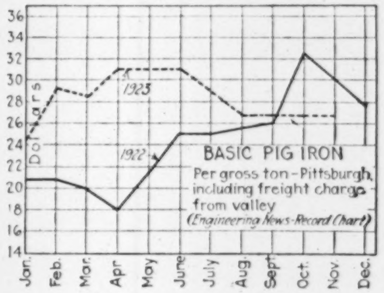
Week Ended	No.	Public Work	No.	Private Work
Oct. 11	14	$3,994,000	33	$11,490,000
Oct. 18	9	1,844,000	35	13,968,000
Oct. 25	6	1,721,000	24	9,184,000
3 weeks	29	$7,559,000	92	$34,642,000

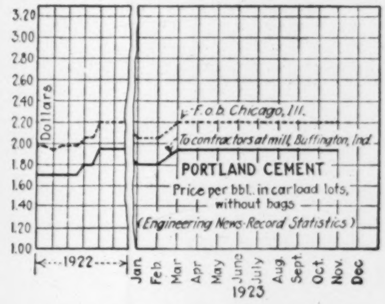
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

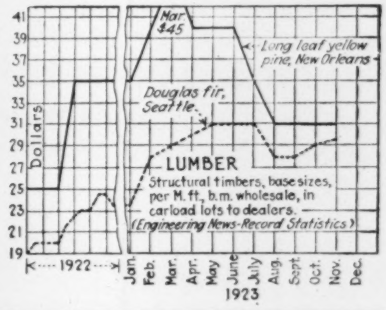
Week Ended	Private	Public All	Public Streets and Roads	Public Waterworks and Sewers	Public All Buildings
Oct. 11	31	205	55	24	54
Oct. 18	26	144	32	34	33
Oct. 25	26	157	42	31	36

BASE PRICES UNCHANGED IN THREE WEEKS

	Quoted on Nov. 1, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	62.00	61.00	Oct. 4
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 5	Haledon, N. J.	Oct. 11
Nov. 5	El Segundo, Calif.	Oct. 25
Nov. 5	Denver, Colo.	Nov. 1
Nov. 6	Stockton, Calif.	Oct. 25
Nov. 6	Moorehead, Miss.	Oct. 25
Nov. 8	Grand Rapids, Mich.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 8	Corning, N. Y.	Nov. 1
	Adv. Nov. 1.	
Nov. 9	New York, N. Y.	Nov. 1
Nov. 13	Woodbury, N. J.	Nov. 1
	Adv. Nov. 1.	
Nov. 13	Clifton, N. J.	Nov. 1
Nov. 15	Chatham, N. J.	Nov. 1
	Adv. Nov. 1	
Nov. 20	Ponchatoula, La.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Nov. 3	Cleveland, O.	Nov. 1
Nov. 5	Hollister, Calif.	Oct. 25
Nov. 5	Ford City, Pa.	Nov. 1
Nov. 7	Freehold, N. J.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 7	Zanesville, O.	Nov. 1
Nov. 13	Winona, Minn.	Nov. 1
Nov. 13	Wash., D. C.	Nov. 1
	Adv. Nov. 1.	
Nov. 16	Louisville, Ky.	Nov. 1
	Adv. Oct. 25 and Nov. 1.	
Nov. 20	Ponchatoula, La.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 20	Bartlesville, Ark.	Nov. 1
Dec. 10	New Orleans, La.	Oct. 11
	Adv. Oct. 11 to Nov. 1.	
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Nov. 5	Fremont, O.	Oct. 11
Nov. 6	Quitman, Miss.	Oct. 11
Nov. 6	Florida	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 7	Minnesota	Oct. 18
Nov. 9	New Jersey	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 9	Winfield, Kan.	Nov. 1
Nov. 12	Jacksonville, Fla.	Oct. 25
Nov. 14	Spencer, Ia.	Nov. 1
Nov. 16	Society Hill, S. C.	Nov. 1
	Adv. Nov. 1.	
Nov. 22	Prairie Siding, Ont.	Nov. 1
Nov. 26	Alabama	Oct. 25
Nov. 27	New Jersey	Nov. 1
	Adv. Oct. 25 and Nov. 1.	
Nov. 30	Sydney, Australia	Apr. 19
May 1	Tientsen, North China	Oct. 11

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Nov. 8	Newark, N. J.	Nov. 1
	Adv. Nov. 1.	
Nov. 9	Oroville, Calif.	Nov. 1

STREETS AND ROADS

Nov. 5	Okeechobee, Fla.	Oct. 25
Nov. 5	Hondo, Tex.	Oct. 11
Nov. 5	St. George, N. Y.	Nov. 1
Nov. 5	Okmulgee, Okla.	Nov. 1
Nov. 5	Phila., Pa.	Nov. 1
Nov. 6	Marlin, Tex.	Oct. 18
Nov. 6	Washington	Oct. 4
Nov. 6	Stockton, Calif.	Oct. 25
Nov. 6	Sebring, Fla.	Oct. 25
Nov. 6	Louisiana	Oct. 25
Nov. 6	Michigan	Oct. 25
Nov. 6	Center, Tex.	Oct. 25
Nov. 6	Cameron, Tex.	Oct. 25
Nov. 6	New Albany, Miss.	Oct. 25
Nov. 6	Mendota, Minn.	Oct. 25
Nov. 6	Warsaw, Ind.	Nov. 1
Nov. 7	Minnesota	Oct. 18
Nov. 7	Clarksville, Tex.	Oct. 25
Nov. 7	Nevada	Oct. 25
Nov. 7	Wyoming	Nov. 1
Nov. 7	Denver, Colo.	Nov. 1
Nov. 8	Brooklyn, N. Y.	Nov. 1
Nov. 8	Porterville, Calif.	Nov. 1
Nov. 9	Michigan	Nov. 1
Nov. 12	Dallas, Tex.	Oct. 25
Nov. 13	Alabama	Oct. 25
Nov. 13	Maryland	Nov. 1
	Adv. Nov. 1.	
Nov. 13	California	Nov. 1
Nov. 14	Coleman, Tex.	Oct. 25
Nov. 14	Millville, N. J.	Nov. 1
	Adv. Nov. 1.	
Nov. 16	New York	Nov. 1
	Adv. Nov. 1.	
Nov. 17	Tonawanda, N. Y.	Nov. 1
	Adv. Nov. 1.	
Nov. 19	Waco, Tex.	Nov. 1
Nov. 26	Alabama	Nov. 1

INDUSTRIAL WORK

Nov. 5	Phila., Pa.	Nov. 1
Nov. 8	Palmyra, N. Y.	Oct. 11
	Adv. Oct. 11 to Nov. 1.	
Nov. 8	Vischers Ferry, N. Y.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 15	Yonkers, N. Y.	Nov. 1

BUILDINGS

Nov. 5	Louisville, Ky.	Nov. 1
Nov. 6	Trenton, N. J.	Oct. 25
Nov. 6	Louisville, Ky.	Nov. 1
Nov. 7	Phila., Pa.	Nov. 1
Nov. 8	Dayton, O.	Oct. 25
Nov. 12	Cincinnati, O.	Oct. 25
Nov. 12	Appleton, Wis.	Oct. 25
Nov. 13	Brooklyn, N. Y.	Oct. 25
Nov. 14	Central Islip, N. Y.	Nov. 1
	Adv. Nov. 1.	
Nov. 15	Hartford, Conn.	Nov. 1
Nov. 15	St. Louis, Mo.	Nov. 1
Nov. 23	Sedalia, Mo.	Nov. 1
Nov. 26	Galveston, Tex.	Nov. 1
Nov. 28	Middletown, N. Y.	Nov. 1
	Adv. Oct. 25 and Nov. 1.	
Nov. 30	Maggie, W. Va.	Oct. 4
Dec. 1	Charleston, W, Va.	Oct. 25

FEDERAL GOVERNMENT WORK

Nov. 2	Pipe, Specials, etc.—Fort Mifflin, Pa.	Nov. 1
Nov. 5	Post Office—Hoosick Falls, N. Y.	Oct. 11
Nov. 5	Pump, etc.—Presidio (San Francisco P. O.), Calif.	Oct. 18
Nov. 6	Quarters—Baltimore, Md.	Oct. 18
Nov. 6	Sewer Pipe—American Falls, Idaho	Oct. 11
Nov. 7	Extension—Pearl Harbor, H. T.	Sept. 20
Nov. 7	Rebuilding Laundry—Great Lake, Ill.	Nov. 1
	Adv. Nov. 1.	
Nov. 8	Road—Oregon	Nov. 1
Nov. 9	Road—Nevada	Nov. 1
Nov. 10	Quarters — Hot Springs, Ark.	Oct. 18
Nov. 10	Breakwater—Indiana Harbor, Ind.	Oct. 18
	Adv. Oct. 18 to Nov. 1.	
Nov. 13	Road—California	Nov. 1
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 14	Post Office—Carroll, Ia.	Oct. 18
Nov. 14	Fuel Oil Storage—Mare Island, Calif.	Oct. 25
Nov. 16	Quarters, etc.—Fort Benning, Ga.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 20	Post Office—Central City, Neb.	Oct. 18
Nov. 20	Barges—Chicago, Ill.	Oct. 25
Nov. 21	Sewer—American Falls, Idaho	Oct. 25
Nov. 21	Post Office—Steubenville, O.	Oct. 25
Nov. 21	Dredging—Puget Sound, Wash.	Nov. 1
Nov. 23	Barges—Louisville, Ky.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 23	Post Office—Ripon, Wis.	Nov. 1
	Adv. Nov. 1.	
Nov. 24	Dredging—New York, N. Y.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	
Nov. 26	Post Office—Mystic, Conn.	Nov. 1
Nov. 27	Barge—New Orleans, La.	Nov. 1
	Adv. Nov. 1.	
Nov. 27	Water Supply System—American Falls, Idaho	Nov. 1
	Adv. Nov. 1.	
Nov. 27	Post Office—Gallipolis, O.	Nov. 1
	Adv. Nov. 1.	
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
Nov. 30	Dredging, etc.—New York, N. Y.	Nov. 1
	Adv. Nov. 1.	
Dec. 1	Steel Barges—Mobile, Ala.	Oct. 25
	Adv. Oct. 25 and Nov. 1.	

UNCLASSIFIED

Nov. 5	Tractor, etc. — Shorewood (Milwaukee P. O.) Wis.	Nov. 1
Nov. 5	Fire Alarm System—Coney Island (Brooklyn P. O.), N. Y.	Nov. 1
Nov. 6	Sprinkler Truck—Calexico, Calif.	Oct. 25
Nov. 7	Board Walk—Spring Lake, N. J.	Oct. 11
	Adv. Oct. 11 to Nov. 1.	
Nov. 10	Tunnel—Oroville, Calif.	Nov. 1
Nov. 12	Tractors—Dallas, Tex.	Oct. 25
Nov. 12	Borings for Subway—Oakland, Calif.	Oct. 25
Nov. 13	Subway—New York, N. Y.	Nov. 1
Nov. 15	Ferry Landing—New Orleans, La.	Oct. 18
Nov. 26	Portland Cement—Los Angeles, Calif.	Oct. 18
Dec. 4	Dragline Machines—Greenville, Miss.	Nov. 1
	Adv. Nov. 1.	
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
	Adv. Nov. 1.	
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Middletown—Water Dept. plans pumping station on Highland Ave. $40,000. J. W. Mylchrest, city engr.

Pa., McKeesport—Election Nov. 6, to vote on $233,000 bonds for extending stand pipe, additional filter beds, etc., for waterworks system. J. E. Crossland, city clk.

Va., Staunton—Plans election to vote on $700,000 bonds for waterworks improvements.

N. C., Durham—Having surveys made extending water system, incl. new mains, plant, large dam on Flat River to create 4 billion gal. reservoir. Will probably build hydro electric plant. R. W. Rigsbee, city mgr.

N. C., Elon College—See "Buildings."

La., Gibsland—Nov. 8, to vote on $50,000 bonds for waterworks, distribution mains and electric light plant. E. T. Archer, New England Bldg., Kansas City, Mo., engr. Noted Oct. 18.

Tenn., Nashville — Plans to modernize waterworks plant, additional force mains, pumping equipment, etc. $2,000,000. H. E. Howse, mayor. Noted Aug. 2.

Tenn., Watertown—Plans to issue $50,000 bonds for waterworks improvements. Noted July 26.

Ky., Paducah—See "Streets and Roads."

O., Rocky River—Plans waterworks and filtration plant. $300,000. E. H. Arnold, city engr.

O., Struthers — Mahoning Valley Water Co., 403 Mahoning Bank Bldg., Youngstown, plans to purchase machinery and equipment for new filtration plant, here. $20,000. G. T. Evans, supt.

Mich., Ferndale—Voted $30,000 bonds extending mains, 6 and 8 in. c.i. pipe, etc. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Mich., Kalamazoo — See "Industrial Works."

Ill., Posen—Soon takes bids 4,000 lin.ft. 10 in., 7,400 lin.ft. 8 in., 2,700 lin.ft. 6 in. and 6,000 lin.ft. 4 in. c.i. mains, etc. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Minn., Foxhome—Plans waterworks system, incl. mains, pumping equipment, etc. $15,000. C. A. Bevins, village recdr. Engineer not announced.

Minn., Granite Falls — Making plans water supply system, will either construct filter plant or install 3 mi. main to convey water from springs. $33,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Minn., Marietta — Making plans waterworks system, 200 ft. well, pumping equipment, steel tower and tank, 30,000 gal. capacity. $24,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Kan., Arkansas City — Soon takes bids waterworks improvements and extensions incl., 20,055 ft. 4 in. class B c.i. pipe, 7,337 lb. B & S specials, thirty-four 4-in. gate valves and boxes, 21 fire hydrants, 23 connections, 200 meters, 2 wells, and one remote control house pump, and extra equipment. $50,000. D. Lawhe, Arkansas City, engr. Noted Oct. 11.

Kan., Brookfield—Plans election to vote on $20,000 bonds waterworks and distribution system.

Kan., Kansas City—Plans extensions to water plant, $275,000 for 25 m.g. settling basin, $160,000 for 12 mi. new mains, $95,000 for 3 new pumping units. Bonds voted. F. F. Beauchamp, constr. engr. Noted Sept. 20.

Mo., Palmyra—Election soon to vote on $25,000 bonds waterworks, reservoir and disposal system.

Tex., Port Arthur — See "Streets and Roads."

Tex., Ranger—Plans election to vote on $200,000 bonds, filtration plant, main extensions, etc. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Wash., Bellingham—Plans to purchase new c.i. mains early next year. $30,000. C. M. Adams, city engr.

Wash., Seattle—Plans impounding reservoir at Youngs Lake, drilling 9,000 ft. tunnel 8 ft. diam. concrete lined, alternate plan calls for 3,000 ft. tunnel, same diam. (over different route). $1,000,000. J. D. Blackwell, city engr.

Calif., Sacramento—City plans to purchase 10,000 lin.ft. of 6 in. c.i. mains. A. Givan, city engr.

Calif., Santa Ana—Having plans prepared water distributing system, 5,150 lin.ft. 30 in., 9,058 lin.ft. 27 in., 3,615 lin.ft. 21 in., 2,570 lin.ft. 18 in., 15,939 lin.ft. 15 in., 3,308 lin.ft. 14 in., 13,105 lin.ft. 12 in., 26,305 lin.ft. 10 in., 41,255 lin.ft. 8 in. and 7,290 lin.ft. 6 in. pipe, etc. R. L. Lucks, City Hall, engr.

Ont., Forest—Plans waterworks system incl. pumps, 15,000 ft. c.i. mains, 6 in. up, valves, hydrants, water towers, etc. $100,000. Chipman & Power, Mail Bldg., Toronto, engrs.

Ont., London—Utilities Bd. plans to extend mains in Oxford and Victoria Sts., probably 6 and 8 in. $30,000. E. V. Buchanan, Hydro Offices, engr.

Ont., Port Colborne — Preparing plans waterworks plant incl. storage basin, pump house, intake, two 750 gal. motor driven pumps, one 1,500 gal. gasoline driven pump, three pressure filter units, 12 in. mains and 2 m.g. elevated tank. $90,000. E. H. Darling, Home Bank Bldg., Hamilton, engr. Noted Sept. 20.

BIDS DESIRED

N. Y., Corning — Nov. 8, by Corning Homes Inc., mains and sewers. W. C. Sleight, secy.; adv. E. N.-R. Nov. 1.

N. Y., New York—Nov. 9, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., electric valve operating equipment, Manhattan Boro.

N. J., Chatham — Nov. 15, one, two or three 8 in. wells and respective suction lines. Tribus & Massa, 15 Park Row, New York City, consult. engrs.; adv. E. N.-R. Nov. 1.

N. J., Clifton—Nov. 13, by Passaic Valley Sewerage Comrs., 900 Chamber of Commerce Bldg., 24 Branford Pl., Newark, pumping machinery and equipment for Yantacaw pumping station, here. J. H. Quigg, clk.

N. J., Woodbury—Nov. 13, by C. S. Davis, city clk., c.i. pipes, special castings, bell-end stop valves with boxes and covers, etc. W. H. Boardman, 426 Walnut St., Phila., engr.; adv. E. N.-R. Nov. 1.

Colo., Denver — Nov. 5, by Bd. Water Comrs., 1509 Cleveland Pl., rein.-con. lining

Waterworks (Continued)

in east and west basins, Ashland Ave. Reservoir, retaining wall with timber roof at east basin, together with additional roof column footings in west basin, open concrete drains to be installed in both. $110,000; 20,400 ft. of 54 in. wood, concrete or steel conduit from Massey Hill to Wynetka. B. Lowther, 1509 Cleveland Pl., engr. Noted Oct. 4.

BIDS RECEIVED

N. Y., Long Island City—Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, Oct. 23, mains in Anable, Woolsey and 6th Aves., etc., here, from J. A. Gregory, 351 East 124th St., New York City, 42,572. Noted Oct. 18.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Oct. 23, mains in Adee, Arnow and Bartow Aves., from Norton Eng. & Contg. Co., 510 West 149th St., $13,200; in Boyd, Bronxwood and Colden Aves. from Knight & DeMicco, 448 East Tremont Ave., $14,500. Noted Oct. 18.

N. Y., St. George—Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, Oct. 23, mains in Bennett, Clinton and Dewey Aves., here, from Knight & DeMicco, 448 East Tremont Ave., New York, $15,400. Noted Oct. 18.

Md., Baltimore — Bd. Awards, Oct. 24, brass service pipe fittings, from H. Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $15,739. Noted Oct. 18.

O., Cleveland—Cuyahoga Co., 12,000 ft. 6 and 8 in. c.i. mains, Impvt. 45 Co. Sewer Dist., from Salem & George Bros., Erie Bldg., $51,271.

O., Columbus—See "Sewers."

Calif., Santa Cruz—Constructing Bay St. reservoir, from Egan Constr. Co., Stockton, $147,075. Noted Oct. 18.

Que., Montreal—Executive Comn., City Hall Annex, furnishing 5,160 ft. 16 in. and 5,940 ft. 20 in. Class C c.i. pipe (747 tons) from Canada Iron & Foundries, Mark-Fisher Bldg., $52.75 per ton. Noted Sept. 27.

CONTRACTS AWARDED

Mass., Stoneham (Boston P. O.)—Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, crank and flywheel, cross compound pump, 20 m.g.d., to Worthington Pump and Mchy. Corp., 115 Bway., New York City, $69,000. Noted Sept. 13.

Conn., Bristol—Water Dept., laying 4,000 ft. 6-12 in. c.i. mains in various streets, to J. E. Driscoll, 499 Prospect St., Torrington. Engrs. est. $20,000.

N. Y., Albany—Repairing retaining wall of basins, removing and replacing new sand, etc., in filtration plant, to E. B. Stevenson, Albany, $62,277. Engrs. est. $60,000. Noted Oct. 18.

N. J., Matawan—Boro Council, 150,000 gal. storage water tank, to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $12,940; concrete base for tower, to W. Bianchini, Freehold, $2,495. Noted Oct. 4.

O., Euclid—See "Sewers."

O., Lyndhurst (Cleveland Heights P. O.) —See "Sewers."

Ind., South Bend—Bd. Pub. Wks., waterworks station; building and foundations to Hay-Wever Co., South Bend, $157,400; suction well to Phelps & Son, Knoxville, $27,000; chimney to H. R. Heinicke, Inc., 540 North Meridan St., Indianapolis, $6,083; pumps to Allis-Chalmers Co., 1410 Waldheim Bldg., Kansas City, Mo., $69,900; boilers to Union Iron Wks., Lackawanna Siding, Hoboken, N. J. $23,008; coal and ash handling, to Link-Belt Co., 910 South Michigan Ave., Chicago, $12,143. Noted Oct. 4, 1923.

Kan., Winfield—Waterworks extensions, incl. 22,000 ft. 16 in. pipe, to Central Fdry. Co., 332 South Michigan St., Chicago, $87,560. Engrs. est. $75,000.

S. D. Milbank—Water collection system, incl. 1,940 lin. ft. pipe, rein.-con. reservoir, etc., to E. M. Scheflow, Elgin, Ill., $18,200. Noted Sept. 20.

Tex., Ft. Worth—Cast Iron pipe 15 cars, 4 in. up, to Natl. Cast Iron Pipe Co., Great Southwestern Life Bldg., Dallas, $15,000.

Tex., Kerrville—For 75 hp. Worthington pump, motor driven, etc., to G. E. Ginter, Calcasieu Bldg., San Antonio, $10,707. Noted Sept. 27.

Tex., Sweetwater—Filter plant, complete, to R. C. Newcomb, Scollard Bldg., Dallas, $39,000. Noted Sept. 6.

Idaho, Lewiston—Waterworks improvements, incl. filtration plant, 2 reservoirs, 6 mi. c.i. pipe, etc., to Chanute Constr. Co., Chanute, Kan., $346,600. Noted Sept. 20.

Sewers

PROPOSED WORK

Mass., Roxbury—Dept. Pub. Wks., Boston, soon takes bids 500 ft. circular concrete, and 2,000 ft. 10-18 in. earthen pipe sewer in Weld St., here. E. F. Murphy, div. engr. City of Boston.

N. Y., Albany — Plans extending 2 mi. Patroons Creek sewer and branches from below Russell Rd. reservoir to Central Ave. $125,000. F. Ravens, City Hall, engr.

N. Y., Binghamton—Plans sewers, general improvements and reclamation work in Brandywine Swamp. $500,000. E. H. Prentice, city engr.

N. Y., Binghamton—Plans trunk sewer and improving Trout Brook. $100,000. E. H. Prentice, city engr.

N. Y., Syracuse — Plans approximately 8,000 ft. 8-24 in. vitr. or concrete sewers in Wadsworth Park, Wolcott, Glenwood, Kuhl and Kenwood Aves. $35,000. T. A. Mather, City Hall, engr.

W. Va., Parkersburg—City Council soon takes bids laying storm sewers in Huff St. $41,000. J. V. Dunbar, city engr.

N. C., Elon College—See "Buildings."

Ky., Fulton—City plans election to vote on $50,000 bonds for sewerage system.

Mich., Adrian—Election this month to vote on $565,000 bonds for reconstructing sewerage system.

Mich., Detroit—Plans prepared 6,985 ft. 10-20 in. vitr. crock and 350 ft. 30 and 36 in. 2 ring brick sewers in Lateral 3966; 5,670 ft. 12-20 in. vitr. crock, 427 ft. 3 ft. 6 in. and 301 ft. 2 ft. 6 in. 2 ring brick sewers in Lateral 4018 2,432 ft. 10-24 in. vitr. crock in Lateral 4023, 3,875 ft. 12-24 in. in Lateral 4027, 4,092 ft. 12-15 in. in Lateral 4028, 1,384 ft. 12-18 in. in Lateral 4029, 1,609 ft. 12-20 in. in Lateral 4030. J. W. Reid, city engr.

Mich., Ferndale—Having plans prepared 20,000 ft. main and lateral sewers in various streets and alleys. $60,000. G. Jerome, 1331 Majestic Bldg., Detroit, engr.

Ill., Harvard—See "Streets and Roads."

Minn., Marietta—Making plans sewerage system, incl. Imhoff tanks, etc. $25,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Kan., Arkansas City — Plans sanitary sewers in Dist. 5, includes 18 blocks of 8 in. pipe. D. Lawhe, Arkansas City, engr.

Mo., Clayton—St. Louis Co. soon takes bids 3,500 ft. 6 and 8 in. sanitary sewers in Hanover Heights and Fletcher Park, Sanitary Sewer Dist. 1. $27,314. L. C. Dziatzke, Empire Bldg., Webster, engr.

Mo., Palmyra—See "Waterworks."

Tex., Kerrville—Making survey for sewerage system. $100,000. R. W. Willard, ch. engr., Municipal Eng. Co., Kerrville, engr.

Tex., Port Arthur — See "Streets and Roads."

Okla., Stroud—Election Nov. 1, to vote on $52,000 bonds for sanitary sewers disposal plant, Imhoff tanks, 25,000 ft. 8 in., 4,000 ft. 10 in. and 2,000 ft. 12 in. vitr. clay pipe. Benham Eng. Co., Gumble Bldg., Kansas City Mo., engrs.

Calif., Gilroy — Having plans prepared sewage disposal plant. $100,000. C. E. Sloane, Santa Fe Bldg., San Francisco, engr.

Calif., Morgan Hill—Had plans prepared sewerage system, disposal plant, treatment plant incl. Imhoff tanks with separate sludge beds, sprinkling filter, etc. C. C. Kennedy, Call Bldg., San Francisco, engr.

Ont., Hamilton—Soon takes bids 15,000 ft. vitr. tile, concrete and brick sewers, 8 in. up, in Alexander St. $21,330, Albany Ave. $7,500, Fairfield Ave. $12,540, Hope Ave. $7,500, Newland Ave. $4,000, Weir St. $12,615. A. L. McFaul, city engr.

Ont., Windsor—Plans sewers in Janette, Howard and Campbell Sts. $50,000. A. Brian, city engr.

BIDS DESIRED

N. Y., Corning—See "Waterworks."

Pa., Ford City—Nov. 5, by Boro. Council, storm sewers from Allegheny River under Pennsylvania R.R. tracks, along 3rd, 5th, 4th Aves. and 1st St., incl. 1,150 lin.ft. 40 in. and 1,830 ft. 36 in. two ring brick sewer, 185 lin.ft. 24 in., 750 lin.ft. 20 in., 900 lin.ft. 18 in. and 1,450 lin.ft. 15 in. terra cotta pipe Douglass & McKnight, 912 Columbia Bank Bldg., Pittsburgh, engrs. Noted July 19.

D. C., Wash.—Nov. 13, by Dist. Comrs., 509 Dist. Bldg., constructing sewer; adv. E. N.-R. Nov. 1.

Ky., Louisville—Nov. 16 by Comrs. of Sewerage, constructing Dry Run Relief Drain. M. H. Crawford, chn.; adv. E. N.-R. Nov. 1.

O., Cleveland—Nov. 3, by Cuyahoga Co., outfall sewer in Snow Rd. Impvt. 39. R. F. MacDowell, Court House, engr.

O., Zanesville—Nov. 7, by J. R. Tanner, dir. Pub. Serv., 24 mi. lateral and house connections for completion Southwestern Sewer Dist. 5. Noted Oct. 4.

Minn., Winona—Nov. 13, by G. W. Hofmann, city clk., sewers in Dist. 4, 7,529 lin. ft. 12-18 in. double strength vitr. clay pipe, 44,789 lin.ft. 8 in. and 640 lin.ft. 6 in. standard vitr. clay pipe, 155 brick manholes. $103,862. E. E. Chadwick, city engr.

Ark., Bartlesville—Nov. 20, by J. J. Swin, chn. Bd. Comrs. Sewer Dist. 21, sanitary sewerage system. $37,000. Parkes Eng. Co., Pine Bluff, engrs.

Tex., Dallas—City Com. taking bids 12 new septic tanks and sewers. $500,000. E. A. Kingsley, city engr.

Calif., San Luis Obispo — Golden State Milk Products Co. taking bids 12,105 lin.ft. 12 in., 6,804 lin.ft. 10 in. and 960 lin.ft. 8 in. vitr. sewer pipes, etc.

BIDS RECEIVED

N. J., Asbury Park—For 5,485 ft. vitr. sewer in Comstock St., engrs. est. $46,967. and 4,470 lin. ft. vitr. storm drain in Wesley Lake vicinity, $35,362, from Mercer Constr. Co., Marcy St., Freehold, $46,967 and $27,892 respectively. Noted Oct. 18.

Ga., Wrightsville — For 5 mi. 6-12 in. sewer, 4 septic tanks, from Dysard Constr. Co., Austell Bldg., Atlanta, $25,000. Noted Oct. 11.

O., Akron—W. F. Peters, dir. Pub. Serv., Oct. 22, for sewers (a) segmental block (b) brick: (1) Holmes Ave. Sewer, 3,905 ft. 8-24 in. vitr. clay pipe, 1,435 ft. 36-39 in. (a) or (b) pipe (2) Serberling St. Sewer, 6,125 ft. 8-24 in. vitr. clay pipe, 1,275 ft. 30-36 in. (a) or (b) pipe (3) Wigley Ave. Sewer, 4,605 ft. 8-24 in vitr. clay pipe, 1,890 ft. 30-54 in. (a) or (b) pipe, from A. Biaselli & Co., 104 Furnace St., (1a) $34,729 (1b) $35,364 (2a) $41,728 (2b) $41,803 (3a) $55,807 (3b) $56,203.

O., Columbus—Franklin Co., from W. D. Winchell, 338 Siebert St., 12,608 ft. 8-18 in. vitr. sewer and 3,000 ft. 8 in. c.i. mains in Sewer Dist. Marion 2 (North Whittier Garden Area), Contr. 16, $41,873, 3,556 ft. 6 in. c.i. mains in Sewer Dist. Franklin 3, Contr. 29, and 2,644 ft. 8 in. vitr. sewers, etc., in Sewer Dist. Franklin 3, Contr. 28, $5,626. Noted Oct. 18.

Mo., Marceline—For (1) 7,920 ft. 8-12 in. vitr. sewers, 224 ft. 10-12 in. c.i. pipe, and disposal plant, known as Sect. A (2) 4,690 ft. 10-12 in. vitr. and 112 ft. 12 in. c.i. pipe, Imhoff disposal plant, etc., Sect. B, from Carrothers Constr. Co., 310 Walsix Bldg., Kansas City, (1) $29,649 (2) $19,905 (combination bid $49,554); Ray & Son, Baxter Springs, Kan., (2) $19,119. Noted Oct. 4.

Wash., Seattle—Bd. Pub. Wks., Oct. 19, (1) 7,058 ft. 8-15 in. pipe in 32nd Ave. et al., (2) 14,525 ft. 8-15 in. pipe in Brandon St. et al., (a) clay (b) concrete, from Romano & Co., 123 23rd St. S. (1a) $35,484 (1b) $35,484 (2a) $75,493 (2b) $75,064. Noted July 12 and Oct. 4.

CONTRACTS AWARDED

Conn., New Britain—Bd. Pub. Wks., 1,500 ft. 24 in. segmental block sewer in Commonwealth Ave., to F. A. Barone Constr. Co., Hartford. Engrs. est. $25,000.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to S. Ambrosio, 1016 60th St., sewers in East 8th St., 92% engrs. est. ($8,462), 86th St. 92% ($1,008); to M. Tozzi, 1362 63rd St., East 82nd St., 83.95% ($8,215), 87th St. 94.25% ($3,241); to F. Merindo Co., 540 17th St., East 27th St. 87% ($6,408); B. Peconi & Son, East 8th St. 88% ($5,053); Nazarro & Querriero, West 6th St. 87% ($5,010). Noted Oct. 25.

Md., Baltimore — Bd. Awards, sewers listed in Storm Water Contr. 61 and in Sanitary Contr. 206, to D. C. McAleer, Phoenix Bldg., $49,928 and $59,724 respectively. Noted Oct. 25.

O., East Liverpool—For 1¾ mi. sanitary sewer in Sewer Dist. 2, East End, to P. Milliron, 2nd St., $90,000.

O., Euclid—Sewers and water mains in 4 streets, to J. B. Lynn, Euclid, $8,448; 3 streets, to Kassouff & Co., 3182 West 25th St., Cleveland, $5,527; 5 streets, to A. C. Hattendorf, Stop 14, Euclid Ave., Cleveland, $48,992; 5 streets, to Curro & Whittaker, 2269 Noble Rd., Cleveland, $46,505.

O., Lyndhurst (Cleveland Heights P. O.) —Sewers and mains in 2 streets, to J. B. Lynn, Euclid, $10,764; 4 streets, to A. Marra Co., Ulmer Bldg., Cleveland, $25,103.

Sewers (Continued)

Ore., Dallas — To Oregon Constr. Co., Blake-McFall Bldg., Portland, sewers in Maple St., 8,102 lin.ft. 8-27 in. clay pipe, prices range from $1.20 to $5.75; Washington St., 2,270 lin.ft. 8 and 10 in. clay pipe, $1.50 and $1.70; Oregon St., 3,240 lin.ft. 8-18 in. clay pipe, $1.50 to $3, total $42,042.

Waste Disposal

CONTRACTS AWARDED

Ind., Indianapolis — Garbage reduction plant building, to Schlegel & Roehm, Lombard Bldg. Noted Sept. 13.

Bridges

PROPOSED WORK

N. Y., New York—Gimbel Bros., 33rd St. and 6th Ave., plans 2 story, brick, steel and concrete bridge connecting two buildings. $75,000. Private plans.

Pa., Scranton—Plans 490 ft. bridge, 37 ft. wide, at Cliff St., $443,400, also undercrossing at Delaware, Lackawanna and Western R.R. tracks, $190,000. W. A. Schunk, city engr.

North Carolina—State Hy. Dept., Raleigh, having plans prepared rein.-con. bridges and culverts on State Project 745, Forsyth Co., $39,600; State Project 912, Cherokee Co., $100,000; State Project 237, Johnston Co., $42,000; State Project 791, Yadkin Co., $38,000; State Project 750 B, Stokes Co., $96,000; State Project 513, Caswell Co., $72,000; rein.-con. and steel bridge over Chowan River, State Project 148, Hertford and Gates Counties, $175,000. C. M. Upham, state highway engr.

North Carolina—See "Streets and Roads."

Miss., Greenwood—Le Flore Co. rejected bids 290 ft. swing span steel bridge. Indefinitely postponed. Noted Oct. 11.

La., New Orleans — Bd. Port Comrs., Suite 200 New Court Bldg., soon takes bids 672 ft. pedestrian viaduct at Bienville Dock. P. H. Maloney, comr. Pub. Utilities.

La., New Orleans—Plans new bridge across New Basin Canal on Claiborne Ave. $35,000. State Hy. Dept., Baton Rouge, will prepare plans, secure bids, and pay half of cost. A. Klorer, city engr.

Ohio—See "Streets and Roads."

O., Cincinnati—Nov. 6, to vote on $825,000 bonds 8th St. viaduct. F. Krug, City Hall, engr.

O., Toledo—Plans new bridge over Maumee River. $2,000,000-$3,000,000. Engineer not selected.

Kan., Hutchinson—Reno Co. making preliminary plans 4th Ave. Bridge over Arkansas River, ten 45 ft. rein.-con. deck girder spans, 20 ft. roadway, will be let about Dec. 1; 110 ft. rein.-con. arch span over Ninnescah River, at Arlington, and 100 ft. steel span over Silver Creek, near Arlington, concrete abutments, also 800 ft. of 20 ft. concrete overflow pavement for approaches, both to be let about Mar. 1. W. A. Stacey, co. engr.

Tex., Beaumont—City and Southern Pacific R.R., 65 Market St., San Francisco, Calif., making plans 1,173 ft. viaduct, steel span and approaches, over Texas & New Orleans R.R. tracks at Short and Mariposa Sts. $160,000. R. M. Fulweiler, city engr., and G. W. Boschke, ch. engr. Southern Pacific R.R.

Okla., Oklahoma City — City, Oklahoma Co. and Oklahoma R.R. Co., had plans prepared 1,500 ft. steel viaduct to replace one destroyed by flood. $250,000. **B. M. Hart**, city engr.

Okla., Oklahoma—Oklahoma Co. having surveys made and plans election soon to vote on $400,000 bonds for 10 bridges along North Canadian River, to replace those destroyed by flood. R. S. James, Court House, engr.

Ont., Toronto—See "Streets and Roads."

BIDS DESIRED

New Jersey—Nov. 27, by State Hy. Comn., Trenton, bridge and approaches, over Raritan River between Perth Amboy and South Amboy. W. G. Sloan, state highway engr.; adv. E. N.-R. Nov. 1.

S. C., Society Hill—Nov. 15, by Society Hill Bridge Bd. approaches to bridge across Great Peedee River. Johnson & Roberts, Marion, engrs.; adv. E. N.-R. Nov. 1.

Ia., Spencer—Nov. 14, by Auditor Clay Co., one 20 x 100 ft. and one 20 x 130 ft. high truss bridges, one 20 x 80 ft. and one 20 x 70 ft. pony truss with approaches, 1,018 cu.yd. concrete, 335,735 lb. structural steel, etc. Iowa Hy. Comn., Ames, engrs.

Kan., Winfield—Nov. 9, by Comrs. Cowley Co., East Madison Ave. bridge across Walnut River, Federal Aid Project 163, two 130 ft. steel truss spans, concrete floor, rein.-con. abutments. Alternate plans may be submitted, if without expense to county. $35,000. W. S. Ruggles, Jr., Arkansas City, co. engr.

Tex., San Antonio—Bexar Co. taking bids removing old bridge approaches, flooring, etc., constructing new rein.-con. approaches with earth fills, new steel and wood floor on present steel bridge, also cleaning and painting all steel now on bridge. $28,000. W. S. Kendall, co. aud.

Ont., Prairie Siding—Nov. 22, by W. G. McGeorge, engr., Chatham, superstructure of 100 ft. bascule double leaf span with steel approach spans of 98 and 158 ft. $120,000.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, Oct. 29, concrete encased plate girder bridge of 69 ft. 8 in. span for 30 ft. roadway, over Bound Brook, Route 9, Sect. 10, Middlesex Co., from F. W. Schwiers, Jr., 90 West St., New York City, $48,673; 15 ft. widening of seven 85 ft. arch, two 65 ft. plate girder and one 60 ft. bascule spans, etc. for distance 140 ft. on west side and 550 ft. on east side, over Raritan River, Route 4, Sect. 21, Middlesex Co., from Krellwitz Constr. Co., Kinney Bldg., Newark, 98% engrs. est. ($357,393). Noted Oct. 25.

Virginia—State Hy. Comn., Richmond, 3 rein.-con. bridges, 137 ft. over Lynhaven River, 112 ft. over Thalia Arm, 97 ft. over Broad Creek, Project S 320, A, B and C, Norfolk and Princess Anne Counties, from Carpenter & Petrie, Box 1243, Norfolk, $25,815, $22,660 and $30,738 respectively. Noted Sept. 27 under Streets and Roads.

Alabama—State Hy. Dept., Montgomery, bridges on Selma-Montgomery Rd., Federal Aid Project 139, Lowndes Co., from W. C. McCoy, Lafayette, creosoted timber $48,391, rein.-con. $82,986. Noted Oct. 4.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Oct. 17, constructing bridges, **r c s means rein.-con. slab, r c g rein.-con. girder, sub, substructure and super, superstructure, 8-1B Warren means (Route 8, Sect. 1B Warren Co.)** from F. Shindelecker, Salem, Mo., one 16 ft. r c s, 8-1B Warren, $5,949; from Miller Constr. Co., Burlington, Ia., 1 sub for 50 ft. steel span, 8-8B and 1 super for 50 ft. steel, 8-8C both Henderson, $3,580 and $3,127 respectively; from R. P. Devine Constr. Co., Watseka, 1 r c g with three 50 ft. spans, 8-21B, Iroquois, $19,670; from D. O'Keith, Lone Point, 1 r c g with seven 24 ft. spans and 1 r c s with two 17 ft. spans, 8-25B, Livingston, $17,754; from W. Behrndt & Son, St. Peter, one 28 ft. and one 24 ft. r c s 12-12B Clay, $6,820; from W. H. Shons, South Liberty Ave., Freeport, 1 r c g with two 50 ft. spans 12-30B, St. Clair, $15,654; from A. P. Poirrot, Belleville, one 40 ft. and one 50 ft. r c g 13-12B, Jackson, $11,181; from Tritt Bros., Belleville, one 23 ft. r c s and one 26 ft. r c g 24-11B Tazewell, $10,660. Noted Oct. 11.

S. D., Mobridge—State Hy. Dept., Pierre, bridge over Missouri River, near here, on State Trunk Highway 16, Walworth and Corson Counties, five 256 ft. steel spans on concrete piers, and three 64 ft. plate girder approach spans on concrete and steel foundations, from Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, Minn., $281,956.

Ore., Portland—Multnomah Co., Oct. 22, substructure for Ross Island Bridge, from Pacific Bridge Co., foot of East Salmon St., additions or deductions to concrete, Piers 2-6, $25, abutments $12, credit for sacks, $0.10, total $414,000 (250 days) substructure for Burnside Bridge, from G. F. Atkinson and L. S. Atkinson, Jr., Portland, removal of old piers $50,000, additions or deductions from concrete (A) $40 (D) $30, credit for sacks, $0.10, total $1,568,000 (400 days). Noted Sept. 27.

CONTRACTS AWARDED

Pa., Oil City—Comrs. Venango Co., removing highway bridges over Allegheny River and constructing new one on site of suspension bridge, to W. S. Rae, Oliver Bldg., Pittsburgh, $433,900. Noted Sept. 6.

North Carolina—State Hy. Comn., Raleigh, rein.-con. bridges and culverts on State Project 763 A, Surry Co., to C. A. Helig, Winston-Salem, $71,348; on State Project 686, Stanly Co., to J. L. Brinkley & Sons, Thomasville, $52,560; on State Project 404 A, Chatham Co., and State Project 302, Bladen Co., to Atlantic Bridge Co., Roanoke, Va., $53,142 and $204,200 respectively. Noted Oct. 18.

South Carolina — State Hy. Dept., Columbia, constructing bridge, Project 100, Lancaster Co., to N. C. Hughes, Jr., Laurens, 997 cu.yd. structural concrete $23.75, 165,740 lb. reinforcing $.05, $43,516. Noted Sept. 20.

Alabama—States of Alabama (Montgomery) and Georgia (Atlanta) concrete piers and approaches to bridge over Chattahoochee River, Barbour Co., to J. A. Peterson, Montgomery, $71,962. Noted Oct. 25.

Alabama—State Hy. Dept., Montgomery, several small bridges on Montgomery-Selma Rd., Lowndes Co., to W. C. McCoy, Lafayette, $82,986. Noted Oct. 4.

Ohio—See "Streets and Roads."

Ohio — Dept. Highways and Pub. Wks., Columbus, bridge and approaches on 0.127 mi. Hamilton-Eaton Rd., Butler Co., to C. Beatty, West Middletown, $25,965; concrete viaduct on 0.17 mi. Sects. L and M. Mansfield-Galion Rd., Richland Co., to Galion Constr. Co., Galion, $38,535; approaches and bridge on Sect. "A" Ripley-Hillsboro Rd., Brown Co., to C. Craver, Owensville, $3,329 and $12,773 respectively; bridges on Sect. "P-2" Logan-New Lexington Rd., and on Sect. "E" Logan-Lancaster Rd., Hocking Co., to Nealon Bros., Columbus, $7,987 and $5,559 respectively; bridge on Sect. "B" Pomeroy-Jackson Rd., Meigs Co., to Ebersbach Co., Pomeroy, $9,337; bridge on Sect. "F" Ohio River Rd., Monroe Co., to B. C. Patterson, Van Atta, $10,574; concrete bridge on Sect. "C" Zanesville-McConnelsville Rd., Muskingum Co., to E. L. Paul, Zanesville, $7,301; concrete beam bridge on Sect. "E" New Philadelphia-Uhrichsville Rd., Tuscarawas Co., to Chillicothe Constr. Co., Chillicothe, $25,116; bridge over Big Still Water Creek, Sects. "E and G" New Philadelphia-Uhrichsville Rd., Tuscarawas Co., to B. C. Patterson, Van Atta, $24,750; bridge over Sugar Creek, Sects. "K" Wooster-Canal Dover Rd., Tuscarawas Co., to Capital Constr. Co., Columbus, $16,181. Noted Oct. 25.

Ia., Denison—Crawford Co., 2 pony truss bridges, 597.9 cu.yd. rein.-con., 155,230 lb. steel, to Lundgren-Reis Co., 65 College St. Des Moines, $27,800.

Colo., Denver—City will construct rein.-con. superstructure, etc., 16th St., viaduct, by day labor. $85,000. Bids opened on Oct. 15, rejected.

Calif., San Francisco—City and San Francisco Co., sub-structure for bridge across Dumbarton Straits, Hetch Hetchy Project, to carry water pipes on series of steel truss spans for part of distance and laying pipe as submerged lines in trenches in bottom of San Francisco Bay for remainder of distance, will have 36 truss spans, each 105 ft. long, to rest on concrete piers, depth of water maximum 25 ft., to Healy-Tibbitts Constr. Co., 64 Pine St., $1,192,484. Noted Oct. 25.

Dams

PROPOSED WORK

Vt., Morrisville—See "Miscellaneous."

N. C., Badin—Tallahassee Power Co. plans large dam across Yadkin River, near here, to form reservoir covering 30 sq.mi.

N. C., Durham—See "Waterworks."

Okla., Oklahoma City—Having plans prepared additional length and protection work to present concrete dam, will replace portions destroyed by recent floor. $500,000. B. M. Hart, City Hall, engr.

Colo., Pueblo—See "Miscellaneous."

Que., Three Rivers—North Shore Power Co., Ltd., Three Rivers, takes bids about Nov. 15, dam at Chute de la Cheminee, on Batiscan River, St. Genevieve Parish, to develop 4,000 hp. $500,000.

BIDS DESIRED

Tex., Ft. Worth—Jno B. Hawley, engr., Cotton Exch. Bldg., taking bids earth dam and concrete spillway for Southwestern Portland Cement Co., Two Republics Bldg., El Paso. $60,000. Noted Oct. 11.

Wash., Lake Cushman—Comrs. Light & Water, Tacoma, taking bids and open same about Dec. 1, arch concrete dam, 275 ft. high, 350 ft. long at the 230 ft. elevation and 800 ft. long at crest, in connection with Lake Cushman Hydro-Electric plant, here. $1,250,000. Bids on equipment, etc., early next year and bids on power house early next spring. J. L. Stannard, City Hall Annex, Tacoma, engr. Noted May 3 under "Industrial Works," Washington.

Calif., Oroville—See "Excavation, Drainage, Irrigation."

CONTRACTS AWARDED

Tenn., Duck River — See "Industrial Works."

Nev., Iron Point (Golconda P. O.)—Ellison Ranching Co., Layton, Utah, addition to Willow Creek Dam, 510 ft. long, 66 ft. high, part rock-filled and part concrete, here, to F. Whiting, Salt Lake City, Utah.

Railways

PROPOSED WORK

Mississippi—Taturn Lumber Co., Hattiesburg, purchased 150,000 acres timber land and plans to construct 26 mi. railroad.

Oklahoma—Atchison, Topeka & Santa Fe R.R. Co., 406 Delaware St., Topeka, Kan., having surveys made 4 mi. extension from Tonkawa to oil fields at Three Sands, crossing Salt Fork River, 80 lb. rails. $100,000. R. A. Rutledge, ch. engr.

Oklahoma — Oklahoma Union R.R. Co., 101 West 4th St., Tulsa, plans 32 mi. extension from Keifer to Nuyka, connecting with Oklahoma-Southwestern R.R., etc. W. Matthews, ch. engr.

Colorado — See "Miscellaneous" under "Pueblo."

Ontario—See "Streets & Roads under Toronto."

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Binghamton—See "Sewers."

Colo., Pueblo—Pueblo Conservancy Dist. takes bids during November or December new river channel to carry 125,000 cfs. of water, 34 mi. railroad tracks, 3,060 ft. barrier dam, 35 ft. high, etc. $4,000,000.

BIDS DESIRED

N. J., Newark—Nov. 8, at office of T. L. Raymond, dir. Dept. Streets & Pub. Impvts., City Hall, dredging portion of City of Newark channel at Port Newark Terminal; adv. E. N.-R. Nov. 1.

Calif., Oroville—Nov. 9, by Dirs. Thermalito Irrigation Dist., constructing Lake Wilenor storage work (known as Concow dam). Bids to be received on 3 alternative sizes, Schedule 1, dam to crest elevation of 1,947 ft. or approximately 75 ft. high, 300 cu.yd. solid rock excav., 2,200 cu.yd. concrete aggregate 1:2½:5 mixture, 40 cu. yd. rein.-con. aggregate 1:2½:5 mixture, 550 tons hauling cement, 20 tons hauling steel and iron; Schedule 2, same as Schedule 1, only different thickness, 400 cu.yd. solid rock excav., 3,420 cu.yd. concrete aggregate 1:2½:5 mixture, 40 cu.yd. rein.-con. aggregate 1:2½:5 mixture, 850 tons hauling cement, 20 tons hauling steel and iron; Schedule 3, dam to crest elevation 1,967 ft. or approximately 105 ft. high, 500 cu.yd. solid rock excav., 4,520 cu.yd. concrete aggregate 1:2½:5 mixture, 40 cu.yd. rein.-con. aggregate 1:2½:5 mixture, 1,100 tons hauling cement, 20 tons hauling steel and iron. S. J. Norris, Oroville, ch. engr. L. Jorgensen, Hobart Bldg., San Francisco, consult. engr.

BIDS RECEIVED

Calif., Yuba City—Recl. Dist. 1660, Sutter Co., 1,000,000 cu.yd. earthworth (a) cash basis (b) warrants of district, from Callahan Constr. Co., Detwiler Bldg., Los Angeles, (a) $0.132 (b) $0.139. Noted Oct. 4.

CONTRACTS AWARDED

Minn., Granite Falls — Yellow Medicine and Lyon Counties, Judicial Ditch 10, Sects. 1 to 6 inclusive, 1,581,407 cu.yd. excav., etc.; Sects. 7 to 10 inclusive, 379,991 lin.ft. 6-28 in. tile, etc., to Peterson & Jenson, Tracy, $376,000. Noted Oct. 4.

Mont., Ulm — Irrigation Project Comn., c/o J. W. Stanton, Great Falls, irrigation system to drain about 11,000 acres in Cascade Co., to Two Miracle Contg. Co., 437 Ford Bldg., Great Falls, about $300,000.

Streets and Roads

PROPOSED WORK

Conn., Windham — Town appropriated $25,000 constructing state aid road through town. F. P. Fenton, clk.

New York—State Hy. Dept., Albany, plans grading 4.57 mi. Project 103, Washington Co. $148,525. F. S. Greene, comr. highways.

N. Y., Albany — Plans extending North Pearl St., 1.04 mi., 60 ft. asphalt. $200,000. F. Ravens, City Hall, engr.

N. Y., Binghamton—Plans constructing 2 mi. State, Clinton and Court Sts., and reconstructing 10 mi. various streets. $600,000. Will mature in spring. E. H. Prentice, city engr.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, rejected bids asphalt repaving Empire Blvd. Noted Oct. 18.

N. Y., Geneva—Plans widening highway, eliminating canal and new sea wall in Seneca Lake Park. $50,000. J. W. Brennan, city engr.

Va., Farmville—City voted $50,000 bonds street improvements. G. Waggoner, city mgr.

W. Va., Beckley—Raleigh Co. voted $400,000 bonds for roads in Slab Ford Dist. Noted Oct. 4.

W. Va., Moundsville—Webster Dist., Marshall Co., voted $100,000 bonds for road work. A. Purdy, co. road engr.

North Carolina—State Hy. Comn., Raleigh, rejected bids grading and concrete or asphaltic paving 2.31 mi. State Project 352, New Hanover and Brunswick Counties, $107,000; grading and waterbound macadam surfacing 2.05 mi. State Projects 990 A and 992, Transylvania Co., $90,000. Will readvertise. C. M. Upham, state highway engr.

North Carolina—State Hy. Comn., Raleigh, soon takes bids grading and concrete or asphaltic paving 4.65 mi. State Project 666, Richmond Co., $178,000, 2.39 mi. State Project 447, Lee Co., $74,000, 7.43 mi. State Project 457 B, Orange Co., $230,000; grading and small rein.-con. structures on 9.88 mi. State Project 646, Lincoln Co., $70,000, 5.03 mi. State Project 648, Lincoln Co., $35,000; concrete or asphaltic paving 8.2 mi. State Project 318, Brunswick Co., $246,000, 2 mi. State Project 557, Montgomery Co., $60,000, 10.82 mi. State Project 852, McDowell Co., $320,000; grading and topsoiling 8.6 mi. State Project 750 B, Stokes Co., $60,000, 6.5 mi. State Project 891, Yancey Co., $45,000, 16.9 mi. State Project 912, Cherokee Co., $150,000; grading, concrete paving and rein.-con. bridges and culverts on 10.2 mi. State Project 292, Wilson Co., $382,000, 10.8 mi. State Project 212, Craven Co., $430,000; grading 13.4 mi. State Project 791, Yadkin Co., $80,000; grading and rein.-con. bridges and culverts on 7.02 mi. State Project 952 B, Jackson Co., $66,000; sand-asphalt paving 5 mi. State Project 571, Moore Co., $120,000; clearing, grading and sand-clay surfacing 16.5 mi. State Project 513, Caswell Co., $120,000; grading, topsoiling and rein.-con. bridges and culverts on 15.3 mi. State Project 136, Halifax Co., $100,000; grading and sand-asphalt paving 13.8 mi. State Project 275, Sampson Co., $240,000. C. M. Upham, state highway engr.

S. C., Greer—Plans hardsurfacing about 1 mi. Hill and Mosteller Sts. $55,000. H. Beebe, Spartanburg, engr.

Ala., Birmingham—City Comn. soon takes bids grading and paving 1¼ mi. 8th Ave. from 6th St. west toward Ensley, 20 and 24 ft. $78,000. A. J. Hawkins, City Hall, engr.

Ala., Birmingham—Plans widening 2 mi. 1st Ave. from 54th to 72nd Sts. $80,000. A. J. Hawkins, City Hall, engr.

Miss., Vicksburg—Plans paving 47 blocks. $100,000.

Tenn., Gallatin — Having surveys made and will soon take bids rock asphalt paving streets. $50,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engr.

Tenn., Huntington—Carroll Co. plans surfacing with oil asphalt 5 mi. road between McKenzie and Henry Co. line.

Tenn., Paris — Henry Co. voted $50,000 bonds for improving 12 mi. road between Carroll Co. line and Paris.

Tenn., Tullahoma — Election Nov. 3, to vote on $40,000 bond issue for gravel and asphalt paving various streets.

Kentucky — State Hy. Dept., Frankfort, plans surfacing 10.7 mi. George-Brooksville Rd., 18 ft., State Project 58½, Sect. B, Harrison Co., 9.811 mi. Pikeville-Williamson Rd., 18 ft., Federal Aid Project 52, Pike Co., 4.85 mi. Shelbyville-Ashland Rd., 18 ft., State Project 20, Sect. 1, Bourbon Co.; grading 6.34 mi. Covington-Falmouth Extension Rd., 24 and 28 ft., Kenton Co., 13 mi. Alexandria-Falmouth Rd., 24 and 28 ft., State Project 21, Pendleton and Campbell Counties, 4.24 mi. road from Beaver to Rockcastle Co. line, 24 and 28 ft., Federal Aid Project 88, Madison Co.; constructing and paving 13.795 mi. Owensboro-Smithland Rd., 18 ft., State Project 10, Sect. 1, Caldwell Co., 12 mi. Henderson-Gutherie Rd., 18 ft., State Project 2, Sect. F, Christian Co.; constructing and surfacing 6.319 mi. Covington-Falmouth Rd., 18 ft. State Project 62, Sect. C, Kenton Co., 2.6 mi. Lexington-Tennessee Line Rd., 18 ft., State Project 23, Sect. E, Garrard Co., 2.7 mi. Campbelsburg-Richmond Rd., 18 ft., State Project 25, Sect. C, Boyle Co.; having survey made for Eastern Dixie Highway, State Project 5, Scott Co., Newcastle-Oldham Co. line Rd., State Project 19, Henry Co., Campbell-Marion Co. line Rd., State Project 25, Taylor Co., Louisa-Morgan Co. line Rd., Lawrence Co., Owingsville-Sharpburg Rd., Bath Co., J. S. Boggs, state highway engr.

Ky., Paducah—M. A. Wakefield, Shelbyville, plans to develop subdivision, here, incl. streets, sidewalks, watermains, etc. $25,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids Oct. 16, grading, bridging and paving 1.827 mi. Sect. "J-2," and 3.463 mi. Sect. "J-1" Twinsburg-Elyria Rd., Cuyahoga Co., rein.-con. and brick. Noted Oct. 25.

O., Akron—Summit Co. and State take bids in spring widening from 14 to 18 ft. and surfacing with asphalt 2.4 mi. Akron-Kent Rd., 18 ft. $65,000. J. Weaver, Court House, engr.

O., Cincinnati—Nov. 6, to vote on $3,330,990 bonds Canal Blvd. (Central Parkway), and $1,850,000 bonds widening and extending 5th St. F. Krug, City Hall, engr.

O., Warren — Plans asphalt resurfacing Scott St., Porter and Washington Aves., $28,000, $31,000 and $27,000 respectively. W. E. Sarver, City Hall, engr.

O., Youngstown—City, New York Central R.R., Grand Central Terminal, New York City, Erie R.R., 50 Church St., New York City, and Pennsylvania R.R., Broad St. Sta., Phila., plan extending Andrews Ave. $400,000. G. F. Turner, city engr.

O., Youngstown—Plans brick paving 1.25 mi. Warren Lauderdale, Earl and Glenaven Aves. $70,000. G. F. Turner, city engr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and concrete surfacing 9 mi. Federal Aid Project 87, Wayne Co. F. F. Rogers, state comr.

Ill., Harvard—Making preliminary plans 30,000 lin.ft. concrete curbing and guttering with usual amount of grading and sewering, also 50,000 sq.yd. penetration macadam, warrenite bitulithic or vibrolithic concrete paving. $250,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted June 27.

Ia., Atlantic—Plans paving 39-40 blocks during 1924. Engineer not selected.

Ia., Des Moines—Polk Co. making plans paving 8 mi. Des Moines-Mitchellville Rd. $240,000. F. O. Laing, co. engr.

Ia., Iowa Falls—Plans paving 48 blocks, also 20,000 sq.yd. (Federal aid) paving during 1924. Engineer not selected.

Ia., Jefferson—Greene Co. making plans paving 17-18 mi. Lincoln Highway. $500,000. J. L. Lindsey, co. engr.

Ia., Manchester—Plans paving 60 blocks during 1924. Engineer not selected.

Kan., Wichita—Having preliminary plans prepared paving 1½ mi. Garland Ave., from Parker to 18th St. and 18th St. from Garland Ave. to river, probably brick on concrete. $50,000. P. L. Brockway, City Hall, engr.

Nebraska—State Hy. Dept., Lincoln, plans graveling 7.6 mi. Project 208, Chase Co., $56,288; grading and graveling 8.23 mi. Project 213, Colfax Co., $50,398.

N. D., Minot — Ward Co. making plans grading, etc., 18 mi. Park Highway through Ft. Berthold reservation. $80,000. H. C. Farhm, Minot, engr.

Missouri—State Hy. Dept., Jefferson City, plans grading and concrete paving 52,600 sq.yd. Federal Aid Project 144B, Route 2, Callaway Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 4.05 mi. Sect. C, and 4.154 mi. Sect. E, Federal Aid Project 228, Route 2, 34 ft., Lafayette Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Citizens Bond Issue Supervisory Com. approved $45,000 bonds for roadways at St. Louis Training School for Feeble-Minded, also $30,000 bonds fire apparatus. L. E. Bowen, City Hall, engr.

Ark., Forrest City — See "Contracts Awarded."

Ark., Pine Bluff—Soon takes bids paving 21,000 sq.yd. in Cemetery Paving Dist., vitr. brick on concrete. $70,686. F. R. Allen, City Hall, engr.

Tex., Anderson—Grimes Co. election Nov. 10, to vote on $450,000 bonds, grading and graveling highways in Navasota Rd. Dist. R. M. West, co. judge. Engineer not selected.

Tex., Cameron—Plans paving 100 blocks, various types. A. F. Mitchell, Cameron, engr.

Tex., Canton—Van Zandt Co. making plans 6 in. concrete paving 7½ mi. State Highway 15, 9 ft. $120,000. H. C. McClure, co. engr.

Tex., Clarksville—Red River Co. soon takes bids gravel surfacing 5.95 mi. Clarksville-Bogata Rd., 16 ft. $30,000. J. B. Reiman, co. engr.

Tex., Ft. Worth — Making plans paving Western Ave., bituminous of various types or brick. $25,000. D. L. Lewis, city engr.

Tex., Jasper — Jasper Co. plans grading and gravel surfacing 6 mi. State Highway 45, 16 ft. $60,000. C. P. Hunter, co. engr.

Tex., Jasper—Jasper Co. ready for bids Nov. 10, surfacing 16.22 mi. Federal Aid Project 82, 16 ft. $92,000 incl. materials to be furnished by county. C. P. Hunter, co .engr. Noted Oct. 25.

Streets and Roads (Continued)

Tex., La Grange—Fayette Co. making plans grading and gravel surfacing 14 mi. State Highway 3D, 16 ft., Federal Aid Project 417. $150,425. A. Schlafli, co. engr.

Tex., Marshall—Voted $50,000 bonds paving, $10,000 bonds sidewalks. Noted Sept. 13.

Tex., Port Arthur—Plans election to vote on $900,000 bonds for paving, water improvemens, sewers, etc. M. C. Erwin, city engr.

Tex., Sherman — Plans prepared paving East Wall St., brick, asphalt or concrete. $25,000. O. J. S. Ellingson, city engr.

Tex., Sweetwater—Nolan Co. voted $600,000 bonds, improving 125 mi. Highways 1 and 30, 70 mi. of foregoing to be hard surfaced. A. S. Mauzey, co. judge. Noted Sept. 27.

Tex., Texarkana—Making plans paving East 9th St. from Hickory to Missouri Pacific R.R. bridge, and State Line St. from 7th to 24th Sts., bituminous or brick. $60,000. O. Yenglin, city engr.

Okla., Andrews—Plans grading and paving 7 blocks North Coddo St., 6,100 sq.yd. vertical fibre brick, 3,600 lin.ft. curbing, etc. $38,000. S. Mathews, Ardmore, engr.

Okla., Chickasha—Grady Co. having plans prepared gravel surfacing 100 mi. Meridian Highway and Ozark Trail. $350,000. P. Little, Chickasha, engr.

Okla., Guymon—Plans grading and paving 7 blocks in business section, 11,800 sq.yd. vertical fibre brick, 3,750 lin.ft. curbing, 3,000 cu.yd. excav. $60,000. F. E. Devlin, Sedgwick Bldg., Wichita, Kan., engr.

Idaho — State Hy. Dept., Boise, plans broken stone surfacing 10.46 mi. Federal Aid Project 75, Latah Co. $148,588. D. P. Olson, dir. of highways.

Nevada—State Hy. Dept., Carson City, having plans prepared 12 mi. road from Carroll Summitt to Petersons Ranch, Lander Co., G. W. Borden, state highway engr.

Wash., Kelso—Making plans and takes bids about Dec. 1, grading and paving 2 mi. streets in West Kelso. U. G. Jackson, city engr.

Wash., Seattle — Rejected bids grading and paving Avalon Way, et al. Will readvertise after grade revisions have been made to reduce cost. Engrs. est. $300,000. Noted Oct. 25.

Calif., El Centro—Had plans prepared improving various streets, 156,000 sq.ft. asphaltic concrete, 4 in. base, 2 in. surface, 391,000 sq.ft. asphaltic concrete, 3½ in. base, 1½ in. surface, 20,000 ft. concrete curb, etc. F. C. Dyer, city engr.

Calif., Inglewood — Had plans prepared improving streets in Fairview Heights, Dist. 4, 573,720 sq.ft. grading, 115,980 sq.ft. 6 in. concrete, 106,500 sq.ft. 2 in. macadam, 83,980 sq.ft. oiling, 98,050 sq.ft. walks, 21,660 lin.ft. curb. A. W. Cory, city engr.

Calif., Lindsay—Had plans prepared improving portions Lindero and Honolulu Sts., 45,890 sq.ft. 1½ in. warrenite bitulithic on 2½ in. bituminous, 2,300 yd. grading, 5,100 sq.ft. concrete gutter, etc. H. D. Watts, city engr.

Calif., San Diego—Common Council plans to improve Girard Ave. and Coast Blvd., 118,601 sq.ft. 5 in. concrete, etc. F. A. Rhodes, city engr.

Calif., San Diego—Having revised plans prepared improving Maryland St. Former bids rejected. F. Rhodes, city engr. Noted Oct. 4.

Calif., San Francisco—Had plans prepared grading Anza St., 30th, 31st and 32nd Aves., 75,083 cu.yd. excav., 72,353 cu.yd. fill. To exceed $55,000. M. M. O'Shaughnessy, city engr.

Calif., San Luis Obispo — Having plans prepared improving Higuera St. between Nipomo and South Sts., 80,000 sq.ft. pavement, 42,000 sq.ft. walks, 5,000 ft. curb. C. Roselip, city engr.

Calif., Santa Ana—Plans improving West 5th St., 172,000 sq.ft. 7 in. concrete with belt finish wearing surface, 2,193 ft. curb, 26,670 sq.ft. regrading and laying 6 in. concrete pavement, etc. Bids were to be opened Oct. 5, proceedings rescinded. New proceedings underway. W. G. Knox, city engr. Noted Oct. 18.

Que., Montreal—Plans asphalt pavement on 3,928 ft. Marquette St. 22-30 ft., $42,824, 1,181 ft. Des Varennes St., 20 ft., $8,100, 532 ft., Laval Ave., 20 ft., $3,520; 2,206 ft. concrete sidewalks on Jarry St., 6 ft., $13,904, 650 ft. 2nd Ave., 4 ft., $570.

Que., Montreal—Plans 1,331 ft. asphalt pavements on Duhamel, Beresford and Chaumont Sts., $11,898 9,725 ft. concrete sidewalks on Sir George Etienne Cartier Sq., Rosemount Blvd., Park Ave., Millen, Masson, Lartique, Wellington, Eva, Bercy, Fullum, Berri and Bordeaux Sts. $35,903. E. Gauthier, asst. city clerk.

Ont., Oshawa—Plans 7,000 sq.yd. asphaltic concrete pavements on King St., $2,330, Simcoe St., $31,110; 10,000 sq.yd. asphalt resurfacing on Simcoe St., $23,000; 5,500 sq.yd. concrete pavement on Ontario, Oak, Ash, Maple and Fisher Sts., $17,680. W. C. Smith, town engr.

Ont., Toronto—Plans to extend Sherbourne St. north to Mt. Pleasant Blvd., 66 or 86 ft. wide, incl. concrete sidewalks, asphalt pavements, curbing, guttering, street railway, and 700 ft. steel bridge over Rosedale Ravine. $2,700,000. R. C. Harris, city engr.

Ont., Toronto—Plans grading Maclennan Ave. $61,000, Norway Ave. $175,000, grading and extending Cleveland St. $25,000, concrete curbs on Brandon Ave. $1,054, concrete sidewalks on Geary Ave. $1,504. R. C. Harris, city engr.

B. C., Vancouver—Dec. 15, to vote on $200,000 bonds for paving various streets, concrete or bituminous macadam. F. L. Fellowes, city engr.

New York — Nov. 16, by L. Grossman, comr. highways, and W. A. Patton, secy. Bureau Highways, Albany, constructing and reconstructing highways in Allegany, Cattaraugus, Chemung, Cortland, Chenango, Livingston, Monroe, Niagara, Ontario, Rensselaer, Schenectady and Schuyler Counties; adv. E. N.-R. Nov. 1.

N. Y., Brooklyn—Nov. 8, by E. Riegelmann, boro pres., Boro Hall, repaving 2nd Ave., granite on 6 in. concrete; paving Clarkson Ave., and grading, curbing, flagging and paving Sheepshead Bay Rd., asphalt on 6 in. concrete.

N. Y., St. George — Nov. 5, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Ave., bituminous concrete; St. Marks Pl., bituminous macadam.

N. Y., Tonowanda—Nov. 17, by Towondo Town Bd., Village Hall, Kenmore, grading, curbing, laying sewers and concrete paving Colvin Blvd. G. C. Diehl, 575 Ellicott Sq., Buffalo, town engr; adv. E. N.-R. Nov. 1.

N. J., Millville — Nov. 14, by State Hy. Dept., Trenton, rein.-con. paving, etc. Route 15, Sect. 4, Main St., here, Cumberland Co. A. L. Grover, secy.; adv. E. N.-R. Nov. 1.

Pa., Phila.—Nov. 5, by Dept. Pub. Wks., City Hall, grading Flanders Rd., Schedule A, paving Emlen, Kingsessing, Newkirk, Rising Sun, Ruscomb, 15th and 65th Aves., Schedule B. F. H. Caven, dir. pub. wks.

Maryland—Nov. 13, by State Rds. Comn., Baltimore, gravel surfacing 1.03 mi. highway in Prince George Co., Contr. P-46. J. N. Mackall, chn.; adv. E. N.-R. Nov. 1.

Maryland—Nov. 13, by State Rds. Comn., Baltimore, paving with sheet asphalt 1.72 mi. Park Heights Ave. and 0.59 mi. Singer Ave., Contr. BC-41, Baltimore City. J. N. Mackall, chn.; adv. E. N.-R. Nov. 1.

Alabama—Nov. 26, by State Hy. Comn., Montgomery, grading and gravel surfacing 6.043 mi. road from Russellville to Phil Campbell, 18 and 26 ft., Federal Aid Project 135, Sect. A, Franklin Co., 12 acres clearing, 66,904 cu.yd. common and 7,016 cu.yd. solid rock excav., 86,100 sta.yds. overhaul on excav., 52,116 lb. reinforcing, 16,000 cu.yd. gravel surfacing in place, etc. W. S. Keller, state highway engr.

Ky., Clay City—See "Bridges."

Ind., Warsaw—Nov. 6, by Kosciusko Co., paving A. W. Geyer County Unit Rd., Van Buren Twp., concrete gravel. $84,970. T. J. Nye, co. aud.

Michigan—Nov. 9, by State Hy. Dept., Lansing, grading and surfacing 5.148 mi. Federal Aid Project 57, Sect. D, Kent Co., 58,110 cu.yd. excav., 54,503 sq.yd. asphalt concrete or bituminous concrete. F. F. Rogers, state comr.

Wyoming—Nov. 7, by State Hy. Dept., Cheyenne, gravel surfacing 8.8 mi. Federal Aid Project 48, Lincoln Highway from Thayer Junction to Point of Rocks, 24 ft., Sweetwater Co., $45,000; grading and building structures on 35.4 mi. Federal Aid Project 158, Kemmerer-Marbleton Rd., 20 ft., Lincoln and Sublette Counties, $226,000. Z. E. Sevison, state highway engr.

Tex., Dallas—City Com. taking bids paving 12 blocks Thomas Hall to McKinney St. $32,000, 11 blocks Holmes, Belasco and Marlborough Sts. $30,000, 9 blocks Central, Edgefield, Pine and Lewis Sts. $25,000, 10 blocks 2nd Ave. from Metropolitan St. to city limits $27,000, 12 blocks 8th and Euclid Sts. $32,000, 15 blocks Spencer and Colonial Sts. $40,500, 20 blocks Beacon and Tyler Sts. $54,000, brick, sheet asphalt, asphaltic concrete or bitulithic. E. A. Kingsley, city engr.

Tex., Marlin—Falls Co. taking bids gravel surfacing, etc., 13.33 mi. State Highway 44, Rd. Dist. 3, 16 ft. $200,000. W. P. Wehrung, Lott, engr.

Tex., Waco—Nov. 19, by City Com. paving 15 blocks Vermont and North 15th Sts., 2 in. bitulithic on 5 in. base or 6 in. concrete. $75,000. V. G. Koch, city engr.

Okla., Okmulgee—Nov. 5, by H. H. Seddium, city clk., grading and paving 7 blocks West 6th, 7th and Kern Sts., 7,800 sq.yd. concrete, 3,850 lin.ft. curbing, etc. $36,000. T. J. Embree, Okmulgee, engr.

Colo., Denver—Nov. 7, by Dept. Impvts. and Parks, curbing, grading and surfacing 1 mi. in North Denver Impvt. Dist. 33, ¼ mi. wide. $103,000. A. K. Vickery, City Hall, engr.

California—Nov. 13, by State Hy. Comn., Sacramento, grading and surfacing with crushed gravel or broken stone 9.8 mi. highway between point 2 mi. south of Hornbrook and Oregon State Line, Siskiyou Co. R. M. Morton, state highway engr.

Calif., Bakersfield—Kern Co. receiving bids and opens same about Nov. 13, grading and paving Arvin and Weed Patch Rds., Impvt. Dist. 26, 38,400 cu.yd. excav., 890,724 sq.ft. 2 in. asphaltic concrete on 4 in. bituminous, etc. P. E. Kressly, Hellman Bldg., Los Angeles, engr.

Calif., Glendale—City Trustees receiving bids improving Alameda, Mountain and Glenwood Sts., 6,615 ft. curb, 6,346 sq.ft. gutter, 119,919 sq.ft. 5 in. oil macadam, etc.; Stanley Ave. and Verdugo Rd., 1,574 ft. curb, 2,990 sq.ft. gutter, 7,900 sq.ft. walk, 20,486 sq.ft. oil macadam, etc.; Railroad St., 18,117 sq.ft. 6 in. concrete, etc.; Concord, Patterson and Pioneer Sts., etc., 16,300 sq.ft. walks, 17,250 sq.ft. 3 in. oil macadam, etc. B. F. Dupuy, city engr.

Calif., Oroville—See "Miscellaneous."

Calif., Porterville—Nov. 8, grading, curbing, paving, etc., Belleview Ave., 47,976 sq. ft. grading, 47,976 sq.ft. concrete paving, etc.; Henrahan, Cleveland, 2nd and 4th Sts., 483,680 sq.ft. grading, 483,680 sq.ft. concrete paving, 14,925 lin.ft. concrete curb, 1,483 lin.ft. rein.-con. culvert, 1,347 ft. conduit, etc. F. Pease, city engr. Noted Oct. 18.

Calif., Visalia — City Trustees receiving bids improving portions Hall Ave., West Center and North Giddings Sts., 4,631 cu. yd. grading, 212,757 sq.ft. 1½ in. warrenite bitulithic on 4 in. base, etc. L. H. Gadsby, city engr. Noted Sept. 6.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Oct. 25, grading, curbing and flagging East 29th St., from T. B. Scott, 671 Halsey St., $4,087; Lake St., from W. J. McHale Contg. Co., 1250 Jefferson St., $4,656; asphalt paving East 29th St. and New York Ave., from Borough Asphalt Co., 1301 Metropolitan Ave., $7,439 and $40,147 respectively; Lake St., from Cranford Co., 52 9th St., $10,231; resurfacing 67th St., bituminous macadam, from Galecor Contg. Co., 507 Greenwich St., New York, $13,759. Noted Oct. 18.

N. J., Alpha—Warren Co. (Belvidere) Oct. 24, paving Alpha Boro Rd., here, from Korp & Korp, Phillipsburg, $64,238. Noted Oct. 4.

N. J., Asbury Park—Asphalt paving 27,000 sq.yd. Kingsland St., engrs. est. $63,774, and 17,500 sq.yd. Cookman Ave., $38,562, from J. J. Barrett, North Olden Ave., Trenton, $63,774 and $38,562 respectively.

Virginia—State Hy. Dept., Richmond, constructing roads, from Roberts Paving Co., Clara, Md. 1.98 mi. Project S 310 B, Route 12, Brunswick Co., 5,720 cu.yd. excav. $0.70, 20,910 sq.yd. one course plain cement concrete $2.86, etc., total $66,566, 3.6 mi. Project S 145 A, Route 35, Sussex Co., 12,609 cu.yd. excav. $0.50, 38,100 sq.yd. one course plain cement concrete $2.77, etc. total $126,793; from Ballard Herring Co., Inc., Bedford, 3 mi. Project S 143 C, Route 10, Bedford Co., 42,909 cu.yd. excav. $0.63, 31,641 sq.yd. bituminous surface course $1.88, etc., total $106,859; from Allport Constr. Corp., Mutual Bldg., Richmond, 0.7 mi. Project F 225 B, Route 31, Spotsylvania Co., 3,705 cu.yd. excav. $0.65, 7,483 sq.yd. one course cement-concrete $2.30, etc. total $24,980; from H. H. George Jr. & Son, 1831 Monument Ave., Richmond, 2.89 mi. Project F 183, Route 31 Stafford Co. and Project F 225 B, Route 31, $126,859 and $25,184 respectively.

Fla., Sebring — Highlands Co., grading road, from O. Harden, Okeechobee, 75,000 cu.yd. excav. at $0.30 per cu.yd., 40 acres clearing $80.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, 10 mi. Covington-Franklinton Highway, Project 373 A, St.

Streets and Roads (Continued)

Tammany Parish, from Vicknair & Co., Plaquemine, combination 1, $23,395, combination 2, $25,649; 7.029 mi. St. Francisville-Baton Rouge Highway, Project 138, East Baton Rouge Parish, from E. Vicknair, $36,012 for both combination 1 and 2; 5.904 mi. St. Francisville-Baton Rouge Highway, Project 137, East Feliciana Parish, from B. H. Bass, Hazelhurst, Miss., combination 1, $52,691; from S. Maggio & Co., combination 2, $58,896; furnishing 8,105 cu.yd. washed gravel from State Gravel Co. Maison Blanche Bldg., New Orleans, $1.75; 16,210 cu.yd. sand clay gravel from Interstate Gravel Co., c/o State Hy. Dept., Baton Rouge, $1.725.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, grading 19.03 mi. road from Decatur to Hamilton Co. line, State Aid Project 140, Meigs Co., from Harrison, Walter & Prater, White River, $51,818; 8.25 mi. road from Marysville to Knox Co. line, 16 ft., State Aid Project 141, Blount Co., from Shea Bros., Knoxville, Tenn., $101,105. Noted Oct. 4.

Kentucky—State Hy. Dept., Frankfort, constructing and surfacing 5.795 mi. Calhoun-Owensboro Rd., 16 ft., State Project 10, Sect. A, McLean Co. and 8.309 mi. Henderson-Dixon Rd., 18 ft., State Project 2, Sects. B and C, Henderson Co., from Corum Bros., Madisonville, $60,497 and $155,949 respectively, 10.378 mi. Dixon-Hopkinsville Rd., 18 ft., Federal Aid Project 41, Sect. F, Hopkins Co., from N. E. Stone Co., Madisonville, $136,604, 8.82 mi. Dixon-Hopkinsville Rd., 18 ft., Federal Aid Project 41, Sect. G, Hopkins Co., and 19.16 mi. Henderson-Madisonville Rd., 18 ft., Federal Aid Project 34, Sect. F, Webster Co., from Peacock Constr. Co., Yale, Mich., $95,003 and $209,803, surface treating above roads, from R. B. Tyler, 114 South 4th St., Louisville, $9,514, $15,166, $17,038, $14,523 and $32,405 respectively; surfacing 7 mi. Lexington-Maysville Rd., 14 ft., State Project 20, Sect. J 1, Nicholas Co., from J. D. Walton, Princeton, $39,446; grading 7.296 mi. Jackson-Campton Rd., 24 and 28 ft., Federal Aid Project 102, Breathitt Co., from North Fork Constr. Co., Jackson, $204,819, 2.64 mi. Owensboro-Hanesville Rd., Federal Aid Project 105, Sect. A, Daviess Co., from Hollen & Waitmen, Lewisport, $26,646, 2.483 mi. Barboursville-Corbin Rd., Federal Aid Project 61, Sect. B, Knox Co., from Garrard and P. S. Patterson Co., Heidrick, $51,199. Noted Sept. 27.

O., Euclid—Curbing, guttering and asphaltic concrete paving Westport, Wilmore, Morris and Foxton Ave., from Cleveland Trinidad Paving Co., The Arcade, Cleveland, $57,512; Priday and Ball Aves., from Gould & Maybach, 16311 Saranec Rd., Cleveland, $28,710.

O., Lyndhurst (Cleveland Heights P. O.)—Grading and laying sidewalks on 4 streets, from Strohman & Kidder, The Arcade, Cleveland, concrete $30,345; Ohio Quarries Co., Citizens Bldg., Cleveland, stone $37,294.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Oct. 17, concrete paving **1-12 Wabash means (Route 1, Sect. 12, Wabash Co.)** from Baker, Agerter & Thompson, 707 National City Bank, Indianapolis, Ind., 5.19 mi. **1-12 Wabash,** 6.69 mi. **1-13 Wabash-Lawrence** and 4.94 mi. **1-15 Lawrence** $321,967, and 6.22 mi. **8-4 Warren,** $122,080; from C. J. Moritz, Inc., Effingham, 3.65 mi. **1-33 Saline** and 4.37 mi. **1-34 Williamson-Johnson,** $71,359 and $99,888 respectively; from C. E. Hamilton, Carbondale, 3.97 mi. **1-35 Johnson** $111,321; from B. Wells, Logansport, Ind., 3.66 mi. **3-7 Rock Island** $88,129; Central Eng. Co., Putnam Bldg., Davenport, Ia., 7.11 mi. **8-1 Knox-Warren** and 6 mi. **8-3 Warren** $277,500; from Miller Constr. Co., Burlington, Ia., 4.12 mi. **8-5 Warren-Henderson,** $71,743, 5.51 mi. **8-6 Henderson** $98,678 and 2.67 mi. **8-8 Henderson** $50,034; from M. Hayes & Son, Chicago, 3.56 mi. **12-12 Clay,** 5 mi. **12-13 Clay-Marion** and 3.41 mi. **12-14 Marion,** $249,000; from C. W. Clarke, Terre Haute, Ind., 5.97 mi. **16-1 Edgar** and 7.31 mi. **16-2 Edgar** $244,000; from W. F. Smith & Co., Rensselaer, Ind., 4.86 mi. **43-2 Mason** $115,802; from Stevens Bros., Piedmont Bldg., St. Paul, Minn., 4.98 mi. **24-3 Christian** and 4.62 mi. **24-4 Christian,** $191,945; from Verhey Constr. Co., Champaign, 3.25 mi. **25-12 Effingham,** 6.44 mi. **25-13** and 4.13 mi. **25-14 Shelby,** $229,450; grading from C. J. Jones, Omaha, 467,768 cu.yd. **2 and 35-17A Pulaski** $154,482; from Russell-Condon Constr. Co., Omaha, Neb., 80,817 cu.yd. **8-8A Henderson,** $36,679; from Devine Constr. Co., Watseka, 15,344 cu.yd. **8-21A Iroquois** $6,198; from Frazier-Davis Constr. Co., Arcade Bldg., St. Louis, Mo., 23,134 cu.yd. **12-30A St. Clair** $9,126; from W. T. Bland, Cairo, 76,322 cu.yd. **13-12A Jackson** $42,123; from Gaines Bros. Co., Fairland, Okla., 58,387 cu.yd. **13-21A Randolph** and 45,220 cu.yd. **16-20A Montgomery,** $25,548 and $30,493 respectively. Noted Oct. 11.

Tex., Ft. Worth—Curbing guttering and paving 16,000 sq.yd. Vickery Blvd. from Genl. Constr. Co., Cotton Exch. Bldg., Uvalde rock asphalt $3.10 per sq.yd.; McCollum Constr. Co., F. & M. Bldg., 3 in. brick $3.22. Noted Oct. 11.

Tex., Hemphill — Sabine Co., grading, gravel surfacing and bridging 7.19 mi. State Highway 21, Federal Aid Project 357 B, 16 ft., from E. M. Wood, Royce City, $60,003, 14,911 cu.yd. gravel to be furnished by county; 8.38 mi. State Highway 8, Federal Aid Project 327 A, 16 ft., from George & Kerr, Lufkin, $65,394, 12,843 cu.yd. gravel to be furnished by county. Noted Sept. 21.

Tex., Quanah — Paving various streets, from Jordon Constr. Co., Plainview, 3 in. brick on 4 in. base $103,146, 2½ in. brick on 5 in. base $104,474, 2½ in. on 4 in. $99,162; from Panhandle Constr. Co., Lubbock, 3 in. brick on 5 in. base $110,297; from J. P. Foty, Vernon, 6 in. concrete $101,317; from Uvalde Paving Co., Insurance Bldg., Dallas, 2 in. Uvalde rock asphalt on 5 in. base $129,772; from McCollum Constr. Co., F & M Bldg., Ft. Worth, 1½ in. Amiesite on 5 in. base $101,268, on 4 in. base $97,284; from L. E. Whitham, Morgan Bldg., Wichita Falls, rein.-con. integral gutter $98,763. Engrs. est. $100,000. Noted Sept. 13.

Colorado—State Hy. Dept., Denver, concrete paving 1.014 mi. Federal Aid Project 251, 18 ft., Boulder Co., from J. F. Roberts Constr. Co., Tramway Bldg., Denver, $32,671, engrs. est. $36,256; concrete paving and grade separation on 0.852 mi. Federal Aid Project 230-A, 18-30 ft., Douglas Co., from Kenney Constr. Co., Bank Bldg., Denver, $82,710, engrs. est. $146,733; paving 3.995 mi. Federal Aid Project 230-B, 18 ft., Douglas Co., plain cement, from Brodie & Anderson, Interstate Trust Bldg., Denver, $139,974, coarse aggregate type, from Stamey-Mackey Constr. Co., Trinidad, $161,759, foregoing firm bid same amount on topeka and warrenite, engrs. est. $154,483. Noted Oct. 11.

Ore., Portland—Multonmah Co., improving 8,470 lin.ft. Base Line Rd. from point near Beaver Creek to upper Sandy Bridge 80, (1) 5 in. cement, warrenite or bitulithic on 5 in. crushed rock, (2) 8 in. cement, warrenite or bitulithic (3) 7 in. concrete, from Oregon Constr. Co., Blake-McFall Bldg., (1) $71,277 (2) $64,672 (3) $69,627. Noted Oct. 11.

Calif., Compton—Improving Tamarid and Raymond Sts., etc., 199,360 sq.ft. grading, 199,360 sq.ft. 5 in. concrete, 11,050 lin.ft. curb, 55,160 sq.ft. walks, etc., from G. H. Oswald, 366 East 58th St., Los Angeles, $93,958. Noted Oct. 11.

Calif., San Luis Obispo—Concrete paving 100,000 sq.ft. Osos St., from I. Hodson, San Luis Obispo, $31,498. Noted Oct. 11.

CONTRACTS AWARDED

Rhode Island—State Bd. Pub. Wks., Providence, bituminous macadam paving 3.04 mi. Pontiac Rd., 18 ft. in Cranston and Warwick, to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $89,024; 3.09 mi. Cumberland-Wrentham Rd., 18 ft., in Woonsocket, to B. Perini & Sons, Ashland, Mass., $102,053. Noted Oct. 25.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Sicilian Asphalt Paving Co., 41 Park Row, New York, repaving North 7th St. $33,793, Saratoga Ave. $13,714, both asphalt; to Uvalde Asphalt Paving Co., 1 Bway., New York, 12th Ave. $22,364, Douglass St. $7,462, Suydam St. $5,997, regrading and paving Kingston Ave. $18,696, all asphalt; to Cranford Co., 52 9th St., repaving 79th St. $20,920, 80th St. $8,407, paving 46th St. $5,681, 77th St. $18,977, 77th St. $9,602, 83rd St. $8,971; all asphalt; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., repaving 99th St. $7,333, paving East 14th St. $8,161, East 19th St. $10,916, West 27th St. $9,882, all asphalt; Greico Bros., 172 Russell St., repaving North 7th St., granite block $32,897; J. D. Norton, 20 Sterling Pl., Union St., granite block $70,885; W. J. McHale Contg. Co., 1250 Jefferson St., grading, curbing and flagging 40th St. $5,520; F. Persicano, 350 Fulton St., 80th and 81st Sts. $902; G. M. Mandatto, 129 29th St., East 19th St., $3,435. Noted Oct. 18 and 25.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, grading, curbing, laying sidewalks, etc., on Alpha Pl. $9,869, sheet asphalt paving 117th St. $39,870, recurbing, laying sidewalks, etc., on Prospect Ave. $16,607; to Kennedy & Smith, 93 Amity St., Flushing, grading, curbing, laying sidewalks, etc. Hayes Ave. $37,639, Linden St. $9,799, Roosevelt Ave. $14,015, 49th St. $9,890, 97th Ave. $5,635, 117th St. $20,244; to W. P. McDonald Constr. Co., 17 West 42nd St., New York, Linden St. (Bway.) $32,295, paving 97th Ave. $15,440, 103rd St. $85,650, repaving 87th St. $5,510, all sheet asphalt, permanent paving Woodside Ave. $43,305, grading, constructing basins and sheet asphalt paving 79th St. $8,766; to Welsh Bros. Contg. Co., 32 Queens St., Astoria, Anable Ave. $49,956; to J. J. O'Brien, Jr., William St., Jamaica, grading sidewalk space, etc. on Mary St. $352. Noted Oct. 18.

N. Y., Rochester—Paving Cedarwood Terrace, warrenite bitulithic, to O. Costich, Exchange Pl. Bldg., $32,366.

Md., Baltimore — Bd. Awards, grading, curbing and paving streets in Contr. 245-OCOANA, 3,290 sq.yd. vitr. brick, 14,760 cu.yd. grading, to D. Marine, Knickerbocker Bldg., $62,440; streets in Contr. 264-OANA, 22,170 sq.yd. asphalt, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $96,248. Noted Oct. 25.

W. Va., Fayetteville—Fayette Co., vitr. brick paving 4 mi. Montgomery-Armstrong Creek Bridge Rd., to A. Keathley, Fayetteville, $107,000. Noted Oct. 4.

W. Va., Weston—Lewis Co., grading and bituminous macadam surfacing Staunton and Parkersburg Turnpike, Project 4, to Battershill & Goode, Virgilina, Va., $189,081; Weston to Harrison Co. line, Project 1, Camden to Churchville, Project 3, and Jacksons Mill to Freemansburg, Project 2, to Ferguson Bros. Co., Shinnston, $177,503, $183,726 and $100,579 respectively. Noted Oct. 11.

North Carolina — State Hy. Comn., Raleigh, grading and paving with bituminous macadam and asphalt 2.6 mi. State Project 556, Montgomery Co., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $65,910; grading and topsoiling 1.25 mi. State Project 302, Bladen Co., to J. T. Plott, Greensboro, $56,229; clearing and grading 11.06 mi. State Project 404 A, Chatham Co., to W. W. Tuck & Sons, Virgilina, Va., $75,831, 6.2 mi. State Project 537 A, Guilford Co., to J. M. Gregory, Pittsboro, $26,470, 10.54 mi. State Project 763 A, Surry Co., to McDowell Contg. Co., Marion, $77,865; grading and concrete paving 4.43 mi. State Project 187, Pitt Co., and 7.72 mi. State Project 126, Edgecombe Co., to Public Service Production Co., Terminal Bldg., Newark, N. J., $156,090 and $262,252 respectively, 7¾ mi. State Project 485 B, Wake Co., to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $246,499; grading and rein.-con. bridges and culverts on 8.07 mi. State Project 732 A, Davie Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $32,253. Noted Oct. 18.

Alabama—State Hy. Dept., Montgomery, 20 mi. graveling and small amount of grading on Montgomery-Selma Rd., Lowndes Co., to Newell Constr. Co., 3828 Ave. A, Birmingham, $196,923. Noted Sept. 27.

Ala., Selma—Grading and paving 180,000 sq.yd. Broad St., 1st and Waters Aves., to Alabama Concrete Products Co., Selma, $285,000.

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, 11 mi. St. Francisville-Mississippi Highway, Sect. A, West Feliciana Parish to J. F. Irwine, c/o State Hy. Dept., Baton Rouge, $89,270; 7.4 mi. Louisiana-Mississippi Highway, Sect. B, West Feliciana Parish, to F. O. Hamilton, c/o State Hy. Dept., Baton Rouge, $71,140; 3.23 mi. Vinton-Orange Highway, to Banta & Mutersbaugh, Lake Charles, $53,949. Noted Sept. 27.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 4.856 mi. Sect. "E" Cincinnati-West Union Rd., Adams Co., waterbound macadam, to J. O. Petrie, Logan, $102,696; 1.092 mi. Sect. "H" Lima-Delphos Rd., Allen Co., Kentucky rock asphalt, to L. L. Clymer, Bluffton, $17,186; 2.897 mi. Sect. "E-1" Lima-Bellefontaine Rd., Allen Co., and 3.134 mi. Sect. "D" Steubenville-Hammondsville Rd., Jefferson Co., bituminous macadam, asphalt, to R. Stone Co., Lima, $53,018 and $66,704 respectively; 5.099 mi. Sect. "M-2" and part of "N" Niles-Ashtabula Rd., and 9.889 mi. of Sects. "N, O, P, Q and R" Niles-Ashtabula Rd., Ashtabula Co., rein.-con., to Hill & Hill, Elyria, $157,617 and $330,674 respectively; 1,279 mi. Sect. "G" Springfield-Xenia Rd., Greene Co., rein.-con., to Lewis & Copeland, Lima, $39,240; 1.6 mi. Sect. "E-1" Medina-Norwalk Rd., Lorain Co., rein.con., to Elyria Constr. Co., 220 Elyria Blk., Elyria, $45,222; 2.632 mi. Sect. "I" Niles-Ashtabula Rd., Trumbull Co., rein.-con., to Mahoning Constr. Co., Warren, $98,797; 4.087 mi. Sect. "O-1" Columbus-Lancaster Rd., Fairfield Co., brick, to Brewer & Brewer, Chillicothe, $167,339; 6.76 mi. Sects. "A, B and Plymouth" Shelby-Plymouth Rd., Richland

Streets and Roads (Continued)

Co., to Republic Asphalt Paving Co., Dayton, Lake T-4-B, $131,251; 3.249 mi. Sect. "L" New Philadelphia-West Lafayette Rd., Tuscarawas Rd., rein.-con., to C. G. Fuller, Dover, $117,763; 1.184 mi. Sect. "C" and 2.58 mi. Sect. "D" Stryker-Evansport Rd., Williams Co., bituminous macadam, asphalt, to A. Langenderfer, Toledo, $28,646 and $52,548 respectively; grading, etc. 4.008 mi. Sect. "C-2" Celina-Van Wert Rd., Mercer Co., to Lynn Constr. Co., Paulding, $18,881. Noted Oct. 25.

O., Canton—Stark Co. improving 2.62 mi. Swamp Rd., 20 ft., rein.-con., and 2.59 mi. Uniontown-Hartville Rd., Sect. B, 20 ft., monolithic brick, to Urban Bros., Canton, $100,880 and $97,674 respectively, engrs. ests. $110,000 and $100,000 respectively; 0.83 mi. Oberlin Rd. and Duncan St., 20 ft. brick with combination base, curb and asphalt filler, to E. Vogt Paving Co., Massillon, $40,150, engrs. est. $45,000.

O., Cleveland — Cuyahoga Co., concrete paving 16,700 sq.yd. Richmond Rd., to F. B. Stein, Euclid, $100,696. Engrs. est. $111,981.

O., Warren — Widening from 50-60 ft., brick gutters and asphalt paving ½ mi. Cleveland Ave., to Garaux Bros., 735 Market Ave. S., Canton, $27,500.

Ill., Sparta—Concrete paving 20,247 sq. yd., to Moreno-Ruckham Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., $75,124. Noted Sept. 13.

South Dakota—State Hy. Dept., Pierre, gravel surfacing 24,887 cu.yd. Federal Aid Project 84, Spink Co., 13,560 cu.yd. Project 120, Moody Co., and 10,438 cu.yd. Project 133, Miner Co., to Wagner & Erling Co., Sioux Falls, $22,642, $12,170 and $8,563 respectively; 21,270 cu.yd. Project 91, Beadle Co. and 13,345 cu.yd. Project 121, Beadle Co., to Stevens Bros., St. Paul, Minn., $14,014 and $8,723 respectively; 24,440 cu.yd. Project 89, Brookings Co., to R. R. Wiley, Summit, $22,418; 23,031 cu.yd. Project 92, Day Co., to Gatzmeyer-Lenz Co., Minneapolis, Minn., $17,329; 16,342 cu.yd. Project 119, Grant Co., to Grant Co. Comn., Milbank, $19,894; 19,572 cu.yd. Project 125, McCook Co., to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, $19,435.

S. D., Watertown—Paving 15,000 sq.yd. various streets vibrolithic type B rein.-con., to C. H. Atkinson Paving Co., Watertown, $43,000.

Mo., Kirksville—To Carrothers Constr. Co., 310 Walsix Bldg., Kansas City, asphalt resurfacing 1,050 ft. 1st St., 15 ft., and 575 ft. Jefferson St., 21 ft. both $2.35 per sq.yd.; to S. L. Eggert, Kirksville, improving 234 ft. Marion St., 40 ft., paving $2.80, curbing $0.80, also 234 ft. Missouri Ave., 40 ft., paving $3.81, curbing $0.80. Noted Sept. 13.

Ark., Forrest City—St. Francis Co., improving Sect. 1 of Rd. Impvt. Dist. 5, to S. K. Jones Constr. Co., Randolph Bldg., Memphis, Tenn., $21,000; balance of $150,000 improvements, incl. 5 mi. gravel road, etc., will be advertised as soon as State Hy. Dept. becomes active under Harrelson Road Act.

Ark., Little Rock—Finishing graded road, 11.02 mi. Foran Gap Forest Rd., 3,931 cu.yd. rock, 68,616 cu.yd. earth excav., etc., to J. J. Harrison, Oklahoma City, Okla., $74,468. Engrs. st. $75,000.

Tex., Abilene — Paving with warrenite bitulithic North 5th St. from Walnut to Mesquite Sts., to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $2.91, total about $25,000.

Tex., Angleton — Brazoria Co. grading and shell surfacing 6 mi. State Highway 19-A, to Lane & Sons, Angleton, $9,699; draining same, to M. C. Daugherty, Angleton, $1,214; 15,044 cu.yd. shell furnished by county $27,686. Engrs. est. $42,459 incl. 10% for engineering and contingencies. Noted Oct. 4.

Tex., Crockett—Concrete and bituminous paving, curbing and guttering, 7 blocks Public Sq., Main and Le Gory St., etc., to Smith Bros., Sumpter Bldg., Dallas, $36,347.

Tex., Dalhart—For 11,753 sq.yd. 3 in. vertical fibre brick, 4,984 lin. ft. straight curb, 1,972 ft. 6 in. gutter, 3,925 cu.yd. earth excav., to J. Stanton, Leavenworth, $53,165. Engrs. est. $60,000.

Tex., Greenville—For 6 in. concrete paving, curbing, guttering, etc., 5 blocks King and Cornelia Sts., et al., 60 ft. to Janes Constr. Co., Southwestern Life Bldg., Dallas, $25,500. Engrs. est. $25,000.

Tex., Houston—Paving Bissonet, Alabama and Reisner Sts., 2 in. Uvalde rock asphalt on 5 in. concrete, to Uvalde Rock Asphalt Co., Woolworth Bldg., $31,095. Noted Oct. 4.

Tex., Paris—Lamar Co. concrete paving, grading, etc., Highway 5, 2 mi. east from Blossom and 3 mi. west from Brookston, 18 ft., to Julian Field & Co., Denison, $57,875 and $81,689 respectively. Noted Sept. 27.

Okla., Blackwell—Grading and paving 12 blocks 1st, 5th, Oklahoma, Dewy and C Sts., to O. T. Tyler, Blackwell, $57,486. Noted Oct. 25.

Okla., Chickasha—Grading and paving 11 blocks 9th and Oklahoma Sts., Dists. 25 and 26, 12,700 sq.yd. asphalt on concrete, 5,200 lin.ft. curbing, F,200 lin.ft. guttering, 4,000 cu.yd. excav., to General Contg. Co., Herskowitz Bldg., Oklahoma City, $62,938.

Okla., El Reno—Grading and paving 12 blocks Watts, Foster and Klein Sts., 6,000 sq.yd. asphalt and 8,000 sq.yd. concrete; asphalt paving to Cannady & Co., Tulsa, $35,360, concrete paving to Connelly Bros., El Reno, $39,361.

Okla., Oklahoma City—Grading and paving 6 blocks Blackwelder and Lottie Sts., 7,100 sq.yd. concrete, 2,950 lin.ft. curbing, 2,300 cu.yd. excav., to M. A. Swateh & Co., 519 West Main St., $26,932.

Arizona—State Hy. Dept., Phoenix, grading and surfacing 7 mi. Federal Aid Project 55A, Schedule 2, to Cashion-Caldwell Constr. Co., 33 East Adams St., Phoenix, 5,729 cu. yd. excav. $0.42, 4,402 cu.yd. borrow $0.38, 14,740 cu.yd. surfacing $0.54, 2,093,080 sta. yd. surfacing overhaul $0.015, total $52,483; 22 mi. Federal Aid Project 69, Maricopa Co., to Kisselburg, Schmidt & Hitchcock, South Central Ave., Phoenix, 10,033 cu.yd. excav. $0.23, 87,078 cu.yd. borrow $0.23, 38,100 cu.yd. surfacing $0.76, 55 cu. yd. Class A concrete $24, 543 cu.yd. Class C concrete $17, etc., total $108,829.

Arizona—State Hy. Dept., Phoenix, grading, surfacing, etc. (1) Tucson-Nogales Highway, Federal Aid Project 66, (2) Tucson-Nogales Highway, Federal Aid Project 75, grading, surfacing, building bridges, etc., on (3) Tucson-Nogales Highway, Federal Aid Project 25-B, (4) structures adjacent to Federal Aid Project 66, to Shumway Constr. Co., Mesa, (1) $17,847 (2) $21,208; to Lown & Woods, Nogales, (3) 15,637 cu. yd. borrow $0.20, 1,274 cu.yd. gravel surfacing $0.75, 1,418 cu.yd. excav. $0.90, 1,051 cu.yd. Class A concrete $9.95, etc., total $37,090. Noted Oct. 25.

Wash., Kelso—Paving 11,086 sq.yd. West Main St., 8 in. concrete, to Yakima Paving Co., Yakima, $2.90, total $47,528.

Wash., Yakima—Yakima Co., paving 1 mi. West Yakima Ave. adjoining city, 13,865 sq.yd. one course 6 in. concrete, to Yakima Paving Co., Yakima, $2.33 per yd. Noted Sept. 20.

Calif., Glendale—Improving 4th and Winchester Sts., etc., to W. J. Curren, 379 West Patterson St., 4,156 lin. ft. grade $0.50, 125,687 sq.ft. 3 in. macadam $0.11, 3,482 ft. curb $0.50, 15,195 sq.ft. walks $0.17, etc. Noted Oct. 25.

Calif., Los Angeles — Grading, concrete paving and concrete walks on Vernon Ave. between Van Ness Ave. and Angeles Mesa Dr., to W. Liddington, 420 East 60th St., $51,664. Noted Sept. 20.

Calif., Lynwood—To Hall-Johnson Co., Box 51, Inglewood, paving 404,100 sq.ft. Poplar Dr., macadam, $107,500, 227,075 sq. ft. South Long Beach Blvd., 5-6 in. concrete, $64,000, 109,000 sq.ft. North Long Beach Blvd., 5-6 in. concrete, $30,900.

Calif., Oakland—Improving 9th St. from Alice to Fallon Sts., to Bates & Borland, Bank of Savings Bldg., 37,500 ft. grade $0.06 per ft., 2,027 ft. concerte curb $0.75, 2,400 ft. concrete gutter $0.30, 35,000 ft. asphaltic concerte $0.30, etc.; 15th St. between Franklin and Harrison Sts., to Oakland Paving Co., 5000 Bway., 40,177 ft. grade $0.069, 1,355 ft. curb $1.10, 1,360 ft. concrete gutter $0.30, 26,050 ft. 2 in. warrenite bitulithic on 6 in. concrete $0.30, etc.; 6th St. from Jefferson to West Sts., to Warren Constr. Co., Bacon Bldg., 58,222 ft. grade $0.053, 2,164 ft. concrete curb 0.80, 2,516 ft. concrete gutter $0.30, 55,705 ft. 2 in. warrenite bitulithic on 4 in. asphaltic concrete $0.292, etc. Noted Sept. 20.

Calif., Riverside—Riverside Co. improving Corona-Elsinore Highway, to Hall-Johnson Co., P. O. Box 51, Inglewood, 12,914 cu.yd. excav. $0.50 per cu.yd., 15,624 lin. ft. shaping roadbed $0.10, 249,984 ft. 5 in. macadam with asphalt surface $0.10, etc., total $37,200. Noted Oct. 25.

Calif., Sacramento—Improving Freeport Blvd. from Western Pacific R.R. to Sutterville Rd. and from 4th Ave. to 21st St., to Clark & Henery Constr. Co., Ochsner Bldg., 3,912 ft. curb and gutter $1.80 per ft., 6.491 cu.yd. excav. $1.14, 86,026 sq.ft. pavement $0.215, etc.

Calif., San Francisco—Curbing, laying sidewalks and concrete paving Collingwood St. between 20th and 22nd Sts., etc., to Municipal Constr. Co., 112 Lyon St., $21,686. Noted Oct. 18.

Calif., San Rafael—Improving portions 6th and H Sts., 23,100 sq.ft. 2 in. asphaltic concrete, 1,000 cu.yd. excav., 1,753 lin. ft concrete curb, etc., to A. J. Raisch, 46 Kearny St., San Francisco. Noted Sept. 13.

Calif., Santa Ana—Improving West Washington St. between North Bway. and Lowell St., to Oglesby & Dahl, Santa Ana, 75,019 sq.ft. 5 in. concrete at $0.204 per sq.ft., 2,183 ft. curb $0.50, etc.

Que., Montreal—Paving Gouin Blvd. 38,535 sq.yd. 3 in. asphalt, to B. Brault Ltd., 2855 Rosemount Blvd., $243,486. Noted Oct. 25.

Ont., Oshawa—Resurfacing with asphalt 25,000 sq.yd. Simcoe St. North, to Standard Paving Co., Central Chambers, Ottawa, $30,000.

Ont., Toronto—York Twp., 40 Jarvis St., 6 mi. of 4 ft. 6 in. to 6 ft. concrete sidewalks to C. O. Matthews, 2142 Dufferin St., $1,800; to Fairbank Constr. Co., c/o owners, $1,530, to F. C. Shipp, 1609 Queen St. W., $4,400, to J. Harrop, 1414 Davenport Rd., $11,300; to Natl. Contg. Co., 9 Garnock Ave., $2,500; to D. Mackay, 289 Ashdale Ave., $3,000; to Murphy Contg. Co., 8 Wychwood Ave., $3,000; to J. McAdams, 45 Jarvis St., $4,100.

Industrial Works

PROPOSED WORK

Vt., Morrisville—See "Miscellaneous."

Mass., Boston—Grovehall Realty Trust Co., c/o E. P. Finn, 1 Beacon St., had plans prepared by Silverman, Brown & Heenan, 51 Cornhill, 1 story, 175 x 250 ft. garage, rein.-con. and composite granite, wood pile foundation, 1186 Commonwealth Ave. $250,000. Work will be done by day labor.

Conn., Rocky Hill—Belamose Corp., 983 Main St., Hartford, having plans prepared by McClintock & Craig, 33 Lyman St., Springfield, Mass., 3 buildings, brick and timber. $1,000,000. Noted Sept. 27.

N. Y., Gouverneur—Plans municipal electric lighting plant. $100,000. Engineer and architect not announced.

N. Y., Flint—Flint Cold Storage, Inc., plans 50,000 bbl. cold storage plant. $200,000. T. D. Whitney, pres. Engineer and architect not selected.

N. Y., New York—J. Logana, c/o J. J. Dunnigan, archt. and engr., 394 East 150th St., having plans prepared 1 story, 55 x 130 ft., rein.-con., brick and steel garage, plain foundation, Convent Ave. $50,000.

N. Y., Norwich—Abbott-Kohn Ribbon Co., Berry St., having plans prepared 3 story factory addition. $75,000. Engineer and architect not announced.

Pa., Phila.—Phila. Electric Co., 10th and Chestnut Sts., purchased 55 acres on Delaware River front and plans to build new power plant. Plans and layout under way for 200,000 kw. steam generating station, to be increased from time to time as need may be to 600,000 kw. $6,000,000. Address J. B. McColl, 1000 Chestnut St. Noted Jan. 11.

Va., Farmville—City voted $50,000 bonds for permanent improvements at electric light plant. G. Waggoner, city mgr.

W. Va., Fairmont—Willete Clay Pottery Co. plans to rebuild plant, recently destroyed by fire. $200,000.

W. Va., Huntington—J. J. Weiler & Sons, Robson-Prichard Bldg., plans 1 story, 30 x 210 ft. steel shop, $50,000.

N. C., Balfour—E. A. Smythe, c/o Hendersonville Chamber of Commerce, Hendersonville, plans cotton-mill, here. $1,000,000.

N. C., Hemp—J. B. McQueen, Lake View, is vice-pres. of new corporation which plans cotton mill, here. $300,000.

Ky., Louisville — Louisville Taxicab & Transfer Co., 2nd and Walnut Sts., plans 3 story, 140 x 200 ft. garage and office building, 9th and Liberty Sts. $200,000.

Ky., Louisville—Hellmueller Baking Co., 434 Baxter Ave., plans bakery on West Bway. between 13th and 14th Sts. $70,000. Architect not selected.

Ky., Louisville — E. Straus Cabinet Co., 1029 Hamilton Ave., having plans prepared by J. W. Rollins, 1532 Texan St., 2 story factory, Baxter Ave. $200,000. Noted July 12.

Ky., Louisville—Standard Sanitary Mfg. Co., 6th and A Sts., having plans prepared by D. X. Murphy & Bro., Louisville Trust Bldg., 1 story addition to shop, 6th and Shipp Sts. $40,000.

Ky., Louisville—United States Foil Co., 2934 Grand Ave., plans 1 story addition to factory, 30th St. and Grand Ave. $40,000. Architect not selected.

Industrial Works (Continued)

Ky., Madisonville—Madisonville Ice & Laundry Co. plans ice plant to replace one destroyed by fire. $60,000.

O., Canton — Wilson Rubber Co., 1216 Garfield Ave., plans 5 story, 50 x 100 ft. factory. $110,000-$125,000. F. J. Wilson, vice pres. and genl. mgr.

O., Cleveland—McCauley Storage Battery Co., c/o J. F. McCauley, 1060 St. Clair Ave., plans 1 story, 35 x 128 ft., brick and timber factory and warehouse, Chester Ave. and East 34th St. $40,000. Private plans.

O., Dayton—See "Buildings."

O., Sidney—S. Bryan and C. Swonger, having plans prepared by C. A. Hock, 602 Commercial Bldg., Dayton, 2 story and basement, 60 x 120 ft., rein.-con. and brick factory, plain foundation. $150,000.

O., Lorain—Natl. Stove Co. soon takes bids 2 story, 100 x 220 ft., concrete, brick and steel factory. $100,000. T. Rath, supt.

O., Toledo—Citizens Necessity Co. plans 140 x 200 ft. ice storage plant and office building, Berden Ave. $250,000. Engineer and architect not announced.

Ind., Evansville — Graham Bros. Truck Co. plans 1 story, 90 x 250 ft. brick (Unit 6 of truck factory). $60,000.

Ind., Mishawaka—La Salle Paper Co., 403 East Madison St., South Bend, soon takes bids 1 story and basement, 50 x 400 ft. mill, here. $300,000. Power plant will also be erected. C. E. Nicely, pres. Freyermuth & Maurer, Farmers Trust Bldg., South Bend, archts.

Ind., New Albany — New Albany Loose Leaf Tobacco Co., Locust and Clark Sts., plans 1 story, 145 x 145 ft. warehouse, Locust St. $40,000.

Mich., Detroit—Detroit Concrete Receptacle Co., 4225 Michigan Ave., having plans prepared 2 story, rein.-con., brick and steel factory, plain foundation, Woodward Heights and Grand Trunk R.R. $250,000. Private plans.

Mich., Detroit—Kroger Grocery & Baking Co., 4769 Merritt Ave., having plans prepared by J. G. Kastler & Co., 523 Detroit Savings Bank Bldg., 1 story, 85 x 365 ft. rein.-con., brick and steel garage, plain foundation, Junction Ave. $90,000.

Mich., Kalamazoo—Valley Paper Co., 401 Press Bldg., having plans prepared by Billingham & Cobb, engrs., 404 Press Bldg., rein.-con., brick and steep paper mill and water filtration plant. $500,000.

Mich., St. Joseph—Auto Specialties Mfg. Co. plans 1 story, 100 x 100 ft. plant $70,000.

Ill., Anna — A. A. Fasig plans cement plant, capacity 80,000 bbl. per month. $65,000. Architect not selected.

Ill., Aurora—Barber-Greene Co., West Park Ave., plans 1 story, 130 x 175 ft. and 1 story, 24 x 45 ft. plant additions. $40,000.

Ill., Chicago—Crane Co., 836 South Michigan Ave., plans 2 story, 160 x 500 ft. fireproof factory, 4100 South Kedzie St. $1,000,000. Graham, Anderson, Probst & White, 80 East Jackson Blvd., archts.

Ill., Chicago—E. A. Heckel, c/o J. Hocke, archt., 7602 Chappel Ave., plans 1 story, 150 x 191 ft. garage, rein.-con., brick and steel, Exchange Pl. between 72nd and 73rd Sts. $65,000.

Wis., Birchwood — Weilgor Hardwood Products Co. having plans prepared 1 story, 60 x 150 ft., brick, rein.-con. and steel factory, plain foundation. $50,000. Private plans.

Wis., Clintonville — Mead-Johnson Co., Evansville, Ind., plans 2 story, 60 x 150 ft. brick, rein.-con. and steel factory, plain foundation. $50,000. Engineer and architect not selected.

Wis., Milwaukee—Lagemann Bros., 3130 Burleigh St., having plans prepared by E. R. Leibert, 432 Bway., 1 story, 52 x 150 ft., brick and concrete shop, plain foundation, Burleigh St. $40,000.

Wis., Randolph—Friesland Canning Co. having plans prepared by J. E. Hennen, Fond du Lac, 1 story, 50 x 80 ft., brick and rein.-con. factory, plain foundation. $40,000.

Ia., Cedar Rapids—Temple—Iowa Consistory Building Assn., c/o T. W. Runkle, secy., 116 North 10th Ave., plans temple. $300,000. Architect not selected.

Minn, Duluth—Cutler-Magner Co., foot of 8th Ave. W., plans warehouse to replace one recently destroyed by fire. $300,000.

Kan., Kansas City — Plans to expend $725,000 for improvements to light plant, work includes installation four 600 hp. boilers $150,000, increasing generating capacity of plant from 25,000 KVA. to 37,500 KVA. $375,000, etc. F. F. Beauchamp, constr. engr.

Mo., St. Louis—Mendenhahl Motor Co., 2317 Locust St., having preliminary plans prepared by W. P. McMahon, Title Guaranty Bldg., 4 story and basement, 37 x 155 ft., brick, concrete, stone and tile, service and sales building, Locust St. $100,000.

Ark., Watson Chapel—C. A. Hughes, Watson Chapel, interested in local syndicate which plans creamery, 500 lb. butter and 3,000 gal. milk daily capacity. $40,000.

Tex., Forney—Forney Oil Mill plans to rebuild mill recently destroyed by fire. $50,000. Engineer and architect not announced.

Tex., Valentine — Southern Pacific R.R., Southern Pacific Bldg., Houston, plans railroad shops, equipment, etc., here. $100,000. G. W. Boschke, ch. engr.

Wash., Lake Cushman — See "Dams" under "Bids Desired."

Calif., Anaheim—Motor Transit Co., 130 South Lemon St., having plans prepared by E. C. Thorne, Western Mutual Life Bldg., Los Angeles, 1 or 2 story, stage depot, South Lemon St. $40,000 or more.

Calif., San Jose—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared warehouse and garage, here. To exceed $90,000. Private plans.

Calif., Vernon—Deats Door & Sash Co., 1832 East 16th St., Los Angeles, had plans prepared by C. C. Rittenhouse, Wilcox Bldg., Los Angeles, 1 story, 125 x 125 ft. factory, frame, here.

Calif., Visalia—J. B. Newman, G and I Bldg., had plans prepared 1 story, 100 x 215 ft. brick garage, Ea[illegible]th St. Private plans.

Que., Cap Rouge—St. Regis Paper Co., Ltd., 70 St. Paul St., Quebec, takes bids this month pulp mill and wharf, here. $4,000,000. Engineer not selected. Architent not announced.

Ont., Almonte — Yorkshire Wool Stock Mill Co. plans to build 2 or 3 story concrete and brick plant, to replace one recently destroyed by fire. $150,000. Engineer and architect not selected.

Ont., Cutler—Spanish River Lumber Co. Ltd., plans to rebuild 1 story mill recently destroyed by fire. $200,000. Private plans.

Ont., Kitchener — Schneider Packing Co. having plans prepared extending and remodeling plant. $100,000. J. C. Klaehm, 59 Irwin St., engr.

Ont., Toronto — Toronto Hydro Electric System, Ryrie Bldg., plans electric plant and equipment incl. cable, wire, insulation, insulators, poles, transformers, etc. $1,940,000. E. M. Ashworth, mgr.

B. C., Essondale—Provincial Government, Victoria, having plans prepared by P. Philip, engr., and H. Whittaker, archt., both c/o Dept. Pub. Wks., Victoria, and takes bids about Nov. 1, rein.-con. central heating plant, on hospital grounds, here. $200,000.

BIDS DESIRED

N. Y., Yonkers—Nov. 15, by J. J. Hayes, Proctor Bldg., 2 story, 100 x 100 ft., brick garage, School and Herriott Sts. $50,000. W. P. Katz, 2 Hudson St., archt.

Pa., Phila.—Nov. 5, by Moores & Dunford Inc., archts., 342 Madison Ave., New York City, 7 story and basement, 52 x 106 ft. rein.-con. and brick warehouse, plain foundation, 3935-3937 Germantown Ave., for Interstate Warehouse & Storage Co., 919 North Front St., $225,000.

Va., Richmond—W. T. Rawleigh Co., c/o W. J. Trevillean, vice-pres., 101 Liberty Ave., Freeport, Ill., taking bids 2 story, 80 x 165 ft. warehouse and garage, brick, rein.-con. and stone, plain foundation. J. R. and E. J. Law, 1st Central Bldg., Madison, Wis., archts. Noted Oct. 4.

N. C., Elizabeth — Foreman, Derickson Veneering Co. taking bids 1 story, 48 x 80 ft. and 100 x 200 ft. factory, Knobbs Creek. $50,000.

La., New Orleans—See "Wharf, etc., under Miscellaneous."

Ill., Chicago—E. G. McClellan, archt., 7441 Cottage Grove Ave., receiving bids 1 story, 200 x 200 ft. garage and service station, fireproof, Indiana and 63rd Sts., for V. Cunningham, c/o archt. $75,000.

Ill., Chicago — Rawson & Eisenberg, archts., 5 North La Salle St., receiving bids 1 story, 100 x 125 ft. garage, fireproof, Roosevelt St. and Central Park. $40,000. Owner's name withheld.

Ill., Chicago—G. Sachs, 1569 South Kenzie St., and J. J. Novy, archt., 2434 South Ridgway St., receiving bids 2 story, 125 x 135 ft., garage and service station, fireproof, Homan St. and Ogden Ave. $50,000.

Ill., Chicago—D. S. Klafter, archt., 64 West Randolph St., receiving bids 1 story, 100 x 264 ft. garage, fireproof, 2501-25 East 75th St., for B. Weiss, c/o architect. $100,000.

Ill., Chicago—E. G. McClennan, archt., 7441 Cottage Grove Ave., receiving bids 1 and 2 story, 100 x 125 ft. ice plant, fireproof, Hoyne Ave. and Walton Pl., for West Side Ice Co., 839 North Hoyne Ave. $50,000.

Ill., Maywood—Van Gunten & Van Gunten, archts., 26 East Huron St., Chicago, receiving bids 1 story, 125 x 125 ft., pattern and machine shop, fireproof, for J. A. Kennedy, c/o architects. $40,000.

Ill., Waukegan—P. Gerhardt, archt., 64 West Randolph St., Chicago, receiving bids 1 story, 80 x 230 ft. auto sales and service building, rein.-con., brick and steel, Madison and Spring Sts., for C. E. Bairstow, 111 South Sheridan Rd. $40,000.

Wis., Hurley—N. A. Nelson, archt., Ironwood, Mich., taking bids 1 story and basement, 98 x 100 ft., brick and concrete garage, plain foundation, for Noeman Bros. $50,000.

Wis., Madison—F. Riley, archt., Conklin Bldg., taking bids 2 story, 45 x 100 ft., brick, rein.-con. and steel, boiler house, laundry and garage, plain foundation, for Madison Medical Assn., c/o R. S. Ingersoll, Lakeside St. $50,000.

Wis., Milwaukee — L. Hunt, archt., 210 Mason St., taking bids 1 story, 60 x 160 ft., brick and concrete addition, plain foundation, for Ogden Ave. Garage Co., 305 Ogden Ave. $40,000.

Calif., Los Angeles—Electric Corp., 836 South Los Angeles St., will build 4 story, rein.-con. warehouse and loft, Santee and 11th Sts., by separate contracts. Work will be done under supervision of J. M. Cooper, Marsh-Strong Bldg., archt. $100,000. Noted Oct. 11.

BIDS RECEIVED

La., Baton Rouge—Capital City Auto Co., 120 3rd Ave., 3 story, 94 x 125 ft. and 1 story, 50 x 103 ft. brick and timber sales and repair shop, from R. J. McBride, Baton Rouge, $105,240.

Calif., Los Angeles—Bd. Educ., 5 story warehouse, rein.-con., from J. B. Harris, 4923 West Pico St., $149,260. Noted Oct. 11.

CONTRACTS AWARDED

R. I., Providence — Textile Finishing Mchy. Co., 171 Westminster St., 2 story, 61 x 110 ft. storage house and 1 story, 76 x 121 ft. roll shop, brick and steel, plain foundation, to J. A. Maguire Constr. Co., Providence, $80,000. Noted Sept. 13.

N. Y., New York — E. B. Lexham, 31 Nassau St., 6 story, rein.-con., brick and steel warehouse, plain foundation, 247 West 12th St., to G. Colon & Co., 81 East 125th St. Archts. est. $60,000.

N. Y., New York—See "Buildings."

N. Y., Tarrytown—Chevrolet Motor Co., Kingsland Pt., 3 story, 80 x 150 ft., and 3 story 80 x 80 ft. rein.-con. plants, pile foundations, to J. W. Ferguson Co., 253 Bway., New York.

Pa., Johnstown — Henderson Bros., 221 Market St., 2 story, part basement, 120 x 160 ft. concrete, brick and steel plant, 8th Ward, to Berkebile Bros., Swank Bldg.

Pa., Phila.—Remington-Burnelli Aircraft Co., 25 West 45th St., New York City, will build plant on Magazine Lane west of Penrose Ave., by day labor. Will begin work on first unit (15,000 sq.ft. floor space) this year.

Tenn., Duck River—Shelbyville Light & Power Co., Shelbyville, hydro electric plant and dam, here, to Foster-Creighton Co., Fourth and First Natl. Bank Bldg., Nashville, $50,000 .

Ky., Benton—Paducah Hosiery Co., Paducah, hosiery mill, Puryear St., here to Treas Milling Co., Benton. Est. cost $40,000.

Ky., Elizabethtown—Burley Co-operative Assn. 1 story, 125 x 297 ft. storage warehouse and redrying plant, to Jenkins-Essex Co., Elizabethtown. $40,000.

O., Cleveland—F. B. Sanders, 2 story, 50 x 100 ft., brick and steel garage, 3432 Prospect Ave., to Craig-Curtiss Co., 4614 Prospect Ave. Archts. est. $40,000.

O., Mansfield—Natl. Ice Co., 1 story, 41 x 60 ft., brick and steel plant, to Snell & Wolff, Mansfield. Archts. est. $50,000. Noted Oct. 4.

O., Toledo—Chevrolet Motor Co., 3137-57 Maplewood St., brick factory addition, to Gettins-Kopittke Co., 733 Nasby Bldg., $66,000.

Mich., Marquette—E. W. Cork and E. G. Davith, 3 story and basement, 72 x 122 ft. concrete and brick garage, plain foundation, to Wisconsin Eng. & Constr. Co., 512 3rd St., Wausau, Wis. Archts. est. $75,000.

Ill., Chicago—A. S. Alschuler, archt., 28 East Jackson Blvd., 1 story, 175 x 300 ft. garage, rein.-con., brick and steel, 3228-42 North Halsted St., to Johnson & Anderson,

Industrial Works (Continued)

7120 Evans Ave. Archts. est. $200,000. Owner's name withheld.

Ill., Chicago — Hartman Furniture and Carpet Co., Pershing and Wentworth Sts., 1 story, 124 x 167 ft. garage, fireproof, 3927-43 Wentworth St., to Johnson & Anderson, 7120 Evans Ave. Archts. est. $75,000.

Ill., Chicago—Hydrox Beverage Co., 2400 Lake Park Ave., 1 story, 75 x 197 ft. garage and service station, fireproof, Lake Park Ave. near 24th St., to Austin Constr. Co., 1346 East 63rd St. Archts. est. $40,000.

Ill., Chicago—J. Ure, c/o Van Gunten and Van Gunten, archts., 26 East Huron St., 1 story, 75 x 105 ft. auto sales and service, fireproof, 7517 North Clark St., to Duff & Noonan, 140 South Dearborn St. Archts. est. $40,000.

Ill., Chicago — National Tea Co., 1000 Crosby St., 6 story and basement ,107 x 146 ft., warehouse, fireproof, 1021 Kingsbury St., to L. J. Mensch, 138 North La Salle St. Archt. est. $400,000.

Ill., Chicago—Randall Bros., c/o M. O. Nathan, archt., 123 West Madison St., 1 story, 120 x 150 ft. garage, fireproof, 3519 West Harrison St., to Atlas Constr. Co., 186 North La Salle St. Archts. est. $50,000.

Ill., Chicago — Vassar Swiss Underwear Co., 2545 Diversey Parkway, 4 story, 134 x 168 ft. factory, fireproof, Rockwell St. and Diversey Parkway, to R. F. Wilson Co., 1851 Elston Ave. Archts. est. $300,000.

Ill., LaGrange — Jackson Express and Van Co., 5951 Madison St., Chicago, general contract 4 story and basement, rein.-con. and brick warehouse, here, to H. D. Moreland, 3701 Sheffield Ave., Chicago. Archts. est. $150,000.

Ill., Springfield — G. J. Kable, 417 West Monroe St., will build 1 story, 76 x 181 ft. garage, brick and rein.-con., 3rd St., by day labor. $40,000. J. J. Rinake, Ferguson Bldg., archt.

Ill., Springfield—H. A. Seidel & Co., 402 North 4th St., 3 story and basement, mill and grain elevator, brick and concrete, along tracks Chicago & Alton Ry., to F. Fitzsimmons, 1001 East Cook St.

Wis., Appleton—A. Stingle Baking Co., 968 College Ave., 3 story and basement, 50 x 62 ft., brick and concrete bakery, plain foundation, to M. Boldt & Sons, 545 State Rd. Archts. est. $40,000.

Wis., Fond du Lac—St. Agnes Hospital, 390 East Division St., 1 and 2 story, 57 x 128 ft., brick and concrete power house, plain foundation, to Hutter Constr. Co., 128 Western Ave. Archts. est. $150,000. Noted Oct. 11.

Wis., Green Bay — Allen A Co., 1000 Prairie Ave., Kenosha, 2 story, 62 x 68 ft., brick and timber factory addition, plain foundation, North Washington St., here, to W. W. Oeflein, 86 Michigan St., Milwaukee. Archts. est. $40,000.

Wis., Markesan—W. Dehn, 1 story, 60 x 100 ft., garage and repair shop, brick and tile, plain foundation, to Oshkosh Constr. Co., Oshkosh. Archts. est. $40,000. Noted Oct. 4.

Wis., Milwaukee—G. Becker, 1502 Fond du Lac Ave., 3 story, 60 x 70 ft., rein.-con. and brick warehouse, plain foundation, 16th and Vine Sts., to Brun Constr. Co., 387 Clinton St. Archts. est. $40,000.

Wis., Milwaukee—Hansen Storage Co., 120 Jefferson St., 1 story, 100 x 150 ft., storage plant, Jackson St., to W. W. Oeflein, 86 Michigan St. Archts. est. $40,000.

Wis., Milwaukee—A. Heath Co., 21st and Wells Sts., 3 story, 40 x 60 ft., brick and concrete addition to bakery, plain foundation, to Lupinski & Wolff, 82 Wisconsin St. Archts. est. $40,000.

Wis., Milwaukee—Milwaukee Boiled Ham Co., 901 Holton St., 2 story, 45 x 77 ft., brick and concrete plant, plain foundation, to F. H. Krueger, 68 Burleigh St. Archts. est. $40,000.

Wis., Neenah—Fox River Valley Co-operative Co., c/o J. W. Armstrong, pres., Route 8, 2 story, 50 x 80 ft., brick and concrete warehouse, plain foundation, to A. Nielsen & Son, 702 South Commercial St. Archts. est. $40,000.

Wis., North Milwaukee — North Milwaukee Fdry. Co., Commerce Ave., 1 story, 65 x 100 ft., brick and timber addition, plain foundation, to A. Filter, 989 5th St., Milwaukee. Archts. est. $40,000. Noted Sept. 20.

Wis., Tomahawk — Tomahawk Kraft Paper Co. will build 1 story, 60 x 90 ft., rein.-con. and brick plant, plain foundation, by day labor. $40,000. Private plans.

Minn., Minneapolis — L. Kinsell, 604 Builders Exchange, 2 story and basement, 132 x 157 ft. garage and office, brick and tile, 5th Ave. S. and 3rd St., general contract to J. C. Nelson & Son, 915 Bway. N. E., $140,000. Noted June 7.

Tex., Austin—State Institute for Colored, 2 story, brick, concrete and stone, industrial plant and warehouse, general contract to Wattinger Bros., Patterson St., $51,882. Noted Oct. 4.

Tex., Houston—Schotts Bakery, Washington St., concrete and brick bakery, to J. B. Townsend, West Bldg., $40,000. Engrs. est. $50,000.

Calif., Emeryville—Amer. Rubber Mfg. Co., Park Ave. and Watt St., 1 story, brick and concrete, third unit of factory, to R. W. Littlefield, 357 12th St., Oakland, $42,000.

Calif., Los Angeles — Pasadena Electric Express Co., 453 Commercial St., 4 story, rein.-con. warehouse, Commercial St., to J. F. Rhodes, 113 North Vermont St., $45,000.

Calif., Los Angeles—Robinson Furniture Mfg. Co., 2001 Santa Fe St., 1 story, concrete and brick factory, 38th St., to Austin Co. of California, Bartlett Bldg., $40,000.

Buildings

PROPOSED WORK

N. H., Nashua—School—School Bd. had plans prepared by J. J. Driscoll, 6 Beacon St., Boston, Mass., and soon takes bids 2 story and basement, 150 x 200 ft., brick and limestone, plain foundation, Lake St. $250,000.

Mass., Ashburnham—Academy—Cushing Academy plans 3 story and basement, rein.-con. and stone, plain foundation, to replace one recently destroyed by fire. $175,000. A. B. Whitney, chn. building com. Engineer and architect not selected.

Mass., Boston — High School — Public Building Dept. having plans prepared by H. H. Atwood, Ashmont (Boston P. O.), and soon takes bids 4 story and basement, 150 x 300 ft., rein.-con., concrete pile foundation, Warren and Townsend Sts. $3,000,000.

Mass., Orange—School—Bd. Educ. having plans prepared by Tooker & Marsh, 101 Park Ave., New York City, brick, steel and stone, plain foundation, Pleasant St. $150,000. Noted Mar. 15.

Conn., Thompsonville—School—St. Josephs Parish plans 3 story, brick and steel, plain foundation, Pearl St. $150,000. D. J. O'Connor, pastor. Whiton & McMahon, 36 Pearl St., Hartford, archts.

Conn., Windham—School—Town appropriated $150,000 for 3 story, brick, plain foundation. F. P. Fenton, clk.

New York—Hospitals—New York State Hospital Comn., Albany, having plans prepared by S. W. Jones, state archt., Albany, new buildings and additions to following hospitals: Binghamton $750,000; Brooklyn and Creedmoor, L. I., $6,000,000; Rochester $1,200,000; Buffalo $1,000,000; Central Islip $3,000,000; Gowanda $3,000,000; Kings Park $3,000,000; Manhattan $3,000,000; Hudson River $3,500,000; Middletown $1,000,000; St. Lawrence $1,400,000; Utica $750,000; Marcy $3,000,000; Willard $600,000; Dannemora $100,000; Mattawan $2,250,000.

N. Y., Albany — Office — H. Goodman (owner and architect) Eagle and Howard Sts., plans 8 story, 65 x 100 ft. rein.-con., brick and steel, plain foundation, South Pearl St. $1,000,000.

N. Y., Albion—Theatre, Store and Office —W. H. Robson, c/o Family Theatre, plans 3 story, 66 x 164 ft., 900 seating capacity, Main St. $150,000. Engineer not announced. Architect not selected.

N. Y., Binghamton—High School—Bd. Educ. plans Junior High School, Broad Ave. $425,000. Architect not announced. E. A. Prentice, city engr. Noted June 14.

N. Y., Binghamton—School—Bd. Educ. plans 3 story addition to Woodrow Wilson School. $200,000. Engineer and architect not announced.

N. Y., LeRoy—School—Election in November to vote on $255,000 bonds grade school. Engineer not selected. Tooker & Marsh, 101 Park Ave., New York, archts.

N. Y., New York—Apartment—Evander Realty Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., having plans prepared brick, steel and stone, plain foundation, Morris Ave. $250.000.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., preparing plans 6 story, brick, steel and stone, plain foundation, 153rd St. and St. Nicholas Ave. $300,000. Owner's name withheld.

N. Y., New York—Apartment—Mandel Ehrich Corp., c/o J. Sloane, arch. and engr., 100 East 42nd St., had plans prepared brick, steel and stone, plain foundation, Park Ave. and 36th St. $500,000.

N. Y., New York—Apartment—One Hundred Fifteen East 48th St. Corp., c/o M. B Schmidt, archt. and engr., 14 East 46th St., having plans prepared 14 story, brick, steel and stone, plain foundation, 48th St. and Lexington Ave. $3,000,000.

N. Y., New York—Apartment—One Thousand Forty Park Ave. Corp., c/o Delano & Aldrich, archts. and engrs., 126 East 38th St., having plans prepared 14 story, 100 x 123 ft., brick, steel and stone, plain foundation, 1040 Park Ave. $1,500,000.

N. Y., New York—Apartment—Schierenson Realty Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., having plans prepared brick, steel and stone, plain foundation, 170th St. and Ft. Washington Ave. $200,000.

N. Y., New York—Apartment—Seventy-Third St. and Amsterdam Ave. Corp., c/o Sugarman, Hess & Bergen, archts. and engrs., 16 East 43rd St., having plans prepared 15 story, brick, steel and stone, plain foundation, West 73rd St. $900,000.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 6 story, brick, steel and stone, plain foundation, Haven Ave. and 178th St. $400,000. Owner's name withheld.

N. Y., New York—Nurses School—City of New York Bellevue & Allied Hospitals, 415 East 26th St., having plans prepared 5 story, brick, steel and stone, plain foundation, foot of East 26th St. $500,000. A. Judd, secy. Private plans.

N. Y., New York — Office — Marlboro Realty Corp., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., having plans prepared 20 story, brick, steel and stone, plain foundation, 1351 Bway. $2,750,000.

N. Y., New York—Office—Seventh Ave. and 35th St. Corp., c/o Buchanan & Kahn, archts. and engrs., 56 West 45th St., having plans prepared 22 story, brick, steel and stone, plain foundation, 7th Ave. and 35th St.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 99, Exterior St. $1,500,000.

N. Y., Rochester—Hospital—Homeopathic Hospital, 224 Alexander St., plans hospital addition. $400,000. Engineer and architect not announced.

N. Y., Rochester—Nurses Home—Highland Hospital, South Ave. and Bellevue Dr., plans nurses home, laundry, sprinkler system, etc. $150,000-$200,000. Engineer and architect not announced.

N. Y., Tonawanda—School—Tonawanda Twp. had tentative plans prepared school, Montrose St. $300,000. Engineer and architect not announced.

N. J., Montclair—Bank—Montclair Savings Bank, 441 Bloomfield Ave., soon takes bids brick, steel and stone, plain foundation. $200,000. T. M. James & Co., 342 Madison Ave., New York City, archts. and engrs. Noted May 17.

Pa., Berwick—Hotel—Chamber of Commerce plans to build hotel by municipal subscription under supervision of Hockenbury System. $200,000. Engineer and architect not announced.

Pa., Bloomsburg — High School — City plans 3 story school to replace one recently destroyed by fire. $150,000. Engineer not announced. Architect not selected.

Pa., Lewistown—High School—Bd. Educ., Green Ave., plans 3 story and basement, 100 x 150 ft. brick and steel. $150,000. C. Coxe, supt.

Pa., Scranton—Office—Chamber of Commerce plans office, on Washington Ave. and Mulberry St. $600,000. Engineer and architect not selected.

Pa., South Williamsport—High School—Bd. Educ. plans 3 story and basement, 80 x 150 ft., Central and Mountain Aves. $150,000.

Md., Baltimore -- Hotel—Emerson Hotel, Calvert and Baltimore Sts., plans 17 story, 50 x 150 ft. addition to hotel, brick and steel, $1,250,000. W. H. Parker, mgr. Engineer and architect not selected.

Md., Baltimore—Store—Trustees Mercantile Trust & Deposit Co., Calvert and Redwood Sts., having plans prepared by T. W. Pietsch, American Bldg., 4 story, brick, plain foundation, Franklin and Charles Sts. $150,000.

Md., Evergreen (Baltimore P. O.)—Gymnasium—Loyola College having plans prepared by O. G. Simonson, Inc., Hearst Tower, Baltimore, 2 story, 73 x 153 ft., stone, steel trusses. $150,000.

Md., Roland Park (Baltimore Station)—College—St. Marys College having plans prepared by Maginnis & Walsh, 100 Boyls-

Buildings (Continued)

ton St., Boston, Mass., 4 story, brick and steel. $400,000.

W. Va., Huntington—Y. W. C. A., Gideon Bldg., plans to construct building. $200,000. Engineer and architect not selected.

N. C., Elon College—College—Elon College plans new buildings, water mains, sewers and heating plant. Several hundred thousand dollars. W. A. Harper, pres.

N. C., Fayetteville—Courthouse and Jail—Cumberland Co. plans courthouse and jail. $200,000. E. A. Poe, chn. bd. comrs.

N. C., Oak Ridge—Dormitory—Oak Ridge Institute plans dormitory, fireproof. $150,000. T. E. Whitaker, head of Institution.

N. C., Fayetteville—Office—National Bank of Fayetteville takes bids about Nov. 15, 10 story and basement, Market Sq. $300,000. Engineer and architect not announced.

N. C., Hendersonville—Schools—Dec. 11, to vote on $350,000 bonds for schools.

Ga., Savannah—Bank and Office—Realty Investment Co., c/o Miller & Miller, Hurt Bldg., plans 10 story. $500,000. G. L. Miller & Co., engrs.

Tenn., Jackson—Hospital—J. L. Crook and others raising $150,000 for hospital.

Tenn., Nashville — Church — West End Methodist Church plans church, West End Ave. $400,000. G. Stoves, 2209 Dixie Pl., pastor.

Tenn., Nashville—Depot and Office—Tennessee Central R.R. Co., 319 7th Ave., having plans prepared by H. C. Hibbs, 4th and 1st Natl. Bank Bldg., 4 story, brick and concrete, foot of Bway. $150,000.

Ky., Henderson — Hotel — R. S. Soaper plans 6 story, 100 x 150 ft. $285,000. Engineer and architect not selected.

Ky., Louisville—Office—See "Industrial Works."

Ky., Ormsby (Lakewood P. O.)—Cottages—Louisville and Jefferson Co. Childrens Home, 3rd and Shipp Sts., Louisville, having plans prepared by A. Loomis, Todd Bldg., Louisville, and takes bids about Nov. 12 or 15, 7 brick cottages at Childrens Home, here. $150,000. Noted Dec. 22.

Ky., St. Matthews — Home — Masonic Lodge, 2nd and B Sts., Louisville, plans widows and orphans home, here. $1,600,000. Joseph & Joseph, Francis Bldg., Louisville, archts. Noted March 22 under "Louisville."

O., Akron—Hotel—A. C. Smith, c/o T. R. Ridley, archt., 109 North Union St., having plans prepared 5 story, brick, steel an concrete. $500,000.

O., Canton—Hospital—Aultman Hospital Assn. plans 3 story addition, Clarendon Ave. S. W. $300,000. Will mature in spring.

O., Cincinnati—Nov. 6, to vote on $650,000 bonds copleting Millcreek interceptor and other sewers. F. Krug, City Hall, engr.

O., Cleveland—Apartment—J. A. Saunders, 11830 Detroit Ave., having plans prepared by H. W. Grieme, 110 Engineers Bldg., 3 story and basement, 47 x 90 ft., brick and timber, West 25th St. $150,000.

O., Cleveland—Commercial and Apartment—S. Glaser, Ulmer Bldg., plans 4 story, brick, Euclid and Bryn Maur Aves. $200,000. L. R. Walker and J. L. Mauer, 1900 Euclid Ave., archts.

O., Cleveland—Nurses' Home—Lakeside Hospital, East 12th St. and Lakeside Ave., plans 8 story, brick, steel and concrete, Euclid Ave. and Adelbert Rd. $1,000,000. Coolidge & Shattuck, Ames Bldg., Boston, Mass., archts.

O., Cleveland — School — St. Catherine Catholic Church, 3443 East 93rd St., having plans prepared by C. R. Greco, 729 Guardian Bldg., 2 story and basement, brick, steel and concrete, East 93rd St. and Catherine Ave. $150,000.

O., Dayton — Apartment, etc. — Homes Constr. Co., 1004 Amer. Bldg., plans 3 story and basement, 50 x 200 ft., rein.-con., brick and stone apartment and garage, plain foundation, Cambridge Ave. $240,000. Private plans.

O., Lakewood (Cleveland P. O.)—Apartment—M. Margolin, 548 East 118th St., Cleveland, having sketches made by M. Weis, 617 Union Bldg., Cleveland, 3 story and basement, brick and timber, Lake and Cook Aves., here. $175,000. Noted Oct. 18.

O., Lakewood (Cleveland P. O.)—Bathhouse, etc.—City plans bathhouse and jetties, brick, concrete and stone, Lakewood Park. $250,000. E. H. Fisher, city engr.

O., Lorain—Commercial and Theatre—Strand Theatre Co., c/o F. J. McFadden, archt., 543 Bway., had plans prepared 3 story, 75 x 134 ft., brick, steel and concrete, Bway. $200,000.

O., Massillon—Y. M. C. A. plans 6 story building. $300,000. Shattuck & Hussly, Chicago, archts.

O., Middletown—Church—St. Johns Congregational Church, plans 1 and 2 story and basement, brick, stone and rein.-con., plain foundation. $175,000. W. W. Jaekle, 310 West 2nd St., Dayton, archt.

O., Toledo—Convent—Notre Dame Convent plans novitiate, Bancroft and Monroe Sts. $200,000. Engineer and architect not selected. Will construct group of buildings, Secor Rd. and Monroe St., at later date.

O., Toledo — Office — See ."Industrial Works."

O., Willoughby—High School—Bd. Educ., c/o M. Otis, clk., having plans prepared by F. C. Warner, Hippodrome Annex, Cleveland, 2 story, brick, steel and concrete. $150,000.

Mich., Detroit—Amusement—Jefferson & Belle Isle Realty Co., c/o M. Friedberg, secy.-treas., 1254 Griswold St., having plans prepared by C. H. Crane, 542 Griswold St., 1, 2 and 3 story, concrete, brick and steel, plain foundation, East Jefferson St. $3,000,000.

Mich., Detroit—Clubhouse—P. A. Miller and others, 600 Majestic Bldg., having plans prepared by Baxter, O'Dell & Halpin, 1024 Hammond Bldg., 11 story and basement, 150 x 175 ft. rein.-con., brick and steel, plain foundation, Cass Ave. and Putnam St. $3,000,000.

Mich., Flint—Court House and Jail—County Building Comm., H. Haas, chn., Thetford, having plans prepared by F. D. Madison, 209 First Bank Bldg., Royal Oak, 4 story and basement, 75 x 170 ft. rein.-con., brick, steel and stone, plain foundation, Saginaw St. $1,000,000.

Mich., Grosse Pointe (Detroit P. O.)—Church—Grosse Pointe Presbyterian Church had plans prepared by W. E. N. Hunter, 1436 Washington Blvd., Detroit, 2 story, 75 x 157 ft. rein.-con., brick, steel and stone, plain foundation. $250,000.

Mich., Kalamazoo—School—Bd. Educ. having preliminary plans prepared by Billingham & Cobb, 404 Press Bldg., 2 story and basement, 60 x 180 ft. rein.-con. and brick, plain foundation, Burdick St. $160,000, also 3 story, 102 x 290 ft. rein.-con., brick and steel, plain foundation, Lovell St., $265,000.

Mich., Lansing — Exchange — Michigan State Telephone Co., 220 North Capitol Ave., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, 3 story and basement, 66 x 124 ft. rein.con. and brick addition, plain foundation. $150,000.

Ill., Chicago—Apartment—W. Jackson, c/o D. S. Klafter, archt., 64 West Randolph St., plans 3 story, 82 x 125 ft., fireproof, 79th and Philips Sts. $150,000.

Ill., Chicago—Apartment—W. Knol, 874 West North Ave., plans 3 story, 147 x 173 ft., fireproof, Belle Plaine Ave. and Kedzie St. $350,000. Steinborn & Simon, 111 North Dearborn St., archt.

Ill., Chicago—Apartment and Store—P. Lederer, c/o D. S. Klafter, archt., 64 West Randolph St., plans 1 and 3 story, 125 x 285 ft., apartment, store and garage, fireproof, 55th St. between Essex and Kingston Sts. $350,000.

Ill., Chicago — Apartment — Oman & Lilienthal, archts., 64 West Randolph St., preparing plans 3 story, 100 x 250 ft., rein.-con., brick and steel, Kedzie Ave. near Logan Sq. $250,000. Owner's name withheld.

Ill., Chicago—Apartment—A. V. Teisen, archt., 4804 North Kedzie Ave., preparing plans 3 story, 120 x 125 ft., fireproof, Laramie and Montrose Sts. $150,000. Owner's name withheld.

Ill., Chicago—Bank Sheridan Trust and Savings Bank, 4738 Bway., plans 12 story and basement, fireproof, Lawrence Ave. and Bway. $1,000,000. Marshall & Fox, 721 North Michigan Ave., archts.

Ill., Chicago—Hotel—J. P. Lynch, c/o D. D. Meredith, 4750 Sheridan Rd., plans 4 story, 50 x 150 ft., fireproof, 4917-19 Kenmore St. $200,000.

Ill., Chicago—Hotel—Morrison Hotel Co., Madison and Clark Sts., having plans propared by Holabird & Roche, 104 South Michigan Ave., 22 story and basement, 67 x 190 ft., fireproof, Madison and Clark Sts. $2,500,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., plans 3 story, fireproof, 4623 Greenwood Ave. $300,000. J. C. Christensen, 650 South Clark St., archt.

Ill., Chicago—Temple, Office and Theatre—State of Illinois A. F. and A. M., c/o Rapp, archts., 190 North State St., plans 21 story, rein.-con., brick and steel, Randolph St. near Dearborn St. $5,000,000. E. Beach, grand master.

Ill., Waukegan—Y. M. C. A. having preliminary plans prepared by Shattuck & Lager, archts., 10 South La Salle St., Chicago, 4 story and basement, 100 x 125 ft., rein.-con., brick and stone, Clay St., here. L. J. Latz, Washington St., associated archt.

Wis., Janesville—Hotel—McNeil Hotel Co., 14 West Milwaukee St. having preliminary plans prepared by Rowe, Dillard & Rowe, 127 Dearborn St., Chicago, 6 story and basement, 62 x 147 ft., brick, steel and concrete addition, plain foundation. $225,000

Wis., La Crosse—Church—Evangelical Lutheran Congregation having plans prepared by O. A. Merman, Linker Bldg., 2 story, brick and tile. Plain foundation, to O. Wold, 1403 Jackson St. Total $150,000.

Wis., Madison — Chapel, etc. — German Methodist Church, c/o W. Schwiering, 110 South Congress St., Kenosha, having plans prepared by Balch & Lippert, Gay Bldg., 4 story, 56 x 88 ft., brick, rein.-con., steel and stone, plain foundation. Webster St., here. $150,000.

Wis., Madison — Club — University Club, c/o W. J. Mead, pres., 803 State St., plans 4 story and basement, brick, rein.-con. and steel, plain foundation, State St. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Apartment—L. C. Goldman, 534 Mitchell St., having plans prepared by C. W. Valentine, 405 Bway., 7 story and basement, 95 x 135 ft., brick and concrete, plain foundation, Prospect Ave. $250,000.

Wis., Milwaukee — Church — Immanuel Evangelical Lutheran Congregation, c/o C. F. Dietz, pastor, 1122 Garfield Ave., plans 2 story, brick and tile, plain foundation, Teutonia Ave. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Office—E. D. Fryer, 400 Grand Ave., having plans prepared by C. H. Tharinger, 3328 State St., 6 story and basement, 50 x 130 ft., brick and timber, plain foundation, East Water St. $200,000.

Wis., Milwaukee—School—Zion Lutheran Congregation, c/o W. Mathes, pastor, 818 21st St., having preliminary plans prepared by Leiser & Holst, 105 Wells St., 2 story and basement, 100 x 110 ft., brick and tile, plain foundation,. Fond du Lac Ave. $150,000.

Wis., Milwaukee—Store and Office—Mitchell Street Bldg. Co., 216 West Water St., having preliminary plans prepared by Herbst & Kuenzli, 114 Grand Ave., 2 story and basement, 120 x 142 ft., brick and concrete, plain foundation, Mitchell St. $150,000.

Wis., Rhinelander—High School—School Bd., c/o A. Moe, Clk., had plans prepared by Smith, Reynolds & Brandt, Dempsey Bldg., Manitowoc, and soon takes bids 3 story and basement, brick, tile and concrete, plain foundation. $350,000. Noted Aug. 9.

Wis., Watertown—Hotel—Badger Hotel Co., c/o M. Blumenfield, 1 South Pickney St., Madison, having plans prepared by Balch & Lippert, Gay Bldg., Madison, 5 story, 66 x 108 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Minn., Breckenridge—Court House—Wilkin Co. having plans prepared by Buechner & Orth, 500 Shubert Bldg., St. Paul, 3 or 4 story and basement, rein.-con., brick and tile. $200,000. P. E. Truax, aud.

Minn., Fairmont—Bank and Office—Fairmont Natl. Bank plans 4 story and basement, rein.-con., brick and tile. $150,000. Engineer and architect not announced.

Minn., Minneapolis — Store — Thomas Holding Co., c/o G. W. Thomas, 8th St. and Nicollet Ave., plans 5 story and basement, 66 x 165 ft., rein.-con., brick and tile, 8th St. near Nicollet Ave. $200,000. Engineer and architect not announced.

Kan., Chanute—Memorial—Nov. 6, to vote on $190,000 bonds, 2 story and basement. Private plans. Noted Oct. 4.

Mo., St. Louis—Club and Office—Knights of Columbus, 3549 Olive St., plan 10 story and basement, 150 x 290 ft. club and office building containing auditorium, 2,000 seating capacity, 4 lodge halls and 200 rooms, Lindell Blvd. and Sarah St. $1,250,000. Engineer and architect not selected.

Okla., Blackwell — Memorial — American Legion having plans prepared 3 story, 100 x 140 ft., rein.-con., plain foundation, Main and McKinley Sts. Election soon to vote on $200,000 bonds. A. R. Black, commander. Architect not selected.

Okla., Guthrie—High School—Bd. Educ. having plans prepared by E. L. Gahl. Guthrie, 3 story and basement, 180 x 230 ft., rein.-con. and brick, plain foundation, Cleveland St., $300,000.

Tex., Austin — Cathedral — Scottish Rite Lodge having plans prepared by Endress & Cato, Houston, 7 story, rein.-con., steel, brick, stone and terra cotta. $500,000.

Tex., Port Arthur — Temple — Masonic Lodge soon takes bids 3 story, rein.-con., steel, brick and stone, plain foundation. $150,000. W. B. Ittner, Bd. Educ. Bldg., St. Louis, Mo., archt.

Buildings (Continued)

Wash., Kelso—Hotel—Chamber of Commerce and L. C. Bohlen & Co. plan community hotel. $200,000.

Wash., Tacoma—High Schools—School Bd. will sell $2,400,000 bonds Nov. 12, for 3 intermediate high schools, plans for which have been prepared by R. E. Borhek, Puget Sound Bank Bldg. A. Lister, secy. of Bd. Noted Oct. 4.

Wash., Tacoma—Hotel—Citizens Hotel Corp. takes bids about Nov. 15, constructing Hotel Winthrop, 9th St. and Bway. $1,500,000. W. L. Stoddart, 50 East 41st St., New York City, archt.

Calif., Covina — High School — Covina Union High School Dist. voted $200,000 bonds for high school addition. Noted Oct. 4.

Calif., Fresno — Theatre — West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, plans theatre. $150,000.

Calif., Long Beach—Office and Store—W. L. Porterfield, 141 Ocean Ave., having plans prepared by Milwaukee Building Co., Wright-Callendar Bldg., Los Angeles, 14 story and basement, rein.-con., Pine St. and Ocean Ave. To exceed $1,500,000.

Calif., Los Angeles—Apartment—A. R. Hutchason, archt., Van Nuys Bldg., preparing plans 4 story and basement, brick, Serrano Ave. $150,000. Owner's name withheld.

Calif., Los Angeles—Bank, Store and Office—Merchants Natl. Bank, 548 South Spring St., had plans prepared by J. Weston, Hollywood Security Bldg., 1 and 2 story, 60 x 150 ft., brick, concrete and granite, Main and Washington Sts.

Calif., Los Angeles—Church—St. Columbkilles Parish Church having plans prepared by Truesdall & Newman, San Fernando Bldg., for church, brick, Main and 64th Sts. $150,000.

Calif., Oakland—Office, Store and Bank—Central Natl. Bank and Central Savings Bank, 14th St. and Bway., having plans prepared by W. Knowles, Central Bank Bldg., 20 story and basement, fireproof, 14th St. and Bway. $2,000,000.

Calif., Oakland—Store and Office—F. M. Ray, c/o W. C. Lowe, archt., Monadnock Bldg., San Francisco, having plans prepared 10 story and basement, fireproof, 19th and Bway. Sts. $450,000.

Calif., Salinas—School—Salinas Grammar School Dist. to vote on $150,000 bonds for school.

Calif., San Diego—High Schools—Plans election to vote on $750,000 bonds for 2 high schools. W. Angier, Southern Title Bldg., secy. Bd. Educ.

Calif., Santa Monica—Hotel—A. C. Blumenthal, et al., Loew State Bldg., Los Angeles, having plans prepared by K. Macdonald, Brack-Shops Bldg., Los Angeles, 14 story and basement, rein.-con., Ocean Blvd. and Santa Monica St. To exceed $850,000.

Ont., Lonson—Y. W. C. A., 183-187 King St., having plans prepared by J. M. Moore, 489 Richmond St., new building incl. gymnasium, swimming pool, cafeteria, auditorium and dormitories. $200,000.

Ont., Oshawa—City Hall—Town plans 2 or 3 story and basement, rein.-con., brick and stone, plain foundation. $200,000. Engineer and architect not selected.

Ont., Saulte Ste. Marie — Hotel — Dominion Hotels Ltd., 66 King St., Hamilton, having plans prepared by V. K. Gibson, 624 South Michigan Ave., Chicago, Ill., 100-150 room hotel, probably 3 or 4 story and basement, rein.-con., brick and steel, plain foundation. $300,000.

Ont., Toronto—Hospital—Toronto East General Hospital Assn., City Hall, plans 3 story and basement, 400 bed, rein.-con., brick and steel, plain foundation, eastern part of city. $500,000. R. C. Harris, city engr. W. Price, city archt.

Ont., Toronto—Hospital—Toronto General Hospital, College St., having plans prepared by Darling & Pearson, 2 Leader Lane, 1 and 2 story and basement, 80 x 100 ft. addition, rein.-con., brick and steel, plain foundation, College St. $150,000.

B. C., Vancouver—Schools—Bd. School Trustees, Hamilton St., plans new schools. $500,000 bonds will be voted on Dec. 15. F. A. A. Barrs, Hamilton St., archt.

BIDS DESIRED

Conn., Hartford—High School—Nov. 15, by Bd. Contract & Supply, 3 story, brick and steel, plain foundation, Maple Ave. $1,200,000. E. T. Wiley, 75 Pratt St., archt. Noted Sept. 27.

N. Y., Central Islip—Cottages—Nov. 14, by State Hospital Comn., Albany, 3 cottages, here. S. W. Jones, Albany, archt.; adv. E. N.-R. Nov. 1.

N. Y., Middletown—Hospital—Nov. 28, by State Hospital Comn., Albany, for construction, heating, sanitary and electric work and restoring main building; laundry building; additional accommodations for chronic patients, etc., at Middletown State Homeopathic Hospital, here. S. W. Jones, state archt.; adv. E. N.-R. Nov. 1.

Pa., Erie—Nurses Home—Nov. 3, by B. Jannsen, archt., Century Bldg., Pittsburgh, 2 story and basement, brick and steel, for St. Vincents Hospital. $200,000.

Pa., Phila.—Parish House—Nov. 7, by F. L. Watson, archt., 1211 Walnut St., 2 story and basement, 73 x 166 ft. rein.-con., brick and steel, plain foundation, Hancock and Diamond Sts., for D. J. Dougherty, 1723 Race St. $150,000.

Ky., Louisville—Bank—Nov. 6, by Federal Reserve Bank, 5th and Market Sts., 3 story, cut stone addition. Est. cost $150,000 to $200,000. D. X. Murphy & Bros., Louisville Trust Bldg., archts. Noted Oct. 11.

Ky., Louisville — Temple — Nov. 5 (extended date), by Nevin, Wischmeyer & Morgan, archts., Starks Bldg., temple, 4th and Breckenridge Sts., for Scottish Rite Order, 438 6th St. $750,000. Noted Sept. 13.

O., Delaware—Observatory—Ohio Wesleyan University, c/o J. Hoffman, pres., taking bids 1 story, brick, stone and steel. $250,000. Tallmadge & Watson, 189 West Madison Ave., Cleveland, archts.

Mich., Detroit—School and Rectory—J. G. Kastler Co., 523 Detroit Savings Bank Bldg., taking bids and opens same about Nov. 1, 2 story and basement, 90 x 160 ft. and 48 x 60 ft. rein.-con. and brick, plain foundation, for St. Louis Parish, c/o architects. $175,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenview St., and R. F. France, archt., 155 North Clark St., receiving bids 3 story and basement, 100 x 140 ft., fireproof, 44th and Drexel Sts. $250,000.

Ill., Chicago—Apartment—Johnson Bros., 109 North Dearborn St., receiving bids 3 story, 170 x 200 ft., fireproof, 69th and Crandon Sts. $300,000. L. M. Mitchell, 138 North La Salle St., archt.

Ill., Chicago—Apartment—R. W. Matteson, 541 Diversey Parkway, receiving bids 4 story, 125 x 200 ft., fireproof, Hampton Court near Wrightwood St. $600,000. P. F. Olsen, 720 Cass Ct., archt.

Ill., Chicago—Apartment—Olsen & Urban, archts., 155 North Clark St., receiving bids 3 story, 50 x 200 ft., rein.-con., brick and steel, Pine Grove Ave. near Grace St., for A. Peterson, c/o architects. $225,000.

Wis., Madison—Store and Office—P. M. Horner, archt., Pioneer Blk., taking bids 3 story, 90 x 115 x 147 ft., brick, rein.-con. and steel, plain foundation, for H. C. Schenk, 205 Atwood Ave.

Mo., Sedalia—High School—Nov. 23, by Bd. Educ., 3 story, 185 x 190 ft. rein.-con., brick and stone, plain foundation. $375,000. T. W. Bast, Sedalia, archt. W. B. Ittner, 911 Locust St., St. Louis, associated archt. Noted Oct. 4.

Mo., St. Louis—High School—Nov. 15, by H. P. Hess, archt., 4811 Cote Brilliante Ave., constructing William Cullen McBride High School, 3 story and basement, 105 x 210 ft., brick, concrete and stone, Kingshighway and Cote Brilliante Ave., for J. J. Glennon, pastor, 3810 Lindell Blvd. $300,000.

Tex., Galveston — High School, etc. — Nov. 26, by Bd. Educ., constructing Ball High School, 3 story and basement, $320,000; Gollad Ward School, 2 story, $175,000; Sam Houston Ward School, 2 story, $175,000; Davy Crockett Ward School, 2 story, $175,000, all brick, stone and concrete. De Witt & Lemmon, Southwestern Life Bldg., Dallas, archts. Noted July 19.

Wash., Tacoma—High School—School Bd. of Dist. 10, taking bids and opens same about Nov. 15, 2 story, rein.-con. and brick veneer, plain foundation, Division Ave. and Sprague St. $450,000. R. E. Boehek, 923 Puget Sound Bank Bldg., archt. A. Lister, secy. Noted Nov. 1.

Calif., San Francisco—Apartment—L. B. Ham, 110 Sutter St., will build 6 story and basement, rein.-con., Sacramento and Octavia Sts., by separate contracts. $150,000. A. J. Horstmann, 110 Sutter St., archt.

Calif., San Francisco—Apartment and Store—E. E. Young, archt., 2002 California St., receiving bids 6 story and basement, rein.-con., Ellis and Taylor Sts., for W. F. Perkins, Nevada Bank Bldg. $150,000.

BIDS RECEIVED

N. J., Madison—High School—Bd. Educ., 60 x 280 ft., brick, steel and stone, plain foundation, from Fitzpatrick & McArthur, $214,000. Noted Oct. 4.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, 100 x 121 ft., Boggs Ave., from H. HL. Ley Co., Westinghouse Bldg., $155,898. Noted July 19.

O., Lakewood (Cleveland P. O.) — High School—Bd. Educ., 2 story, 89 x 259 ft. and 62 x 108 ft. high school and auditorium, brick, steel and concrete, Hilliard Rd., from J. Grant & Son, 4500 Euclid Ave., Cleveland, $418,417. Noted Oct. 4.

Calif., Los Angeles—Auditorium—City, 3 story, brick, for Polytechnic High School, general contract from W. Stacko, 1719 West Adams St., $228,000.

CONTRACTS AWARDED

Conn., Hartford — Office — Nirenstein & Swartz, 1247 Main St., 4 story, 60 x 120 ft., brick and steel, plain foundation, Main St., to H. Juster, 104 Bond St. Archts. est. $200,000. Noted July 12.

N. Y., Brooklyn—Apartment—Owner, c/o S. Millman, archt. and engr., 26 Court St., will build 4 story, brick, steel and stone, plain foundation, Clarkson St., by day labor. $200,000.

N. Y., Brooklyn—Institute—Dept. Parks, Municipal Bldg., New York, completing interior finish for additions F and G of Brooklyn Institute of Arts and Sciences, Eastern Parkway, here, to P. J. Carlin Constr. Co., Grand Central Terminal, New York, $656,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 205, 20th Ave. from 67th to 68th Sts., here, to G. F. Driscoll, 115 Schermerhorn St., $995,995. Noted Oct. 25.

N. Y., Buffalo—Office and Store—Walbridge & Co., 392 Main St., 10 story, 94 x 102 ft., rein.-con., brick and steel, Court St., to D. P. Robinson & Co., Inc., 125 East 46th St., New York City, to exceed $500,000. Noted June 7.

N. Y., New York—Apartment—P. Aginsky Building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Walton Ave., by day labor. $175,000.

N. Y., New York—Apartment—R. Campagna, 200 West 72nd St., will build brick, steel and stone, plain foundation, 320 West End Ave., by day labor. $500,000. R. Candela, 200 West 72nd St., archt. and engr.

N. Y., New York—Apartment—W. Kinsler, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, brick, steel and stone, plain foundation, 203rd St. and Valentine Ave., by day labor. $175,000.

N. Y., New York—Apartment—Palfin Building Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, West 176th St., by day labor. $200,000.

N. Y., New York—Apartment—Seventy-Four West 68th St. Corp., c/o R. T. Lyons, archt. and engr., 342 Madison Ave., will build 10 story, brick, steel and stone, plain foundation, 72 West 68th St., by day labor. $600,000.

N. Y., New York—Apartment—Sherman Elwood Building Corp., c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 14 story, 86 x 160 ft., brick, steel and stone, plain foundation, Park Ave. and 39th St., by day labor. $1,110,000.

N. Y., New York — Loft — Greenwich Constr. Co., c/o E. Roth, archt. and engr., 119 West 40th St., will build brick, steel and stone, plain foundation, 260 West 38th St. $350,000. Work will be done by separate contracts under supervision of architects.

N. Y., New York—Loft—W. Bomzen, 18 Washington Pl., 16 story, 50 x 115 ft., brick, steel and stone, plain foundation, West 38th St., to S. S. Roth & Bros., Inc., 130 West 42nd St.

N. Y., New York—Office, etc.—Stewart-Warner Speedometer Co., 551 West 52nd St., rein.-con., brick, steel and stone office building and service station, plain foundation, West 65th St., to R. Carvel, 401 West 59th St. Archts. est. $400,000.

N. Y., Sherburne—High School—Bd. Educ. brick, to H. O'Connell, Earlville, $150,000.

Pa., Chester — School — F. F. Durang, archt., 1220 Locust St., Phila., 2 story and basement, 70 x 158 ft. brick and steel, plain foundation, 21st and Patton Sts., to M. Melody & Son Co., 1322 Race St., Phila., for C. D. J. Dougherty, 1723 Race St., Phila. $165,000.

Pa., Harrisburg — Office — B. H. Boyd, secy. Dept. Property & Supplies, Capitol Bldg., general contract completing office building, to C. W. Strayer, Green and Forster Sts., $629,667. Noted Aug. 30.

N. C., Wake Forest—Dormitory—Wake Forest College, 3 story and basement, 50 x 138 ft., brick and limestone, to Hancock & Davis, Beaufort, $208,000. Noted Aug. 16.

Miss., Jackson—Hospital—State, 3 story, brick and concrete, at Beauvoir Soldiers Home, to W. T. Beckelhimer, Hattiesburg, $377,990. Engrs. est. $375,000.

Tenn., Memphis — Store—Peabody Hotel Co., 9½ story, brick and terra cotta, South Main and Monroe Sts., to Gauger-Korsmo Constr. Co., St. Paul, Minn. Archts est. $830,000. B. Lowensteins Bros., Inc., lessee. Noted July 26.

Ky., Louisville—Apartment—Castlewood Realty Co., Inter Southern Bldg., will build

Buildings (Continued)

4 story, 60 x 125 ft., brick and hollow tile, Eastern Parkway, by day labor. $150,000. C. J. Stinson, Inter Southern Bldg., archt.

Ky., Owensboro—Bank—National Deposit Bank, 2 story, 70 x 125 ft., stone, to Hoggson Constr. Co., 38 South Dearborn St., Chicago, Ill. Est. cost $150,000.

O., Cleveland—Office and Commercial—Cleveland Desk Co., 1380 Ontario St., 3 story and basement, 56 x 160 ft., brick and steel, 1325 Superior Ave., to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $150,000.

O., Ridgeville (North Ridgeville P. O.)—Schools—Bd. Educ. general contract two 2 story and basements, brick, steel and concrete, to J. Kaiser & Bros., Elyria, $125,000. Noted Oct. 25.

O., Toledo—Medical—N. Gillette, 9 story and basement, 48 x 120 ft., rein.-con., brick and steel, plain foundation, Michigan and Adams Sts., to J. D. Bullinger, Toledo, $300,000.

Mich., Battle Creek—Apartment—W. K. Kellogg, 6 story, 100 x 120 ft. rein.-con., brick and steel, plain foundation, Sanitarium Pl., to Moorehouse Constr. Co., Chicago, Ill., cost plus fixed fee. About $350,000.

Ill., Chicago—Apartment—L. M. Cull, c/o Z. E. Smith, archt., 305 East 55th St., 3 story, 124 x 124 ft., fireproof, 76th and Kingston Sts., to Johnson-Anderson Co., 7120 Evans Ave. Archts. est. $200,000.

Ill., Chicago—Apartment—Park View Manor Building Corp., c/o A. S. Alschuler, archt., 28 East Jackson Blvd., 3 story and basement, 137 x 249 ft., fireproof, 6830-58 South Shore Dr., to Johnson-Anderson Co., 7210 Evans Ave. Archts. est. $650,000.

Ill., Chicago—Apartment—W. Reichert, 28 East Jackson Blvd., 3 story and basement, 50 x 300 ft., fireproof, 5830 Cornell St., to J. Swanson, 8237 Elizabeth St. Archts. est. $300,000.

Ill., Chicago—Apartment—I. S. Staten, c/o A. M. Ruttenberg, archt., 64 West Randolph St., 3 story and basement, 110 x 170 ft., fireproof, 1633 Farwell Ave., to Fisher & Boldberg, 986 North Fairfield Ave. Archts. est. $150,000.

Ill., Chicago—Apartment—W. Wightman, 6206 South Talman St., two 2 story, 55 x 110 ft. fireproof, Richmond St., between 64th and 65th Sts., to Blommaert & Van Leuven, 125 West 110th St. Archts. est. $150,000.

Ill., Chicago—High School—Sisters of Mercy, c/o J. W. McCarthy, archt., 139 North Clark St., 3 story and basement, fireproof, Prairie St., to R. C. Weiboldt Co., 1534 West Van Buren St. Archts. est. $400,000.

Ill., Evanston—Store and Office—Evanston Shops Building Corp., c/o S. E. Epstein, 10 South La Salle St., Chicago, 2 story and basement, 116 x 120 ft., fireproof, 518 Davis St., here, to L. Kuklin, 2717 Hirsch Blvd., Chicago. Archts. est. $175,000.

Wis., Milwaukee—Apartment—Wisconsin Bldg. & Investment Co., 528 Summit Ave., 3 story and basement, 62 x 147 ft., brick and concrete, plain foundation, Wells St., to Universal Constr. Co., 915 Chestnut St. Archts. est. $165,000.

Minn., Minneapolis—Amusement—Minneapolis Recreation Co., 8th St. and Hennepin Ave., general contract 3 story and basement rein.-con., brick and tile, 8th St. and Hennepin Ave., to Union Constr. Co., Metropolitan Life Bldg., $300,000.

Minn., Minneapolis—Office—See "Industrial Works."

Mo., St. Louis — Hospital — Franciscan Sisters, St. Anthonys Hospital, Grand Blvd. and Chippewa St., general contract 5 story and basement, 50 x 135 ft., brick and rein.-con., plain foundation, Chippewa St., to J. J. Grewe, Century Bldg. Archts. est. $250,000.

Calif., Los Angeles—Store and Theatre—J. M. Bowen, et al., Van Nuys Bldg., store and theatre, rein.-con., Highland Ave., to Winters Constr. Co., Los Angeles Railway Bldg., $175,000. Noted Apr. 4.

Calif., San Francisco—Apartment—L. B. Ham, 110 Sutter St., will build 10 story, concrete, brick and steel, Sutter and Leavenworth Sts., by day labor. $250,000. A. J. Horstmann, 110 Sutter St., archt. Noted Oct. 11.

Calif., San Francisco—High School—City and San Francisco Co., furnishing and erecting steel and cast iron for high school addition, to Golden Gate Iron Wks., 1541 Howard St., $67,100. Noted Oct. 11.

Calif., Santa Monica—Hotel and Apartment—G. F. Stephenson, 21 41st Ave., 6 story and basement, rein.-con., to Gutleben Bros., I. W. Tellman Bldg., Los Angeles. Archts. est. $250,000.

Ont., Oshawa—High School—Bd. Educ., 2 and 3 story and basement, 20 room, rein-con., brick and steel addition, plain foundation, Simcoe St., to Schultz Bros., Albion St., Brantford, $246,000. Noted Oct. 11.

ROAD WORK—KENTUCKY

Following are lowest three bids opened by State Highway Comn., Frankfort, Sept. 26, for improving 14.421 mi. Owen-Carrollton Rd., Owen Co., (A) Muir & Welch, Nicholasville; (B) Clark Co. Constr. Co., Winchester; (C) Staebler Constr. Co., St. Matthews. The unit bids were as follows:

	A	B	C
3 acres clearing and grubbing	$100.00	$200.00	$150.00
673 trees and stumps	5.00	5.00	4.50
88,400 cu.yd. earth excavation	52	.60	.55
96 cu.yd. rock excavation	2.50	2.00	1.75
3,486 cu.yd. borrow excavation	52	.60	.55
497 cu.yd. structural excavation	1.00	1.00	1.50
24,962 sq.yd. overhaul	.04½	.04	.03
15,247 sq.yd. scarifying and reshaping	07	.05	.10
105 ft. removing pipe	1.00	1.00	.75
157 cu.yd. class A concrete	26.50	25.00	22.00
13,087 lb. reinforcement	07	.09	10
569 cu.yd. cement rubble	15.00	14.00	13.50
246 ft. 12 in. culvert metal pipe	2.50	2.50	2.00
75,489 tons crushed limestone	3.19	3.10	4.00
2,612 ft. 18 in. vitrified pipe	2.65	3.00	2.30
360 ft. 24 in. vitrified pipe	3.60	4.50	3.00
271 cu.yd. encasing concrete	20.00	20.00	21.00
2,612 ft. 18 in. concrete pipe	3.58	3.75	3.40
360 ft. 24 in. concrete pipe	5.00	5.75	4.40
Extended totals waterbound macadam—vitrified pipe	$323,147	$324,224	$384,949
Extended totals waterbound macadam—concrete pipe	320,456	321,217	382,639

Ont., Toronto—Y. W. C. A., 21 McGill St., 3 story and basement, 80 x 100 ft. rein.-con., brick and steel addition, plain foundation, McGill St., general contract to R. G. Kirby, 539 Yonge St., masonry to Carter & Cecil, 269 Leslie St., steel to Disher Constr. Co., Cherry St. Total est. $160,000.

Federal Government Work

PROPOSED WORK

California—Road—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, making plans improving Yuba Pass National Forest Highway Project, 10 acres clearing, 135,000 cu.yd. excav., 3,500 lin.ft. corrugated pipe, etc.

Calif., San Diego—Concrete Floor, Foundations, etc.—Spec. 4925—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans concrete slab floor, concrete foundations, water and drainage systems, etc., here.

BIDS DESIRED

Conn., Mystic—Post Office—Nov. 26, by Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile, here. J. A. Wetmore, acting superv. archt.

N. Y., New York—Dredging, etc.—Nov. 30, at office U. S. Engineer, Army Bldg., 39 Whitehall St., dredging and rock removal in Bronx River; adv. E. N.-R. Nov. 1.

Pa., Fort Mifflin—Pipe, Specials, etc.—Nov. 2, at office U. S. Engineer, Phila., 1,075 lin.ft. 4 in. c.i. pipe, specials, etc.

La. New Orleans — Barge Nov. 27, at office U. S. Engineer, 329 Custom House, one 120 x 30 x 7 ft. steel barge and two 80 x 26 x 5 ft. steel oil barges; adv. E. N.-R. Nov. 1.

O., Gallipolis—Post Office—Nov. 27, by Treas. Dept., Wash., D. C., construction U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Nov. 1.

Ill., Great Lakes—Rebuilding Laundry—Spec. 4918—Nov. 7 by Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding laundry, here. Noted Oct. 4.

Wis., Ripon—Post Office—Nov. 23, by Treas. Dept., Wash., D. C., construction, complete incl. mechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Nov. 1.

Idaho, American Falls — Water Supply System—Nov. 27, by U. S. Bureau of Recl. Denver, Colo., furnishing and laying wood or metal water pipe, in Reclamation Addition to City of American Falls, Minidoka Project. D. W. Davis, comr.; adv. E. N.-R. Nov. 1.

Nevada—Road—Nov. 9, by C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, Calif., grading 8.87 mi. Meadow Creek Sect., Gold Creek-Jarbridge Highway, Elko Co., here, 53,500 cu.yd. excav., 1,660 lin.ft. corrugated metal pipe, etc.

Wash., Puget Sound—Dredging—Spec. 4708—Nov. 21 by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging approximately 68,000 cu.yd. place measurement in Navy Yard, here.

Wash., Tacoma—Dredging—Nov. 19, at office U. S. Engineer, Seattle, dredging 78,000 yd. in Harbor, here.

Oregon—Road—Nov. 8 by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg., Portland, constructing 7.2 mi. Detroit-Niagara Sect. Santiam National Forest Rd., 40 ft., Marion Co., 17 acres clearing, 88,000 cu.yd. rock excav., 60,000 cu.yd. common excav., etc.

Oregon—Road—Nov. 8, by C. H. Purcell, dist. engr. U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, constructing 7.2 mi. Waldo-Elk Creek Sect., Grants Pass-Crescent City National Forest Rd. Project, 35 acres clearing, 21 acres grubbing, 5,000 cu.yd. rock excav., 53,000 cu.yd. common excav., etc.

California—Road—Nov. 13, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 9 Main St., San Francisco, clearing, grading and crushed rock surfacing 15.5 mi. Murphy-Big Trees National Forest Highway, Calavoras Co., 100 acres clearing, 133,400 cu.yd. excav., 18,000 cu.yd. crushed rock surfacing, etc. Noted Aug. 16.

BIDS RECEIVED

R. I., Providence—Dredging—U. S. Engineer, Providence, R. I., dredging 348,000 cu.yd. in Harbor, here, from Bay State Dredging and Contg. Co., 62 Condor Et., East Boston (Boston P. O.), Mass., $80,360. Noted Sept. 30.

N. Y., Brooklyn—Lumber—Bureau Supplies and Accounts, Navy Dept., Wash., D. C., furnishing 80,000 ft. b.m. white oak, Navy specification, at Navy Yard, here, from C. E. Chenevert, 856 Spitzer Bldg., Toledo, O., $87.50 per M.

D. C., Wash.—Grading, etc.—Constructing Quartermaster, War Dept., clearing, grading, etc., extension to Flying Field at Bolling Field, from C. T. Hofferberth, Woodward Bldg., $47,635.

Va., Fortress Monroe—Pipe Line—Constructing Quartermaster, Fortress Monroe, pipe line construction incl. relocation pipe line, trestle, and elevated steel water tank, here and at Langley Field, from Noland-Clifford Co., 330 28th St., Newport News, $52,898.

S. C., Clinton—Post Office—Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile, here, from Perkins Constr. Co., Greenville, $42,485. Noted Oct. 4.

Ky., Louisville—Derricks—U. S. Engineer, P. O. Box 72, furnishing 6 steel derricks complete exclusive of wire rope, from Lakeside Bridge & Steel Co., North Milwaukee, Wis., $33,700. Noted Oct. 4.

Wyoming—Road—J. W. Johnson, dist. engr., U. S. Bureau Pub. Rds., Custom House, Denver, Colo., grading 3.77 mi. Cody-Yellowstone Rd., here, from Taggard Bros. & Tebbs, Cowley, $70,128. Noted Sept. 27.

Calif., Los Angeles—Dredging—U. S. Engineer, 725 Central Bldg., dredging 700,000 cu.yd. in Harbor, here, from United Dredging Co., Central Bldg., $0.4197 per cu.yd., total $293,790. Noted Sept. 27.

Calif., Presidio (San Francisco P. O.)—Pump, etc.—Constructing Quartermaster, Fort Mason, San Francisco, 20 in. booster pump and motor, f.o.b. Rio Vista, and addition to pump house, here, from Main Iron Wks., 16th and Daggett Sts., San Francisco, $9,685. Noted Oct. 18.

CONTRACTS AWARDED

N. Y., New York—Discharge Pipe—U. S. Engineer, Army Bldg., 167 lengths shore discharge pipe, to Thompson Iron Wks., 1825 Callowhill St., Phila., $6,495.

Pa., Point Marion—Lock—U. S. Engineer Office, Pittsburgh, will build Lock 8, Monongahela River, here, by day labor. $750,000.

Ala., Florence—Cement—U. S. Engineer, furnishing 60,000 bbl. portland cement for Wilson Dam, to Lehigh Portland Cement Co., Birmingham, $89,562 and Atlas Portland Cement Co., B-N Bldg., Birmingham, $88,129.

Ala., Florence—Lime—U. S. Engineer, furnishing 15,000 sacks hydrated lime for Wilson Dam, Muscle Shoals, to Keystone Lime Wks., Keystone, $8,460.

Federal Government Work (Continued)

Ala., Mobile—Pontoon Pipe—U. S. Engineer, 1,200 ft. 15 in. iron discharge pipe and one 90 degree elbow, to Hartley Boiler Wks., Lownes St., Montgomery, $6,098. Noted Aug. 9.

Ala., Mobile—Steel Beams—U. S. Engineer, furnishing 100 tons fabricated steel beams, to Virginia Bridge and Iron Co., Roanoke, Va., $8,950.

La., New Orleans—Lumber—U. S. Engineer, furnishing 260,000 ft. yellow pine lumber, to G. E. Gurd, Natchez, Miss., $5,460.

Ill., Rock Island—Lumber—U. S. Engineer, furnishing 280,947 ft. b.m. Douglas fir, to Brandmeir-Rounds Lumber Co., White Bldg., Seattle, Wash., $8,410. Noted Aug. 30.

Kan., Ft. Riley—Road Paving—Constructing Quartermaster, 60,000 sq.yd. bituminous roadway, to Kaw Paving Co., 616 New England Bldg., Topeka, $68,060. Noted Oct. 4.

Ark., North Little Rock—Building, etc. —F. T. Hines, dir. U. S. Veterans Bureau, at office Constructing Quartermaster General, 2306 Munitions Bldg., Wash., D. C., for disturbed patients building, 2 continued treatment buildings, recreation building, tuberculosis cottage, male attendants quarters, additions to nurses' quarters, and to kitchen and mess, all rein.-con., brick and tile; together with road, water, sewer and electric lines serving same, to Murch Bros. Constr. Co., Railway Exch. Bldg., St. Louis, Mo., $618,909 (250 days). Noted Oct. 25.

New Mexico—Road—E. S. Wheeler, dist. engr., U. S. Bureau New Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 11.09 mi. Glenwood-Reserve Sect. 4, Forest Highway, Datil National Forest, Catron Co., here, to Fuqua & Gonzales, Las Cruces, $239,450. Noted Aug. 23.

Arizona — Road — E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, constructing 15.583 mi. Prescott-White Spar Forest Highway, Prescott National Forest, Yavapai Co., to Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., $462,907 (condition A Alternate); grading 16.522 mi. Salt River-Pleasant Valley, Sect. 1, Forest Highway, Tonto National Forest, Gila Co., 12 ft., to W. C. Braley, Claypool, 18,917 cu. yd. rock excav. $1.25, 80,946 cu.yd. common excav. $0.28, 3,608 lin.ft. 18 in. and 920 lin. ft. 24 in. corrugated metal pipe $2.20 and $3.30 respectively, etc., total $87,803 (Condition A Alternate 2). Noted Aug. 23 and Sept. 20.

Unclassified

PROPOSED WORK

Hydro-electric Development—Morrisville, Vt.—Village plans hydro-electric development, incl. concrete dam, power house, etc. $150,000. C. A. Slayton, Morrisville, engr. and mgr.

Airplane Hangar—Hartford, Conn.—Aircraft Comn., Municipal Bldg., plans 60 x 120 ft., steel and wood hangar. $25,000.

Sewalls—Geneva, N. Y.—See "Streets and Roads."

Subway—Watertown, N. Y.—City, State and New York Central R.R., Grand Central Terminal, New York City, plan subway under Massey St. $85,000. A. Burkhardt, c/o Pub. Service Comn., Albany, engr.

Undercrossing — Scranton, Pa. — See "Bridges."

Park—Washington Crossing, Pa.—Washington Park Comn. plans to develop state park, here. $100,000. A. P. Townsend, Langhorne, secy.

Fish Hatchery — Marion, N. C. — State Fish Comn., Raleigh, plans construction of lake and development of fish hatchery plant, 18 mi. from Marion, Cedar Cove Twp., McDowell Co. $50,000. J. K. Dixon, Trenton, chn.

Transmission Line—Alabama—Alabama Power Co., B. M. Bldg., Birmingham, plans 48 mi. transmission line from Montgomery to Greenville. $310,000.

Terminal — Memphis, Tenn. — Jones & Laughlin Steel Corp., Ross St., Pittsburgh, Pa., plans river and rail transfer terminal on 8 acre site, here.

Tractor, etc.—Kenosha, Wis.—City plans to purchase tractor, 2 road graders and catchbasin cleaning machine. B. W. Bolerjack, purch. agt.

Parks, etc.—Cincinnati, O.—Nov. 6 to vote on $1,750,000 bonds parks, boulevards and playgrounds. F. Krug, City Hall, engr.

Street Lights, etc.—Cleveland, O.—Plans overhead street lights, equipment and distribution service for same. Plans election to vote on $400,000 bonds.

Jetties—Lakewood (Cleveland P. O.), O. —See "Buildings."

Docks—Sandusky, O.—Lower Lakes Dock Co., foot of King St., and Pennsylvania R.R., Penn. Sta., Pittsburgh, plan improving docks along canal, and new railroad terminal. $1,000,000.

Freight Yard—Willows (East St. Louis P. O.), **Ill.**—Chicago, Burlington & Quincy R.R., 547 Jackson Bvd., Chicago, plans freight yards, capacity 1,100 cars, here. $700,000. A. W. Newton, ch. engr.

Golf Course—Dallas, Tex.—City having plans prepared golf course in Tennison Park. $25,000. E. A. Kingsley, city engr.

Levee System—Kaufman, Tex.—Kaufman Levee Dist. 4, voted $175,000 bonds for improvements, alterations and maintenance of present system. Noted Oct. 11.

Wharf—Cap Rouge, Que.—See "Industrial Works."

Power Line—Jarvis, Ont.—Plans to build 7 mi. electric power line from here to Hagersville. $35,000. Work will be done under direction Ontario Hydro Comn., London, A. Beck, chn.

Wharves and Slip—Saulte Ste. Marie, Ont.—Spanish River Pulp & Paper Co. had plans prepared wharves and slip, concrete and timber. $350,000. Private plans.

Gas Mains—Kingsville, Ont.—B. Jasperson plans to lay gas mains in various streets. $25,000.

Arena—Port Arthur, Ont.—Port Arthur Arena Co. having plans prepared 1 and 2 story skating arena. $150,000. C. D. Howe & Co., Port Arthur, engrs.

Public Lavatories—Toronto, Ont.—City plans 24 one and two story, rein.-con., brick and steel lavatories, plain foundations, in various sections of city. R. C. Harris, city engr. W. Price, city archt.

BIDS DESIRED

Concrete Mixer—Brooklyn, N. Y.—O. and R. Heepe, 461 7th Ave., taking bids concrete mixer.

Fire Alarm System—Coney Island (Brooklyn P. O.), **N. Y.**—Nov. 5 by T. J. Drennan, fire comr., Municipal Bldg., New York, portion of underground fire alarm system, here.

Subway—New York, N. Y.—Nov. 13, by Transit Comn., 49 Lafayette St., tracks for part of Jerome Ave. Yard of 7th Ave. Lexington Ave. Line. G. McAneny, chn.

Gravel Loader—Wilmington, N. C.—W. Clark P. O. Box 824, in market 2 ton hoist steam driven gravel loader.

Dragline Machines—Greenville, Miss.—Dec. 4, by Bd. Drainage Comrs. Washington Co., 3 dragline machines. O. C. Kulicka, ch. engr.; adv. E. N.-R. Nov. 1.

Cement Mixing Machine—Kenosha, Wis. —B. W. Bolerjack, city purch. agt., taking bigs cement mixing machine for Street Dept.

Tractor, etc. — Shorewood, (Milwaukee P. O.), **Wis.**—Nov. 5, by G. E. Krnecke, village purch. agt., one tractor and snow remover, also street cleaning equipment which can be attached.

Tunnel—Oroville, Calif.—Nov. 10, by Directors Oroville-Wyandotte Irrigation Dist., Tunnel No. 1 for Lost Creek concrete arch dam on South Feather River Ditch, 1,140 lin.ft. long, 370 cu.yd. solid rock and 210 lin. ft. loose rock excav.; constructing road, 1,800 cu.yd. solid and 4,400 cu.yd. loose rock excav. S. J. Norris, ch. engr.

Hopper Dredge — Brisbane, Queensland, Australia—March 31, by G. L. Beal, under secy. The Treasury, furnishing twin screw bucket hopper dredger.

Aluminum Steel Cored Cable and Accessories—Melbourne, Victoria, Australia—Jan. 3, by R. Liddelow, secy. State Electricity Comn. of Victoria for Specification 24/1, aluminum steel cored cable and accessories, for Morwell Power Scheme; adv. E. N.-R. Nov. 1.

BIDS RECEIVED

Station Finish—Brooklyn, N. Y.—Transit Comn., 49 Lafayette Ave., New York, station finish work for part of Bway.-4th Ave. Rapid Transit R.R. in Willoughby St. between Lawrence and Bridge Sts., here, from Station Finish Corp., 7 East 42nd St., New York, $51,100. Noted Oct. 18.

Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., materials for paving Plum St. **(a)** 380 bbl. cement **(b)** 623 cu.yd. crushed rock **(c)** 27 tons asphalt **(d)** 116 tons binder stone **(e)** 45 tons trap rock, from Speakes Co., Griggs and Fuller Sts., **(a)** $2.80 per bbl.; Stiefel Material Co., 501 Concord St., **(a)** $2.80 **(b)** $3; Donohue Brick Co., 614 Ryan Bldg., **(a)** $2.80; J. L. Shiely Co., 305 Dakota Bldg., **(b)** $3 **(d)** $2; Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, **(c)** $22.66, Trap Rock Co., Bway. and K St., N. E., Minneapolis, **(d)** $2, **(e)** $2.25; 400 coils ¾ in. extra strong lead pipe and 5,000 lb. solder, for Water Dept., from Natl. Lead Co., 451 East 6th St., $8.06 per 100 lb. and $23 per 100 lb. respectively. Noted Oct. 11.

Grade Separation—Colorado—See "Streets and Roads."

Cement—Portland, Ore.—Multnomah Co. furnishing 270,000 bbl. cement for construction of Burnside and Ross Island bridges from H. Cowell Lime & Cement Co., Ry. Exch. Bldg., $3.04 f.o.b. barges at bridge site, 10c. credit on each sack returned, and 5c. per bbl. discount for cash in 10 days. Noted Oct. 4.

CONTRACTS AWARDED

Underground Fire Alarm System—New York, N. Y.—T. J. Drennan, fire comr., Municipal Bldg., part of underground fire alarm system in Bronx Boro, to W. F. Kenny Co., 44 East 23rd St., Item 1 $10,914; J. Sudgen Co., 100 5th Ave., Item 2 $62,775. Noted Oct. 25.

Dock—North Tonawanda, N. Y.—Tonawanda Iron Corp., new dock, to Empire Eng. Co., River Rd., to exceed $200,000. Noted May 10.

Subway — Martinsburg, W. Va. — Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, Md., concrete subway under tracks, here, to Empire Eng. Co. Inc., 216 East Lexington St., Baltimore, Md., $300,000.

Levee—New Orleans, La.,—Bd. Comrs. Atchafalaya Basin Dist., State Engineer Office, 213-215 New Court House Bldg., constructing Sect. 2 Alabama Island Levee, 1,000,000 cu.yd. excav., to H. B. Blanks, 502 First Natl. Bank Bldg., Vicksburg, Miss., $275,000.

Car Barns, etc.—Richmond, Ind.—Terre Haute, Indianapolis & Eastern Traction Co., Traction Terminal, Indianapolis, plans car barns and repair shop, here. $50,000.

Dock — Mackinaw, Mich. — State Hy. Dept., Lansing, dock here, to T. L. Durocher Co., DeTour, $98,718.

Coaling Station — Gilman, Ill. — Illinois Central R.R. Co., 135 East 11th Pl., Chicago, rein.-con. coaling station, 300 ton capacity, here, to Howlett Constr. Co., 1605 5th Ave., Moline. Archts. est. $40,000.

Golf Course—Appleton, Wis.—Appleton Golf Club, c/o S. Harwood, pres., 806 College Ave., will construct 18 hole golf course, by day labor. $35,000. W. C. Jackson, 909 Webster Bldg., Chicago, engr. Noted Sept. 20.

Foundation — La Crosse, Wis. — See "Buildings" under "Proposed Work."

Culverts—Le Mars, Ia.—Plymouth Co., 11 box culverts and 1 pony truss, 654.5 cu.yd. rein.-con., 121,600 lb. steel, etc., to Deloit Bridge Co., Denison, $25,826.

Spray Pond—Leavenworth, Kan.—Kansas Electric Power Co. will construct 86 x 187 ft. rein.-con. spray pond, by day labor. $35,000. Private plans.

Levee — Gascony, Ark. — New Gascony Levee Dist. 1, new levee embracing 106,000 cu.yd. earth work, to H. Brown, North Little Rock, $0.33 per cu.yd. Engrs. est. $35,000.

Dock Sheds — Houston, Tex. — Turning Basin Compress Co., Ship Channel, dock sheds, brick, to W. E. Humphreville, Woolworth Bldg., $42,500.

Gate Valves—Montreal, Que.—Furnishing two 48 in. and four 48 in. gate valves to Dominion Eng. Wks., Lachine, $6,500 and $11,850 respectively; five 36 in., one 30 in. and one 24 in. gate valves to Drummond McCall & Co., 28 Victoria Sq., $7,515, $1,105 and $635 respectively. Noted Oct. 25.

Pier—Burlington, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, reconstructing south pier in Burlington Channel, concrete and pile, to Port Arthur Constr. Co., Excelsior Life Bldg., Toronto, $46,000.

Foundation—Hamilton, Ont.—Canadian Westinghouse Co., Ltd., Aberdeen St., foundation for 1 story, rein.-con., brick and steel foundry, Aberdeen St., to Yates Constr. Co., 17 Main St. E. Total cost $250,000.

Steel Towers—Port Arthur, Ont.—Hydro Electric Power Con., 190 University Ave., Toronto, steel towers for 80 mi. transmission line, to Port Arthur Shipbuilding Co., Port Arthur, $200,000.

Docks—Sandwich, Ont.—Pittsburg Coal Co., extending docks to Detroit River Constr. Co., Sandwich St. W., $100,000.

Telephone Cable — Toronto, Ont. — Bell Telephone Co. of Canada, 76 Adelaide St. W., will build 264 pair cable from here to Hamilton, distance of 40 miles, by day labor. $750,000. F. Kennedy, mgr.

CONSTRUCTION NEWS

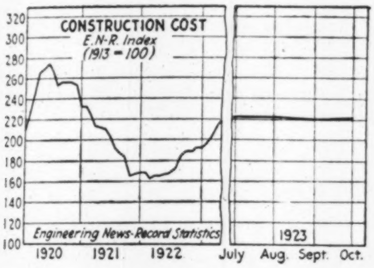
Engineering News-Record, November 8, 1923

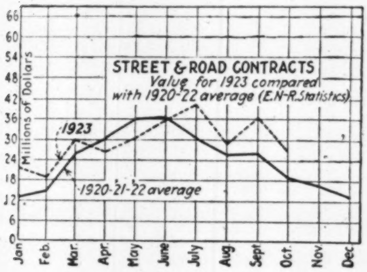
The Construction Barometer

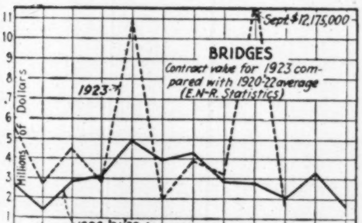
Construction Volume 132 Compared with 130 in Ten Months of 1922

A FACT that may not be generally recognized but deserves serious consideration is that although the value of contracts awarded in the first ten months of this year is $330,000,000 greater than in the same period of 1922 the actual physical volume of construction is only 1½ per cent above last year. *Engineering News-Record's* Volume Index Number for the ten months of 1923 is 132, against 130 for the same period of 1922 and also for the whole of 1922. This is due entirely to high cost. The Cost Index is 214 for the ten months of 1923 and 173 for 1922.

The sharp rise in industrial building, shown by the chart, is attributable to the $20,000,000 power plant at Kearny, N. J., for the Public Service Corporation. The difference in the September and October bridge contracts is due to four big September awards totaling $9,914,366.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Oct. 18	$17,421,000	$44,487,000	$61,908,000
Oct. 25	8,452,000	16,583,000	25,035,000
Nov. 1	16,746,000	14,321,000	31,067,000
3 weeks	$42,619,000	$75,391,000	$118,010,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

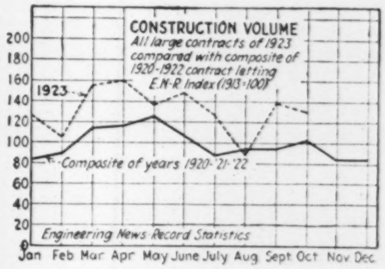
Week Ended	No.	Public Work	No.	Private Work
Oct. 18	9	$1,844,000	35	$13,968,000
Oct. 25	6	1,721,000	24	9,184,000
Nov. 1	7	2,537,000	33	10,743,000
3 weeks	22	$6,102,000	92	$33,895,000

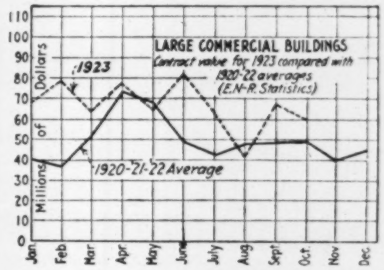
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

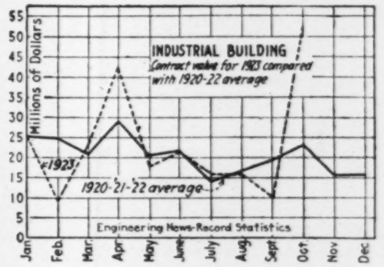
Week Ended	Private	Public			
		All	Streets and Roads	Waterworks and Sewers	All Buildings
Oct. 18	26	144	32	34	33
Oct. 25	26	157	42	31	36
Nov. 1	32	146	39	27	26

PINE LUMBER TRIFLE EASIER—OTHER BASE PRICES FIRM

	Quoted on Nov. 8, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft	61.00	62.00	Nov. 1
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common labor, hr.	0.54	0.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 9	New York, N. Y.	Nov. 1
Nov. 13	Woodbury, N. J.	Nov. 1
Nov. 13	Clifton, N. J.	Nov. 1
Nov. 13	Hurley, Wis.	Nov. 8
Nov. 14	Baltimore, Md.	Nov. 8
Nov. 15	Chatham, N. J.	Nov. 1
Nov. 15	Cleveland, O.	Nov. 8
Nov. 16	Genoa Junction, Wis.	Nov. 8
Nov. 16	Crowley, La.	Nov. 8
Nov. 16	New York, N. Y.	Nov. 8
Dec. 5	Watertown, N. Y. Adv. Nov. 8.	Nov. 8
Dec. 12	Keyser, W. Va. Adv. Nov. 8.	Nov. 8
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Nov. 13	Winona, Minn.	Nov. 1
Nov. 13	Wash., D. C.	Nov. 1
Nov. 13	Long Island City, N. Y.	Nov. 8
Nov. 14	Dayton, O.	Nov. 8
Nov. 15	Cleveland, O.	Nov. 8
Nov. 16	Louisville, Ky.	Nov. 1
Nov. 19	Mamaroneck, N. Y. Adv. Nov. 8.	Nov. 8
Nov. 20	Ponchatoula, La. Adv. Oct. 25 to Nov. 8.	Oct. 25
Nov. 20	Bartlesville, Ark.	Nov. 1
Nov. 22	Chicago, Ill. Adv. Nov. 8.	Nov. 8
Dec. 10	New Orleans, La. Adv. Oct. 11 to Nov. 8	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Nov. 9	New Jersey	Oct. 25
Nov. 9	Winfield, Kan.	Nov. 1
Nov. 12	Jacksonville, Fla.	Oct. 25
Nov. 13	Utah	Nov. 8
Nov. 14	Spencer, Ia.	Nov. 1
Nov. 15	Society Hill, S. C. Adv. Nov. 1 and 8	Nov. 1
Nov. 16	North Bend, Pa.	Nov. 8
Nov. 16	Youngstown, O.	Nov. 8
Nov. 19	St. Paul, Minn.	Nov. 8
Nov. 20	Beaumont, Tex.	Nov. 8
Nov. 22	Prairie Siding, Ont.	Nov. 1
Nov. 26	Alabama	Oct. 25
Nov. 27	New Jersey	Nov. 1
Nov. 27	New Jersey Adv. Nov. 8.	Nov. 8
Nov. 30	Sydney, Australia	Apr. 19
Dec. 5	Salem, Mass. Adv. Nov. 1 and 8.	Nov. 8
May 1	Tientsen, North China	Oct. 11

RAILWAYS

Bids Close		See Eng. News-Record
Nov. 22	Michigan	Nov. 8
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Nov. 13	Clarksdale, Miss.	Nov. 8
Nov. 17	Sterling, Colo.	Nov. 8
Nov. 26	Jonesboro, Ark.	Nov. 8

STREETS AND ROADS

Nov. 9	Michigan	Nov. 8
Nov. 13	Alabama	Oct. 25
Nov. 13	Maryland Adv. Nov. 1 and 8	Nov. 1
Nov. 13	California	Nov. 1
Nov. 13	Michigan	Nov. 8
Nov. 13	Long Island City, N. Y.	Nov. 8
Nov. 13	St. George, N. Y.	Nov. 8
Nov. 13	New York, N. Y.	Nov. 8
Nov. 13	Ft. Worth, Tex.	Nov. 8
Nov. 13	Marlow, Okla.	Nov. 8
Nov. 13	Massachusetts	Nov. 8
Nov. 14	Ohio	Nov. 8
Nov. 14	Coleman, Tex.	Oct. 25
Nov. 14	Millville, N. J. Adv. Nov. 1 and 8	Nov. 1
Nov. 14	St. George, N. Y.	Nov. 8
Nov. 15	Little Rock, Ark.	Nov. 8
Nov. 15	Lewistown, Ill.	Nov. 8
Nov. 16	New York Adv. Nov. 1 and 8	Nov. 1
Nov. 16	St. George, N. Y.	Nov. 8
Nov. 16	New York, N. Y.	Nov. 8
Nov. 17	Tonawanda, N. Y. Adv. Nov. 1 and 8	Nov. 1
Nov. 19	Waco, Tex.	Nov. 1
Nov. 19	San Jose, Calif.	Nov. 8
Nov. 20	Massachusetts	Nov. 8
Nov. 22	Virginia Adv. Nov. 8.	Nov. 8
Nov. 22	Jasper, Tex.	Nov. 8
Nov. 23	Independence, Kan.	Nov. 8
Nov. 23	La Grange, Tex.	Nov. 8
Nov. 26	Alexandria, Ky.	Nov. 8
Nov. 26	Alabama	Nov. 1
Nov. 27	New Jersey Adv. Nov. 8.	Nov. 8

INDUSTRIAL WORK

Nov. 12	St. Paul, Minn.	Nov. 8
Nov. 15	Yonkers, N. Y.	Nov. 1

BUILDINGS

Nov. 10	Schenectady, N. Y.	Nov. 8
Nov. 10	Erie, Pa.	Nov. 8
Nov. 10	Boston, Mass.	Nov. 8
Nov. 12	Cincinnati, O.	Oct. 25
Nov. 12	Appleton, Wis.	Oct. 25
Nov. 12	Swissvale (Pittsburgh P. O.), Pa.	Nov. 8
Nov. 13	Brooklyn, N. Y.	Oct. 25
Nov. 14	Central Islip, N. Y. Adv. Nov. 1 and 8.	Nov. 1
Nov. 14	West Haverstraw, N. Y. Adv. Nov. 8.	Nov. 8
Nov. 15	St. Louis, Mo.	Nov. 1
Nov. 15	Grosse Pointe (Detroit P. O.), Mich.	Nov. 8
Nov. 18	Roxbury (Boston P. O.), Mass.	Nov. 8
Nov. 20	Hartford, Conn.	Nov. 1
Nov. 20	Dayton, O.	Nov. 8
Nov. 20	Virginia, Minn.	Nov. 8
Nov. 21	New Haven, Conn.	Nov. 8
Nov. 23	Sedalia, Mo.	Nov. 1
Nov. 24	Lakewood (Cleveland P. O.), O.	Nov. 8
Nov. 26	Galveston, Tex.	Nov. 1
Nov. 26	Huntington, W. Va.	Nov. 8
Nov. 26	Tucson, Ariz.	Nov. 8
Nov. 28	Middletown, N. Y. Adv. Oct. 25 to Nov. 8	Nov. 1
Nov. 28	Newark, Del. Adv. Nov. 8.	Nov. 8
Nov. 30	Maggie, W. Va.	Oct. 4
Dec. 1	Charleston, W. Va.	Oct. 25
Dec. 4	Brooklyn, N. Y. Adv. Nov. 8.	Nov. 8
Dec. 4	Louisville, Ky.	Nov. 8

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 10	Breakwater—Indiana Harbor, Ind. Adv. Oct. 18 to Nov. 8.	Oct. 18
Nov. 14	Storehouse—Pearl Harbor, H. T.	Sept. 27
Nov. 14	Post Office—Carroll, Ia.	Oct. 18
Nov. 14	Fuel Oil Storage—Mare Island, Calif.	Oct. 25
Nov. 16	Quarters, etc.—Fort Benning, Ga. Adv. Oct. 25 to Nov. 8	Oct. 25
Nov. 20	Post Office—Central City, Neb.	Oct. 18
Nov. 20	Barges—Chicago, Ill. Adv. Oct. 25 to Nov. 8	Oct. 25
Nov. 21	Sewer—American Falls, Idaho	Oct. 25
Nov. 21	Post Office—Steubenville, O.	Oct. 25
Nov. 21	Dredging—Puget Sound, Wash.	Nov. 1
Nov. 23	Barges—Louisville, Ky. Adv. Oct. 25 to Nov. 8	Oct. 25
Nov. 23	Post Office—Ripon, Wis. Adv. Nov. 1 and 8.	Nov. 1
Nov. 23	Quarterboat—Huntington, W. Va.	Nov. 8
Nov. 24	Dredging—New York, N. Y. Adv. Oct. 25 to Nov. 8	Oct. 25
Nov. 26	Post Office—Mystic, Conn.	Nov. 1
Nov. 27	Barge—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 27	Water Supply System—American Falls, Idaho	Nov. 1
Nov. 27	Post Office—Gallipolis, O. Adv. Oct. 18 to Nov. 8	Nov. 1
Nov. 28	Quarters—San Juan, Porto Rico	Nov. 8
Nov. 28	Catamarans—Jacksonville, Fla. Adv. Nov. 8.	Nov. 8
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
Nov. 30	Dredging, etc.—New York, N. Y. Adv. Nov. 1 and 8	Nov. 1
Nov. 30	Post Office—Harrisonville, Mo. Adv. Nov. 8.	Nov. 8
Dec. 1	Steel Barges—Mobile, Ala. Oct. 25 to Nov. 8.	Oct. 25
Dec. 3	Barge and Hull—New Orleans, La. Adv. Nov. 8.	Nov. 8
Dec. 5	Post Office — Marianna, Ark. Adv. Nov. 8.	Nov. 8
Dec. 10	Towboat—Montgomery, Ala. Adv. Nov. 1 and 8	Nov. 8

UNCLASSIFIED

Nov. 9	Signal Tower—New York, N. Y.	Nov. 8
Nov. 12	Heating and Ventilating Apparatus, etc.—New York, N. Y.	Nov. 8
Nov. 13	Subway—New York, N. Y.	Nov. 1
Nov. 13	Gravel—Louisiana	Nov. 8
Nov. 13	Cement—New York, N. Y.	Nov. 8
Nov. 13	Crushing Plant—Owatonna, Minn.	Nov. 8
Nov. 15	Ferry Landing—New Orleans, La.	Oct. 18
Nov. 15	Paving Brick—Youngstown, O.	Nov. 8
Nov. 20	Sluice Gates—Exchequer, Calif.	Nov. 8
Nov. 21	Heating, Ventliating, Plumbing, etc.—Phila., Pa. Adv. Nov. 8.	Nov. 8
Nov. 26	Portland Cement—Los Angeles, Calif.	Oct. 18
Dec. 4	Dragline Machines—Greenville, Miss. Adv. Nov. 1 and 8	Nov. 1
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Port Angeles—Having report made for waterworks. $500,000. Burns & McDonnell Eng. Co., 404 Marsh-Strong Bldg., Los Angeles, Calif., engrs.

N. Y., Batavia—Nov. 6, to vote on $30,000 bonds for purchasing and laying 180 tons c.i. pipe. F. E. Russell, city clk.

La., Bossier—Having plans prepared new water supply from Shreveport. $50,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Ky., Paintsville—Plans $50,000 bond issue for waterworks.

Ia., Carlisle—Making plans waterworks. $22,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Wyoming—Voted $12,500 bonds for waterworks extension and $35,000 bonds for electric light plant. D. A. White, city clk.

Kan., Sublette—Voted $20,000 bonds for waterworks improvements.

Wyo., Casper—Plans complete new waterworks system. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Aug. 2.

Mo., Ava — Making plans waterworks, incl. rein.-con. reservoir, tower and distribution system. $30,000. Elston, Axon & Russell, 404 McDaniels Bldg., Springfield, engrs.

Mo., Farmington — Voted $15,000 bonds waterworks improvements. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Oct. 18.

Mo., Festus—Nov. 27, to vote on $175,000 bonds waterworks, reservoir, stand pipe, distribution mains, storm and sanitary sewers. J. P. Davis, Jefferson City, engr. Noted Oct. 4.

Mo., Hannibal—Nov. 20 to vote on $400,000 bonds new pumps and motors, 26 in. main from pump house to reservoir, filtration plant, new mains in West Main and Oakwood Dists., South Hannibal pumping equipment, etc. D. H. Henry, 304 South Dearborn St., Chicago, engr. Noted Aug. 30.

Mo., Kahoka — Defeated $15,000 bonds for mains. W. B. Rollins & Co., Ry. Exch., Kansas City, engrs. Noted June 21.

Mo., Piedmont—Nov. 20 to vote on $40,000 bonds waterworks and distribution system. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, engrs. Noted Aug. 9.

Tex., Dallas—North Highland Water Dist. voted $20,000 bonds, mains, hydrants, etc. Myers & Noyes, Mercantile Bank Bldg., engrs. Noted Sept. 6.

Tex., Waco—Dec. 18, to vote on $75,000 bonds 6, 8 and 10 in. main extensions. V. G. Koch, city engr.

Okla., Canton—Voted $30,000 bonds for new water supply, well, pump, house, tank, tower and distribution system, 2,200 ft. 2 in., 7,100 ft. 4 in. and 1,600 ft. 6 in. c.i. pipe. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engr. Noted Dec. 28.

BIDS DESIRED

N. Y., New York—Nov. 16, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Edgewater and White Plains Rds., Coster and Longfellow Sts., Oak Point, Viele, Brinsmade, Calhoun, Miles, Quincy, Revere, Sampson, Swinton, Bolton, Bronx River, Cornell, Gildersleeve, Leland, O'Brien, Paterson, Thieriot, Underhill, Barkley, Lafayette, Quincy, Revere and Swinton Aves., Bronx Boro.

N. Y., Webb—Dec. 5, by Bd. Black River Regulating Dist., Light & Power Bldg., Pub. Sq., Watertown, constructing certain dams, spillways and other structures for enlarging Stillwater Reservoir on Beaver River, here. E. S. Cullings, secy.

Md., Baltimore—Nov. 14, by Bd. Awards, furnishing and delivering two 60 hp. motors and 2 centrifugal pumps, Material Contr. 31. $15,000. B. L. Crozier, highways engr.

W. Va., Keyser—Dec. 12, at office of City Clerk, 2 m.g. rapid sand filtration plant, etc. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.; adv. E. N.-R. Nov. 8. Noted Oct. 25.

Ga., Cordele—City taking bids 100 tons 6 in. c.i. water pipe, 15 or 20 fire hydrants and 8 or 10 valves. $10,000. C. D. Farrell, city mgr.

La., Crowley—Nov. 16, extending watermains and sewers, steel or concrete reservoir and pumps. $200,000. M. Mernard, Crowley, engr. Noted Sept. 20.

O., Cleveland—Nov. 15, 60 in. steel or c.i. mains, in Sect. N and S of Woodhill Rd. G. W. Hamlin, City Hall, engr.

O., Dayton—See "Sewers."

Wis., Genoa Junction—Nov. 16, by T. E. Watson, village clk., pumping station and reservoir. W. G. Kirchoffer, 22 North Carroll St., Madison, engr.

Wis., Hurley—Nov. 13, water purification plant and pumping station at Lake Lavinia. $34,000. Former bids rejected. J. Emunson, clk. Noted Oct. 18.

Wis., Marshfield—Layne—Bowler Chicago Co., 37 West Van Buren St., Chicago, taking bids 11,000 ft. 8-12 in. Class C c.i. pipe, to be laid 6 ft. under ground, here.

BIDS RECEIVED

N. Y., Buffalo—A. W. Kreinheder, comr. Pub. Wks., Municipal Bldg., venturi meters, rate controllers, operating tables, water level gages, chemical feed devices, sample pumps and chlorinators, with (a) c.i. wash water troughs (b) concrete wash water troughs, from Amer. Water Softener Co., Lehigh Ave. and 4th St., Phila., (a) $230,000; Pitt Constr. Co., Inc., Fulton Bldg., Pittsburgh, (b) $216,000. Noted Sept. 20.

O., Cleveland—For 130 x 790 ft. brick and concrete filtration plant, Baldwin Rd., from Stange Walsh Constr. Co., 2315 Fairmount Rd., $2,794,000 (16 months); 4 gate houses at Fairmount Reservoir, from Schrader Constr. Co., Euclid-46th St. Market Bldg., $53,313. Noted Oct. 4.

Minn., St. Cloud — Installing 21 blocks mains, from E. T. Webster, 437 Beacon Ave., St. Paul, $17,841. Noted May 17.

Waterworks (Continued)

Ore., Beaverton — Water system, incl. reservoir, pipe line from Bull Run, etc., from Inland Constr. Co., 330 Railway Exch. Bldg., Portland, $47,513.

CONTRACTS AWARDED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Adee, Arnow and Bartow Aves., to Norton Eng. & Contg. Co., 510 West 159th St., $13,200; in Boyd, Bronxwood and Colden Aves., to Knight & DeMicco, 448 East Tremont Ave., $14,500. Noted Nov. 1.

N. Y., St. George—Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bennett, Clinton, and Dewey Aves, here, to Knight & DeMicco, 448 East Tremont Ave., New York, $15,400. Noted Nov. 1.

N. Y., Solvay (Syracuse P. O.) — See "Sewers."

Md., Baltimore—Bd. Awards, brass service pipe fittings for Water Dept., to H. Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $15,739. Noted Nov. 1.

Fla., Crescent City—Bond Trustees, 40,000 gal. reservoir, to E. G. Ladd, 214 Bisbee Bldg., Jacksonville, $1,250; two 700 g.p.m. centrifugal pumps, to Fairbanks-Morse & Co., 630 West Bay St., Jacksonville, $26,250. Noted Sept. 6.

Mich., Menominee — Improving waterworks incl. lowering one intake, installing receiving pit on dock, etc., to Fluor Bros. Constr. Co., 48 Ottee St., Oshkosh, Wis. Engrs. est. $15,000.

Mo., Canton—Waterworks and sewers, to James & Anderson, Woodriver, Ill., $74,000. Engrs. est. $60,000. Noted Sept. 6.

Mo., Ridgeway — Waterworks, to O. C. Johnson, Iowa Falls, Ia., $40,420. Noted Sept. 27.

Wash., Yakima — Constructing concrete pipe line in 7th St., lining to be 2 in thick, 930 cu.yd. rein.-con., to Coluccio & Erickson, 1642 Lane St., Seattle, $50,677. Engrs. est. $55,000.

Sewers

PROPOSED WORK

N. Y., Albany—Opens bids about Dec. 15, 2 mi. rein.-con. trunk sewer from Holland Ave. to Whitehall Rd. $100,000. J. G. Brennan, City Hall, engr.

Pa., Erie—Will take new bids main interceptor from Mill Creek to Cranberry St. and Mill Creek Valley. $140,000. Former bids rejected. F. G. Lynch, city engr.

La., Bossier—Having plans prepared complete new sewerage system. $75,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

O., Cincinnati—Plans 400 ft. vitr. and 2,700 ft. 33-45 in. brick or concrete sewer in Marburg Ave. $55,850. F. Krug, City Hall, engr.

Kan., Kansas City—Fairfax D. D. having plans prepared and takes bids about Dec. 15, 5½-13 in. storm and sanitary sewers in various streets. Horner & Wyatt, 306 McMillian Bldg., Kansas City, Mo., engrs.

Kan., Kansas City—Plans to purchase 20 pumps for Kaw Valley D. D., pumps to force surplus water from sewers to rivers. S. H. McNeal, Kansas City, engr. $185,000.

Mo., Farmington — Voted $85,000 bonds storm and sanitary sewers, etc. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Oct. 18.

Mo., Festus—See "Waterworks."

Mo., Kahoka — Defeated $60,000 bonds sewers and $18,000 for paving. W. B. Rollins & Co., Ry. Exch., Kansas City, engrs. Noted June 21.

Ark., Fayetteville—Plans sewerage district. $75,000. H. M. Hudgens, member bd.

Ark., Hot Springs—Making preliminary plans 24 in. sewer lines in various parts of city. $70,000.

Calif., Alhambra—Plans 52,956 lin.ft. 8 in. vitr. sewer, 1,491 house connections, 137 Manholes, etc. M. H. Irvine, city engr.

Calif., Glendale — Making preliminary plans sewer improvements. $1,500,000. Burns & McDonnell, 404 Marsh-Strong Bldg., Los Angeles, engrs. Noted Oct. 18.

Calif., San Jose—Voted $400,000 bonds for extensions and additions to sewerage system. W. Popp, city engr. Noted Sept. 20.

Que., Montreal East—Soon takes bids brick sewers in various streets. $42,000. L. Hurtelbuise, Town Hall, engr.

Ont., London—Having plans prepared extending sewers. $200,000. W. P. Near, city engr.

BIDS DESIRED

N. Y., Long Island City—Nov. 13, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sanitary sewers in Garrison and Furman Aves., Owens, Grand, Milton and Creek Sts.

N. Y., Mamaroneck—Nov. 19, by Bd. Sewer Comns. of Sewer Dist. 1, Edgewood Rd., sewerage system, Contr. 6. H. R. Mitchell, secy.; adv. E. N.-R. Nov. 8.

La., Crowley—See "Waterworks."

O., Cleveland—Nov. 15, sewers in Carnegie Ave. To exceed $25,000. R. Hoffman, City Hall, engr.

O., Dayton—Nov. 14, by Montgomery Co., 2,200 lin.ft. 8 in. vitr. sewers, and 1,530 lin. ft 6 in. c.i. mains in Mt. Auburn Sanitary Sewer Dist. 2. $25,000. K. B. Allen, Keith Bldg., engr.

Ill., Chicago—Nov. 22, by W. E. Wallace, clk. Sanitary Dist. of Chicago, 910 South Michigan Ave., for Calumet Intercepting Sewer, Contr. 1 and 95th St. Sewage Pumping Station. W. O. Nance, chn.; adv. E. N.-R. Nov. 8.

Minn., St. Paul—See "Bridges."

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in West 176th and West 180th Sts., from Spedero & Turriamo, 3185 East Tremont Ave., $24,489 and $2,379 respectively; Davidson Ave., from M. Del Balso, 660 East 221st St., $1,298. Noted Oct. 25 under "Streets and Roads."

Mich., Detroit—Constructing vitr. crock and brick lateral sewers, from W. Blank & Co., 827 Ford Bldg., Lateral 3966 $18,000, Lateral 4023 $7,079, Lateral 4027 $8,415, Lateral 4028 $6,000, Lateral 4029 $3,436, Lateral 4030 $3,682.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 2,000 ft. 10-15 in. vitr. clay and 4,175 ft. 48 in. segmental block sewer in Oakland Ave., from Martin & Riley, Title Guaranty Bldg., $35,252. Engrs. est. $40,000. Noted Oct. 4.

Tex., Ft. Worth—Riverside sewers, from McKenzie Constr. Co., Riverside, $27,106. Noted Oct. 11.

CONTRACTS AWARDED

N. Y., Solvay (Syracuse P. O.)—For 1.1 mi. sewer and water extensions, to C. Bonn, Solvay, $27,000. Engrs. est. $28,000.

N. Y., Syracuse—Equipment and machinery for disposal plant, to Roberts Filter Co., Darby, Pa., $76,000. Engrs. est. $75,000.

N. J., Asbury Park—For 5,485 ft. vitr. sewer in Comstock St., and 4,470 lin.ft. vitr. storm drain in Wesley Lake vicinity, to Mercer Constr. Co., Marcy St., Freehold, $67,647. Noted Nov. 1.

Pa., Wilkes-Barre—Brick storm sewers in Bowman, Skidder and Scott Sts., to B. G. Coon Constr. Co., Wilkes-Barre, $49,282.

Fla., Leesburg—For about 2 mi. 8 in. sewer extensions and 1 mi. 4 in. house connections, to F. W. Long & Co., Stockton St., Jacksonville, $24,000. Noted Sept. 13.

Ky., Ashland—See "Streets and Roads."

Ia., Des Moines—For Southwest Sewerage System, 43,806 lin.ft. 10-24 in. pipe sewer, 28,100 lin.ft. 27-48 in. circular sewer, 1 dry weather outfall complete, 1 inverted siphon, etc., complete, to G. G. Herrick, 607 Observatory Bldg., $626,909. Noted Oct. 25.

Mo., Canton—See "Waterworks."

Mo., Ridgeway—Sewerage system, Imhoff tank, filter and dosing chamber, to O. C. Johnson, Iowa Falls, Ia., $36,509. Noted Sept. 27.

Mo., St. Joseph—For 3,136 ft. rein.-con. double box, and 2,186 ft. 9 x 9 ft. concrete box sewer for Browns Branch, to Owings & Shofner, Atchison, Kan., $211,226. Noted Oct. 18.

Tex., Dallas—For 18 in. sanitary sewer from Oak Cliff interceptor to Beckley Ave., to W. G. Cullum, Central Bank Bldg., $2.30 per ft. To exceed $25,000.

Ont., Sandwich—Partington Ave. sewer, to Webster Constr. Co., Bank of Toronto Bldg., London, $30,000. Noted Sept. 13.

Bridges

PROPOSED WORK

N. Y., Jamestown—Plans concrete or steel bridge, West 3rd St. $450,000. Election soon to vote on bonds. L. A. Bergman, City Hall, engr.

Tennessee — Tennessee Dept. Hys. & Pub. Wks., Nashville, rejected bids bridge over Roaring River, Federal Aid Project 135. Will readvertise later. $55,000. J. G. Creveling, comr. Noted Oct. 4.

Tennessee—Dept. Hys. and Pub. Wks., Nashville, having surveys made for bridge over Hatchie River near Brownsville on Memphis-Bristol Highway, Haywood Co. J. G. Creveling, comr.

Tenn., Kingston—Roane Co. voted $40,000 bonds for bridges over Emory River and Popular Creek near Oliver Springs, probably steel. Engineer not selected.

Wis., Milwaukee—Park Bd., City Hall, rejected bids concrete piling for Mason St. viaduct over Chicago & North Western Ry. tracks. Will readvertise for wood and concrete piling. Total cost $400,000. Clas. Shepherd & Clas, 445 Milwaukee St., engrs. Noted Sept. 27.

Missouri—State Hy. Dept., Jefferson City, plans three 20 ft. rein.-con. slab spans, 20 ft. roadway, etc., over stream, Federal and State Project 230 C, Route 2, also one 180 ft. and two 80 ft. steel truss spans, 2 rein.-con., piers, 20 ft. roadway, etc., over Lamine River, and one 60 ft. steel truss span, etc., over stream, Federal and State Project 230 B, Route 2, all in Cooper Co. B. H. Piepmeier, state highway engr.

Mo., Kansas City — Plans bridge over Blue River on Independence Rd. $100,000. W. Waddell, 800 Graphic Arts Bldg., engr.

Tex., Corpus Christi—Corpus Christi Port Comn. making plans structural steel bascule bridge, 110 ft. main span with 75 ft. approach spans, concrete piers and abutments, 30 ft. roadway, also street railway track on bridge. Adams & Adams, Campau Bldg., Detroit, Mich., engrs.

Tex., Georgetown — See "Streets and Roads."

Okla., Oklahoma City — Oklahoma Co., election Nov. 30, to vote on $600,000 bond issue for 1,400 ft. (10 span) steel and concrete bridge on Walker St. R. S. James, Court House, engr.

Calif., San Jose—Voted $150,000 bonds for bridges. W. Popp, city engr. Noted Sept. 20.

BIDS DESIRED

Mass., Haverhill—Dec. 5, by Haverhill Lower Bridge Rebuilding Comn., Court House, Salem, steel channel span, in new Haverhill Lower Bridge, over Merrimack River on Main St., here. R. R. Evans, engr.; adv. E. N.-R. Nov. 8. Noted July 12.

New Jersey—Nov. 27, by State Hy. Dept., Trenton, 40 ft. 6 in. single leaf bascule span, incl. concrete pier, removing present concrete bridge, etc., over Bass River M. P. 13.9, State Highway Route 4, in Bass River, Burlington Co.; 15 ft. widening of seven 85 ft. arch, two 65 ft. deck plate girder and one 60 ft. bascule spans, etc., over Raritan River, M.P. 31.4, Route 1, Sect. 13, in New Brunswick and Highland Park, Middlesex Co. Former bids rejected. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Nov. 8. Noted Nov. 1.

Pa., North Bend — Nov. 16, by Comrs. Clinton Co. (Lock Haven), 145 ft. (3 span), rein.-con. girder bridge over Young Womans Creek, here. M. C. Krause, Susquehanna Trust Bldg., Williamsport, engr.

Virginia—See 'Streets and Roads."

Ohio—See "Streets and Roads."

O., Youngstown—Nov. 16, by P. J. Carney, dir. Pub. Serv., 500 ft. concrete and steel bridge, Belmont Ave. $150,000. I. Turner, city engr.

Minn., St. Paul—Nov. 19, by G. J. Reis, aud. Ramsey Co., constructing Pier No. 1 of new Robert St. bridge over Mississippi River and outfall for Robert St. sewer (Bridge to be 500 ft. long, 76 ft. wide, steel and concrete), for Ramsey Co. and City of St. Paul. Total $1,500,000. Toltz, King & Day, 1410 Pioneer Bldg., engrs. Noted July 28, 1921.

Tex., Beaumont—Nov. 20, by B. B. Johnson, judge Jefferson Co. bridge over Neches River, State Highway 3, will have 240 ft. steel swing span, rein.-con. main pier, 2 rest piers, 2,644 ft. cresoted pile trestle, 390 ft. earth approach, 1 rein.-con. approach span, overall 3,400 ft., involving 24,595 tons reinforcing steel, 1,033 cu.yd. concrete, etc. $275,000. A. C. Lane, co. engr. Noted Aug. 23.

Tex., Jasper—See "Streets and Roads."

Utah—Nov. 13, by State Rd. Comn., Salt Lake City, 144 ft. steel bridge, concrete abutments and earth-filled approaches, known as Weber River Bridge 367 or Riverdale Viaduct. H. C. Means, ch. engr.

BIDS RECEIVED

Alabama—State Hy. Dept., Montgomery, superstructure 4 span bridge, pivot draw-span on center pier, concrete approaches, 5 concrete piers, at Reese Ferry over Alabama River, from Koss Constr. Co.,

Bridges (Continued)

2818 5th St., Des Moines, Ia., $249,985; substructure, creosoted timber approaches, from Hardaway Constr. Co., Columbus, Ga., $204,457.

Tex., Centerville—Leon Co., 1,370 ft. timber pile trestles with 8,160 ft. earth approaches over Keechi, Beaver and Boggy Creeks, 6,644 lin.ft. treated wooden piling, 38,013 cu.yd. borrow excav., from W. L. Sanders, Cooledge, $37,613, alternate $33,859. Engrs. est. $34,500. Noted Oct. 4.

Tex., Palo Pinto—See "Streets and Roads."

CONTRACTS AWARDED

W. Va., Williamson—Mingo Co., substructures for 2 bridges over Guyandot River, at Justice and Gilbert, to Karr & Shuitt, Westmoreland. Engrs. est. in excess of $25,000.

Alabama—States of Alamaba (Montgomery) and Georgia (Atlanta) rejected bids concrete piers and approaches to bridge over Chattahoochee River. Work will be done by State Hy. Dept. of Alabama, Montgomery, under supervision. L. S. Smith, bridge engr. This corrects report in Nov. 1 issue.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, 3 rein.-con. bridges and 1 steel bridge between Waynesboro and Lawrence Co. line, Federal Aid Project 99, Wayne Co., also rein.-con. substructure for bridge on Manchester Pike, Rutherford Co., to J. B. Ramsey, Woodbury. $55,822 and $5,787 respectively. Noted July 19.

Oregon—State Hy. Dept., Salem, Bridge 1000 over Snake River, on Old Oregon Trail, Malheur Co., to Portland Bridge Co., Yeon Bldg., Portland, $134,295.

Dams

PROPOSED WORK

Wis., Elcho—See "Industrial Works."

BIDS DESIRED

N. Y., Webb—See "Waterworks."

Railways

BIDS DESIRED

Michigan—Nov. 22, by Dept. Purchases & Supplies, 700 Marquette Bldg., Detroit, special work and rail for lines on Beaubien, Baker and Fort Sts., Grand River, Trumbull, Toledo, Scotten and Clark Aves., in Detroit, for Dept. Street Rys., St. Jean and Shoemaker Aves., Detroit.

Oregon—Southern Pacific RJR. Co., Southern Pacific Bldg., San Francisco, Calif., receiving bids Natron Cutoff from Kirk, Ore., to point 42 mi. North, incl. 3,300 lin.ft. tunnel. G. W. Boschke, ch. engr.

Excavation, Drainage and Irrigation

PROPOSED WORK

Florida—See "Streets and Roads."

BIDS DESIRED

Ark., Jonesboro—Nov. 26, by Comrs. D.D. 85, Craighead Co., c/o Cobb & Lee, engrs., Amer. Trust Bldg., 560,000 cu.yd. earth floating dredge and 218,000 cu.yd. dragline work.

Colo., Sterling—Nov. 17, by L. A. Whittier, secy. Pioneer D. D. of Logan Co. 5 mi. open drainage ditch; adv. E. N.-R. Nov. 8.

CONTRACTS AWARDED

N. C., Roanoke Rapids—See "Industrial Work."

Ia., Corydon—Wayne Co., 18.5 mi. channel for Charlton River D.D., 629,000 cu.yd. excav., etc., to Briggs & Drew, 925 City Natl. Bank Bldg., Omaha, Nev. Noted Sept. 27.

Tex., Harlingen—Hidalgo Water Impvt. Dist. 1, 8 mi. canal dredging, to J. Ballinger, San Benito, $0.14 per cu.yd. Noted Oct. 11.

Calif., Yuba City—Recl. Dist. 1660, Sutter Co., 1,000,000 cu.yd. earthwork, interior drainage and irrigation canals, to Callahan Constr. Co., Detwiler Bldg., Los Angeles, $0.139. Noted Nov. 1.

Streets and Roads

PROPOSED WORK

W. Va., Buckhannon—Plans to issue $35,000 bonds paving various streets.

N. C., Fayetteville—Making plans hard surfacing, curbing and guttering 80,000 sq.yd. various streets. $350,000. W. C. Olsen, Kinston, engr.

Florida—State Rd. Dept., Tallahassee, plans grubbing, grading, rock base, etc., Project 40 E, Brevard Co., Project 544 A, Pasco Co., and Project 604, Volusia Co.; grubbing, grading and marl surfacing Project 576, Sarasota Co.; grubbing, grading and sand clay surfacing Project 571, Nassau Co.; grading, surfacing with concrete, rock base, or bituminous concrete (Topeka type) Project 521, Nassau Co.; rock base Project 544, Pasco Co.; 21 mi. ditching and rock shoulders on Project 605, Pope Co.; dredging embankment for bridge across Escambia River, Project 38 A, Escambia Co. J. L. Cresap, state highway engr.

Fla., Wauchula—Hardee Co. election Nov. 27, to vote on $27,000 bonds paving 3 mi. road from Gardner easterly; $36,000 bonds 4 mi. Buchanan-Sweetwater Rd.; $27,000 bonds road from Stevens Mill to Yankeetown and Zolfo River bridge west; $31,500 bonds roads 1 mi. east of Moffits and from Peace River via Bonds Corner to Papach School House; $73,000 bonds Zolfo-Crewsville Rd.; $105,500 bonds 12.75 mi. Ona Station-Lilly Rd.; $36,000 bonds road 2 mi. west from Carrollton Corner and 2 mi. south from Williams Corner; $107,000 bonds road through Bowling Green to Ft. Green Springs; $27,000 bonds road 2 mi. east from Wauchula and from Griffin Pl. to Zolfo; $330,000 bonds Ona-Highland Co. line Rd., all 9 and 15 ft. wide. Engineer not selected.

Ala., Birmingham—City Comn. takes bids about Dec. 1, paving north side 8th Ave. from here to Ensley, 3 mi. long, 20 ft. wide, 2 in. asphalt on 5 in. concrete. A. J. Hawkins, city engr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, will concrete surface 8.25 mi. road from Knoxville Co. line to Marysville, Blount Co. Will mature in spring. J. G. Creveling, highway comr.

Ky., Louisville—Plans reconstructing with macadam Rowan and 32nd Sts. $25,000. A. A. Krieger, city engr.

O., Cleveland—Plans weather proofing Cranwood race track, cinders and sand on crushed stone. $25,000. J. S. Coates, South St., Goshen, N. Y., engr.

O., Cleveland—E. L. Schueren, 401 Swetland Bldg., plans paving, laying sewers and mains in East 86th St. $50,000. C. W. Courtney, 509 Leader-News Bldg., engr.

Wis., Green Bay—Brown Co. making plans improving 3.7 mi. East De Pere Rd. between here and De Pere, one course concrete boulevard, double street car tracks down center, 18 ft. wide, on each side of center plot. $220,000. O. C. Rollman, div. engr. Wisconsin Hy. Comn., Green Bay, engr.

Ia., Jefferson—Auditor Greene Co. takes bids about Nov. 15, paving and incidental work on approximately 18 mi. Lincoln Highway. $500,000. Iowa Hy. Comn., Ames, engrs. Noted Nov. 1.

Missouri—State Hy. Dept., Jefferson City, plans concrete paving 46,058 sq.yd. Federal Aid Project 144 C, Route 2, Callaway Co.; grading Federal and State Project 236 C, Route 2, Warren Co., 57,330 cu.yd. earth, 2,703 cu.yd. solid and 2,703 cu.yd. loose rock excav., etc., Federal and State Project 236 B, Route 2, 34,644 cu.yd. earth, 1,176 cu.yd, loose and 1,079 cu.yd. solid rock excav. B. H. Piepmeier, state highway engr.

Mo., Kahoka—See "Sewers."

Tex., Abilene—Taylor Co. making plans improving highways, east, west, north and south. $350,000 bonds voted. $656,000 granted by State and Federal Government. Noted Sept. 27.

Tex., Anderson—Grimes Co. voted $150,000 bonds, grading and gravel surfacing in Plantersville Dist. 5. $150,000. R. M. West, co, judge.

Tex., Carthage—Panola Co. voted $225,000 bonds improving roads in Carthage Precinct, State Highway 8 and laterals. Titus & Dillon, Center, engrs. Noted Oct. 18.

Tex., Cleburne—Plans paving Main St. entire length of city, various types, to exceed $50,000. R. C. Whiteaker, city engr.

Tex., Del Rio—Val Verde Co. soon takes bids grading and gravel surfacing 12.74 mi. Sonora Rd., 16 ft. $93,850. G. M. Jowers, co. engr.

Tex., El Paso—El Paso Co. election Nov. 17, to vote on $1,260,000 bonds, paving State highways and lateral county roads. L. A. White, co. engr.

Tex., Floresville—Wilson Co. soon takes bids hard surfacing road from Saspamco to point 2 mi. south of here. $300,000. L. W. S. Mantel, Alice, engr.

Tex., Ft. Worth—Had plans prepared paving 8 blocks Wabash, Lilac, Chambers, Tennessee, Terrell and North Houston Sts., 40 ft. average, bituminous or brick. D. L. Lewis, city engr.

Tex., Georgetown—Williamson Co. election Dec. 4, to vote on $300,000 bonds, grading, gravel and bituminous macadam surfacing and bridging in Taylor Precinct. R. A. Nichols, co. engr.

Tex., Houston—Making plans paving Dowling St., bituminous or brick. $25,000. J. C. McVea, city engr.

Tex., Madisonville—Madison Co. voted $300,000 bonds gravel and bituminous surfacing Highway 21 and laterals. T. Ferguson, co. judge. Noted Oct. 18.

Tex., Taylor—Williamson Co. plans election to vote on $300,000 bonds, improvement and maintenance of roads in Taylor Rd. Dist. R. A. Nichols, co. engr.

Tex., Vernon—Wilbarger Co. election Nov. 24, to vote on $600,000 bonds for concrete and gravel surfacing Colorado to Gulf Highway, Lee Highway and laterals. J. Nabors, co. engr.

Tex., Waco—Making plans paving 12 blocks West and Vermont Sts., 2 in. bitulithic on 5 in. base, or 6 in. concrete. $40,000. V. G. Koch, city engr.

Tex., Wichita Falls—Plans paving 8th, Austin, Harrison and 7th Sts., brick, concrete or bituminous, to exceed $25,000. F. M. Rugely, city engr.

Okla., Cushing—Plans grading and paving Noble, Walnut, Maple and 2nd Sts., 9,100 sq.yd. concrete, 2,700 cu.yd. excav., etc., $38,500. O. E. Bloch, Cushing, engr. Noted this issue.

Okla., Durant—Plans grading and paving 4th and 9th Sts., 5,800 sq.yd. concrete, 2,300 ft. curbing, etc. $25,000. L. V. Stinson, Durant, engr.

Okla., Oklahoma City—Preparing plans widening Robinson Ave. 4,000 sq.yd. asphalt, 9,000 lin.ft. concrete curbing, 500 cu.yd. earth and 2,500 cu.yd. rock excav. $38,000. B. M. Hart, city engr.

Okla., Sapulpa—Creek Co. making plans paving 43 mi. roads, 450,000 sq.yd. concrete. $750,000. Election during winter to vote on bonds. F. L. Simmons, Capitol Bldg., Oklahoma City, engr.

Wash., Tacoma—Plans paving and grading roadway between north and south ends of city. $300,000. C. E. Putnam, city engr.

California—State Hy. Dept., Sacramento, making plans 10 mi. grading and concrete paving, 20 ft., also 10-11 mi. grading and gravel surfacing, 30 ft., both average 30,000 cu.yd. excav. to mile, Shasta Co.; grading and gravel surfacing 6.5 mi. extension to Half Moon Bay Rd., approximately 25,000-30,000 cu.yd. excav. to mile, San Mateo Co. R. M. Morton, state highway engr.

Calif., Bakersfield—Plans made grading, curbing, paving, etc., portions of 20th, 21st and R Sts., 220,375 sq.ft. grading, 220,375 sq.ft. 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, 11,829 sq.ft. concrete gutter, 7,583 lin.ft. concrete curb, etc. To exceed $50,000.

Calif., Fresno—Making plans paving ½ mi. Lewis Ave. and ½ mi. Palm Ave., both 36 ft. W. Stranahan, city engr.

Calif., Oakland—Plans grading and paving East 18th St., 13,436 sq.ft. grading 7,107 sq.ft. oil macadam pavement, etc.; 12th St., 94,797 sq.ft. grading, 3,538 ft. concrete curb, without guard, 671 ft. concrete curb with guard, 5,161 sq.ft. concrete gutter, 89,636 sq.ft. 2 in. warrenite on 6 in. concrete, etc.

Calif., San Diego—Plans paving, building sewers, etc., in Ft. Stockton Dr., Falcon and Lewis Sts., 12,599 sq.yd. 1½ in. wearing surface on 2½ in. asphaltic concrete, 3,308 sq.yd. cement sidewalk, 912 lin.ft. cement curbing, etc. F. A. Rhodes, city engr.

Calif., San Francisco—Had plans prepared grading and concrete paving Silver Ave. between Merrill and Vienna Sts., 7,000 cu.yd. excav., 10,269 sq.ft. concrete pavement, etc. To exceed $35,000. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

Massachusetts—Nov. 13, by State Highway Comn., Boston, bituminous macadam paving 6,600 ft. highway, 20-25 ft., in Revere. To exceed $42,000. W. F. Williams, state highway comr.

Massachusetts—Nov. 20, by State Hy. Comn., Boston, rein.-con. paving 3,600 ft. highway, 20-30 ft., in Swansea. To exceed $75,000. W. F. Williams, state highway comr.

N. Y., Long Island City—Nov. 13, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., paving Buckley St., etc.,

Streets and Roads (Continued)

granite block, 102nd St., sheet asphalt; grading, etc., Coffrey Ave.; grading, curbing, recurbing, etc., 102nd St.

N. Y., New York—Nov. 13, by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing, flagging and reflagging West 165th St.; repaving Riverside Dr., stone filled sheet asphalt on concrete.

N. Y., New York—Nov. 16, by J. Miller, pres. Manhattan Boro, Municipal Bldg., curbing, recurbing, flagging, reflagging and paving West 155th St. and 7th Ave., granite block on concrete.

N. Y., St. George — Nov. 13, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Turnpike, granite block, also filling in Lot 6, Plot 7, Ward 4, Egbert Ave.

N. Y., St. George—Nov. 14, by J. A. Lynch, pres. Richmond Boro, Boro Hall, concrete repaving Center and Moore Sts.

N. Y., St. George—Nov. 16, by J. A. Lynch, pres. Richmond Boro, Boro Hall, paving Gifford Lane, bituminous macadam.

New Jersey — Nov. 27, by State Hy. Comn., Trenton, rein.-con. paving Route 15, Sect. 5, Millville to Menantico Creek, Cumberland Co. A. L. Grover, secy.; adv. E. N.-R. Nov. 8.

Virginia—Nov. 22, at office State Hy. Dept., Richmond, grading, etc. 2.5 mi. Project F 140 B-C, Augusta Co., 3 mi. Project S 143 C, Bedford Co., 4.6 mi. Project S 245 Wise Co., 2 mi. Project S 327, Russell Co.; graveling 2.99 mi. Project F 166 A, King William and Hanover Counties, 13.51 mi. Project S 326 A B, Norfolk Co.; concrete road 4.89 mi. Project F 166 C, Hanover Co., 0.81 mi. Project S 335, streets in Victoria, Lunenburg Co., state to furnish cement on both projects; bituminous macadam road 2.4 mi. Project S 317, Mecklenburg Co.; 326 ft. rein.-con. bridge Project S 189 A, Alleghany Co., one 25 ft. concrete beam span bridge Project S 191, Nansemond Co. H. G. Shirley, highway comr.; adv. E. N.-R. Nov. 8.

Ky., Alexandria—Nov. 26, by Secretary Campbell Co. Road Comn., American Natl. Bank Bldg., Newport, paving road from here to Persimmon Grove, concrete or macadam. $25,000.

Ohio—Nov. 14, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 41.972 mi. roads in Athens, Columbiana, Cuyahoga, Defiance, Hamilton, Highland, Lawrence, Perry, Tuscarawas and Van Wert Counties; various materials; grading 9.185 mi. roads in Meigs, Washington and Williams Counties; concrete bridge in Jackson Co. A. V. Donaheys, dir. highways.

Michigan—Nov. 13, by State Hy. Dept., Lansing, grading and surfacing 8.91 mi. Federal Aid Project 87, Wayne Co., 104,901 sq.yd. concrete. F. F. Rogers, state comr.

Ill., Lewistown—Nov. 15, by Bd. Local Impvts., paving North Bway., 5,583 sq.yd. vitr. brick on 4 in. concrete and 1 in. sand, etc., $25,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Kan., Independence — Nov. 23, by Clerk Montgomery Co., grading and bituminous macadam surfacing 5.141 mi. Federal Aid Projest 121, Sect. C, 18 ft. Former bids rejected. H. K. Hibbard, co. engr. Noted Oct. 18.

Ark., Little Rock — Nov. 15, by City Comrs., 602 Boyle Bldg., improving Dist. 356, incl. asphalt paving 2nd St., also Cumberland Sts., from Markham to Burd Sts.; asphalt on concrete, Rock, Byrd, Commerce, Ferry, Sherman, Collins and Cumberland St., from 3rd to 4th Sts.; repaving with asphalt Rector St. $100,000. G. D. Douglass, 610 West 14th St., engr.

Tex., Ft. Worth—Nov. 13, by City Com. paving, etc., Helen, Cockrell, Ballinger, Hillcrest, Eastern and Edwin Sts., 23,150 sq.yd. bitulithic, rock asphalt, 3 in. brick or amiesite, 5,550 ft. curb and gutter, 4,630 cu.yd. excav. $75,000. D. L. Lewis, city engr.

Tex., Jasper—Nov. 22, by A. L. Hancock, judge Jasper Co., gravel surfacing 4.24 mi. State Highway 63, State Aid Project 93, 12 ft., $33,618; gravel surfacing and timber pile trestle bridges on 6.4 mi. State Highway 63, Federal Aid Project 82, 12 ft., $91,870; gravel on both to be furnished by county. C. P. Hunter, co. engr.

Tex., La Grange — Nov. 23, by J. P. Ehlinger, judge Fayette Co., grading and gravel surfacing 5.84 mi. State Highway 3 B, Federal Aid Project 285, 18 ft., 15,571 cu.yd. gravel to be furnished by county. $99,822. C. A. Schlafli, co. engr.

Okla., Marlow—Nov. 13, by G. L. Orr, city clk., widening and paving Bway., 14,340 sq.yd. 2 in. asphaltic concrete on 6 in. base, 9,800 lin.ft .curbing, 5,000 cu.yd. earth and 120 cu.yd. rock excav. $73,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Calif., San Jose—Nov. 19, by Supervs. Santa Clara Co., paving Santa Clara and Los Gatos Rd., 281,956 sq.ft. cement concrete, asphaltic concrete or oil macadam; Santa Cruz Ave. in Los Gatos, 52,513 sq.ft. concrete.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on 101st (Jerome) Ave., from Sicilian Asphalt Paving Co., 41 Park Row, New York, $110,020. Noted Oct. 25.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on Davidson Ave., from C. D. Beckwith, Inc., 2875 Bway., $15,485, West 195th St., from F. Hanratty, 605 Beach Terrace, $8,447; grading, building inlets, basins and drains in Colden Ave., from I. F. Cavaluzzo, 1538 Walton Ave., $23,317; 25,000 gal. road surfacing material, from Barrett Co., 17 Battery Pl., $4,125. Noted Oct. 25.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 49th St., sheet asphalt, from W. J. Fitzgerald, 547 West 45th St., $20,110, Tiemann Pl., sheet asphalt, from Brusstar Constr. Co., Harlem River and 150th St., $10,089, Dyckman St., granite block, from Asphalt Constr. Co., 208 Bway., $52,248; widening and repaving 56th St., sheet asphalt, from Cleveland Trinidad Paving Co., Flushing, $28,322, 60th St., sheet asphalt, from Sicilian Asphalt Paving Co., 41 Park Row, $53,858, 58th St., stone filled sheet asphalt, from Uvalde Asphalt Paving Co., 1 Bway., $24,989. Noted Oct. 25.

Fla., Gainesville—Bd. Bond Trustees surface treating 18.1 mi. Gainesville-Hawthorn Rd., from Finley Method Co., Graham Bldg., Jacksonville, $56,067. Noted Oct. 11.

Kentucky — State Hy. Dept., Frankfort, paving with waterbound macadam 2.83 mi. Owingsville-Carlisle Rd., State Project 61, Sect. A, Bath Co., from Clark Constr. Co., Manchester, $58,450, surface treatment from Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, $3,643; paving 3.156 mi. Alexandria-Falmouth Rd., 18 ft. State Projest 21, Sect. B, Campbell Co., from E. Hine & Sons, Harrison, O., $111,334 12.76 mi. Winchester-Hampton Rd., 16 ft., State Project 4, Sect. A, Clark Co., from E. E. Price, 723 Hornbrick Ave., Lexington, $327,793, 10.112 mi. Alexandria-Falmouth Rd., 16 ft., State Project 21, Sect. A, Campbell and Pendleton Counties, from Cynthiana Constr. Co., Cynthiana, $273,345, surfacing foregoing from Atlantic Refining Co., Atlanta, Ga., $4,284, $15,349 and $13,131 respectively; paving 0.137 mi. Somerset-Stamford Rd., 18 ft., State Project 22, Sect. B, Pulaski Co., from Cast & Lynn, Stamford, $8,480, 6.319 mi. Covington-Falmouth Rd., 18 ft. State Project 62, Sect. C, Kenton Co., from J. Wroe, Dayton, O., $144,607, $1.306 mi. Stanton-Winchester Rd., 24 and 28 ft., Federal Aid Project 108, Powell Co., from R. L. Shunfessel, Clay City, $4,217.

Tex., Palo Pinto—Palo Pinto Co., grading and gravel surfacing on crushed stone 3.37 mi. State Highway 1, Federal Aid Project 383, 18 ft. and grading, surfacing with gravel, sledged stone and crushed stone and bridging 15.47 mi. State Highway 1, Federal Aid Project 382, 18 ft., from McCling Constr. Co., Cleburne, $24,258 and $200,847 respectively. Engrs. est. $60,254 and $262,200 respectively. Gravel to be furnished by county. Noted Oct. 11.

Ore., Baker — Baker Co., grading and crushed stone surfacing Mason-Salisbury Sect., Lockhart Market Rd., from T. Knudson, Portland, excav. $0.50, 13,000 crushed stone for base $2.50, top course $2.70, total $36,320.

Calif., San Diego—Improving 31st and Elm Sts., 4,875 lin.ft. cement curb, 24,699 sq.yd. cement sidewalk, 21,067 cu.yd. earth excav., one 160 ft. bridge, etc., from G. R. Daley, 4440 Boundary St., $44,321. Former bids rejected. Noted Sept. 20.

Calif., San Diego—Paving with 1½ in. asphaltic concrete on 4 and 5 in. concrete 13,550 sq.yd. Ray, Weightman and Dwight Sts., from G. R. Daley, 4440 Boundary St., $29,994; 23,905 sq.yd. Granada, 29th, Dale and Palm Sts., from California Constr. Co., Union Bldg., $51,007. Noted Aug. 30.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, bituminous macadam paving 21,046 ft. highway, 18 ft., in Truro and Wellfleet, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $110,086; 2,480 ft., 30 ft. wide, in Scituate, to Reynolds Bros., Inc., 179 Summer St., Boston, $28,068. Noted Sept. 27.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, grading, sheet asphalt paving, etc., main roadway of Eastern Parkway from Albany to Ralph Aves., here, to M. J. O'Hara, 1228 Park Ave., New York, $147,081. Noted Oct. 18.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging East 29th St., to T. B. Scott, 671 Halsey St., $4,987; Lake St., to W. J. McHale Contg. Co., 1250 Jefferson St., $4,656; asphalt paving East 29th St. and New York Ave., to Borough Asphalt Co., 1301 Metropolitan Ave., $7,439 and $40,147 respectively; Lake St., to Cranford Co., 52 9th St., $10,231; resurfacing 67th St., bituminous macadam, to Galecor Contg. Co., 507 Greenwich St., New York, $13,759. Noted Nov. 1.

N. J., Asbury Park — Bituminous concrete paving 27,000 sq.yd. Kingsley St., and 17,500 sq.yd. Cookman Ave., to J. J. Barrett, North Olden Ave., Trenton, $102,339. Noted Nov. 1.

Pa., Pittsburgh—Paving 3,638 sq.yd. Bon Air Ave. and 594 sq.yd. Coast Ave., to M. O'Herron, South 1st, and McKean Sts., $4.25 per sq.yd., 2,330 sq.yd. Conniston Ave., to McDonnough & O'Toole, 3032 Landis St., $4.25 per sq.yd., 1,329 sq.yd. Fuschia Way and 163 sq.yd. Hoffers Way, to A. Lucini, Pittsburgh, $4.35 per sq.yd.

N. C., Winston—Salem-Montgomery Co. grading and top soiling 7 mi. Blaine-Chandeers Grove Rd., to Harris & Moore, Mt. Gilead, $26,800.

Fla., Gainesville—Alachua Co. surfacing treating 52,800 sq.yd. Rd. 2 from Daysville to Wacahoota, and 60,000 sq.yd. Rd. 3 from Gainesville to Newberry, to Finley Method Co., Graham Bldg., Jacksonville, $14,256 and $16,200 respectively. Noted Sept. 6.

Fla., Leesburg—Curbing, guttering and paving 60,000 sq.yd. various streets, to C. R. Scott, Lake Wales, $225,000. Noted Sept. 13.

Fla., Sebring — Highlands Co., to O. Hardin, Okeechobee, improving Sick Island-Kissimmee River Rd., 75,000 cu.yd. excav. $0.30 per cu.yd., 49 acres clearing $80.

Ala., Birmingham—Asphalt paving 5 blocks 3rd Ave. from 14th to 20th Sts., to Dunn Constr. Co., Lincoln Bldg., $40,777; 3 blocks 14th St. from 3rd Ave. to 6th Ave. S, to Southern Roads Co., American Trust Bldg., $16,957; paving with brick between street car tracks on above avenue and street, to Birmingham Railway and Light Co., 4105 1st Ave. N. $13,260 and $1,105 respectively; asphalt paving 3 blocks 7th St., West and 8th Court St. West, to J. L. Mularky, 2,400 Ave. J, $11,849; furnishing and laying c.i. pipe several blocks in Elyton Highlands, to Long & McPollands, Birmingham, $7,896. Noted Aug. 2.

Miss., Lexington—Improving 6.388 mi. Federal Aid Project 137-B, to McElwrath & Rogers, renada, 54,422 cu.yd. excav. $0.31, 9,941 cu.yd. borrow $0.26, 516.42 cu.yd. concrete $22.50, etc. Noted Sept. 27.

Miss., Meadville — Improving 8.514 mi. Federal Aid Project 150, to B. H. Bass, Hazlehurst, 70,307 cu.yd. excav. $0.27, 24,138 cu.yd. borrow $0.20, 112.45 cu.yd. concrete $20, 13,328 cu.yd. gravel 1 mi. haul $0.75, 46,068 units gravel overhaul $0.15. Noted Sept. 27.

La., Independence—Grading and graveling 5.7 mi. streets, to Morgan & Newton, Amite, excav. $0.24, concrete $16, gravel $1.92. Engrs. est. $27,000. Noted Oct. 11.

Tennessee—State Dept. Hys. and Pub. Wks., Nashville, grading and surfacing (2 in. Topeka type) 13 mi. road from Knoxville to Jefferson Co. line, 16 ft., State Aid Project 132, Knox Co., to Baird-Eller Constr. Co., Nashville, $209,697, with bituminous macadam 9.25 mi. from Jasper to Whitwell, 14 ft., State Aid Project 137, Marion Co., and 13 mi. Federal Aid Project 2 B, 24 and 72, 16 ft., Marion Co., to Texas Road Co., Great Southern Life Bldg., Dallas, Tex., $104,439 and $176,543 respectively, 3.3 mi. from New Market to Knox Co. line, 16 ft., State Aid Project 133, Jefferson Co., to W. C. Anderson Constr. Co., Harriman, $55,823; with gravel or chert 11.83 mi. from Waynesboro to Lawrence Co. line, 16 ft., Federal Aid Project 99, Wayne Co., to Federal Constr. Co., Nashville, $124,905; grading 19.93 mi. Decatur to Hamilton Co. line, 20 ft., State Aid Project 140, Meigs Co., to Harriman, Walters & Prather, White River, $51,188, 8 mi. from Marysville to Knox Co. line, 16 ft., State Aid Project 141, Blount Co., to Shea Bros., Knoxville, $101,105. Noted Oct. 4.

Tenn., Knoxville—Will resurface 16 mi. Washington St., Bway., Clinton and Dandridge Pikes, Clinton Rd., Tennessee and Central Aves., etc., limestone macadam, by day labor. $35,000.

Ky., Ashland—Concrete paving and extending sewers up Grays Hill, to Concrete

Streets and Roads (Continued)

Highway Constr. Co., Ashland. Est. cost, to exceed $25,000.

O., Cleveland—Paving Liberty Row, 1,300 tons asphalt, 10,100 sq.yd. 7 in. concrete base, to Bentley Bros., 3024 Euclid Ave., $48,582.

O., Euclid—Curbing, guttering and asphalt paving on concrete Priday and Ball Aves., to Gould & Maybach, 16311 Saranec Rd., Cleveland, $28,710; Westport, Wilmore, Morris and Foxton Aves., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $57,512.

Q., Lyndhurst (Cleveland P. O.)—Grading and laying concrete sidewalks on 4 streets, to Strohman & Kidder, The Arcade, Cleveland, $30,345. Noted Nov. 1.

O., Toledo—Curbing and concrete paving 2 mi. Milburn St. to city limits, 50 ft., to Johnson, Van Wagner & Johnson, Toledo, $40,159.

Michigan—State Hy. Dept., Lansing, grading and surfacing 6.304 mi. State Trunk Line Rd. 55-10, Roscommon Co., to DuVall Bros., McBain, incl. 48,511 cu.yd. excav. $0.38, 59,174 sq.yd. gravel surface Class B $0.53, etc., total $58,772; 1.12 mi. State Trunk Line Rd. 51-6, Ottawa Co., to Ottawa Co. Rd. Comn., Grand Haven, 7,084 cu.yd. excav., 13,173 sq.yd. concrete, $28,500; 9.509 mi. State Trunk Line Rd. 27-6, Sects. A and B, Huron Co., to Huron Co. Rd. Comn., Bad Axe, incl. 35,010 cu.yd. excav. $0.48, 88,754 sq.yd. gravel surface class B $0.73, etc., total $98,465. Noted Oct. 4 and 25.

Ill., Winnetka—Bd. Local Impvts., 12,000 sq.yd. rein.-con. paving, to H. G. Goelitz, 810 North Blvd., Oak Park, $119,000. Noted Oct. 11.

Kan., Great Bend—Barton Co., grading, bridging, etc., Sects. A and B of Federal Aid Project 160, by day labor. $33,606. H. S. Allen, co. engr.

Kan., La Crosse—Paving, etc., various streets, to Cook & Ranson, Ottawa, 11,330 sq.yd. 3 in. brick on 5 in. concrete, asphalt filler $3 per sq.yd., 24 in. gutter $1.05, 30 in. gutter $1.15, grading, $0.80, etc., total $40,000.

Kan., Marion—Marion Co., grading and surfacing 0.818 mi. Project 161, 18 ft. bituminous filled brick, to Kaw Paving Co., 506 N. E. Bldg., Topeka, $40,566. Engrs. est. $41,974.

Kan., Marion—Marion Co., grading and paving 0.818 mi. Santa Fe Trail, Federal Aid Project 161, to Stimson Constr. Co., Topeka, $25,088. Noted Sept.

Ark., Little Rock—Improving Izara St. in Dist. 302, 4,500 cu.yd. excav., 6,200 sq.yd. 2½ in. sheet asphalt on 5 in. concrete, etc., to P. F. Connelly Paving Co., 814 Rector St., $26,300.

Tex., Alpine—Brewster Co., grading, gravel and caliche surfacing 8.53 mi. State Highway 12, 18 ft., to Womack Constr. Co., Sherman, $38,540; 22,031 cu.yd. gravel and caliche surfacing to be furnished by county. Engrs. est. $43,000. Noted Oct. 4.

Tex., Barstow—Ward Co., grading, gravel and caliche surfacing 5.5 mi. State Highway 1, Federal Aid Project 391 A, 18 ft., 35,899 cu.yd. roadway, 12,288 cu.yd. borrow excav., 24.5 cu.yd. concrete, 12,908 cu. yd. gravel and 1,597 cu.yd. caliche, etc., to Valient & Toomey, 1703 F & M Bank Bldg., Ft. Worth, $43,435. Engrs. est. $45,184. Noted Oct. 25.

Tex., Ft. Worth—Paving 6th Ave., 1½ in. Uvalde rock asphalt on 5 in. base, to General Constr. Co., Cotton Exch. Bldg., $41,862. Engrs. est. $40,000.

Tex., Ft. Worth—Paving with warrenite bitulithic West Bway. and White St., to West Texas Constr. Co., Cotton Exch. Bldg., $19,500; amiesite on Tremont St., to McCollon Constr. Co. F. & M. Bldg., $17,000. Noted Sept. 20.

Tex., Houston — Improving Preston St. from Crawford to Dowling Sts., to Gulf Bitulithic Co., Kress Bldg., $48,116.

Tex., Palestine — Anderson Co., grading gravel and clay surfacing and bridging 6 mi. Elkhart-River City Rd., 16 ft., to Montgomery & Minter, Kaufman, $26.717. Engrs. est. $35,000. Noted Oct. 4.

Tex., Quanah — Paving 22 blocks West 3rd, Mercer and Main Sts., 38 ft., Amiesite on 4 in. concrete, to McCulom Constr. Co., F&M Bldg., Ft. Worth, $2.65 per sq.yd. Noted Nov. 1.

Okla., Poteau—Grading and paving Dewey Ave., 13,300 sq.yd. concrete, 7,200 lin.ft. curbing, 7,200 lin.ft. guttering 5,330 cu.yd. excav., to J. S. Terry, Poteau, $59,895. Rein.-con. pavement $3.40 per sq.yd. Noted Sept. 6.

Okla., Wewoka—Grading and paving 11 blocks Main, Apple, Wewoka and Okfushey Sts., to E. E. Pach, Box 622, Okmulgee, 27,100 sq.yd. vertical fibre brick, 2½ in. $3.75, 3 in. $3.92, 8,700 cu.yd. earth excav. $0.80, etc., total $139,988. Noted Oct. 11.

Idaho—P. E. Oxley, dist. engr., Lewiston, 5.91 mi. grading and surfacing Federal Aid Project 74, Latah Co., 40,400 cu.yd. earth, 5,900 cu.yd. solid and 4,500 cu.yd. loose rock excav., 12,340 cu.yd. crushed rock surfacing, etc., to Triangle Constr. Co., Realty Bldg., Spokane, Wash., $76,493. Noted Oct. 11.

Arizona—State Hy. Dept., Phoenix, will grade and surface 7 mi. Federal Aid Project 55A, Schedule 2, Yuma Co., and 22 mi. Federal Aid Project 69, Maricopa Co., by force account. This corrects report in Nov. 1 issue.

Oregon — State Highway Dept., Salem, grading 7.69 mi. Paulina Prairie-Lava Butte Sect., The Dalles-California Highway, Des Chutes Co., to Jetley Bros., Burns, $39,617, using concrete pipe; 6.2 mi. Stices Gulch Sect. Baker-Unity Highway, Baker Co., to I. J. Roslen & Co., Portland, $121,738 using concrete pipe.

Calif., Hanford—Paving East 6th St. between Harris St. and Corcoran Highway, 1½ in. warrenite bitulithic on 4 in. bituminous, to California Constr. Co., 58 2nd St., San Francisco, $56,322.

Calif., San Luis Obispo—Concrete paving 100,000 sq.ft. Osos St., to I. Hodson, San Luis Obispo, $31,498. Noted Nov. 1.

Industrial Works

PROPOSED WORK

Me., Portland—E. W. Jones, Exchange St., had plans prepared by Webster & Libby, Exchange St., and soon takes bids 1 story, 100 x 180 ft. garage, rein.-con., plain foundation, Forest Ave. $50,000.

Mass., Boston — C. T. Main, engr. and archt., 220 Devonshire St., takes bids early in winter, 4 story bakery, about 75 x 125 ft., rein.-con., wood pile foundation, Palmer St., for Berwick Cake Co., 2220 Washington St. To exceed $150,000.

R. I., Providence—Atlantic Biscuit Co., c/o McCormick Co., archts. and engrs., 41 Park Row, New York City, having plans prepared 3 story, rein.-con. and brick factory, plain foundation, here.

Conn., Berlin—Donelly Brick Co. having plans prepared by M. J. Unkelbach, Main St., New Britain, 1 story and basement, 60 x 160 ft. power house, brick and steel, plain foundation. $40,000.

Conn., Cromwell—Warner Hammer Co. plans 2 story, 80 x 80 ft. factory, brick and steel, plain foundation. $40,000. Private plans.

Conn., Hartford—Kinsley & Smith, 571 Main St., had plans prepared by F. C. Walz, Trumbull St., 2 story, 50 x 175 ft. garage, brick and steel, plain foundation, Main St. $40,000.

Conn., Meriden—M. Cherniack, Colony St., plans 3 story, 50 x 70 ft. storage plant, brick and steel, plain foundation, East Main St. $50,000. Engineer and architect not selected.

Conn., Thompsonville—Bigelow-Hartford Co., 58 Main St., plans 4 story, 140 x 220 ft. factory, brick and steel, plain foundation. $70,000. Private plans.

Conn, Waterbury—P. Laskas, 1844 East Main St., having plans prepared by F. L. Lauper, 16 Albion St., 1 story and basement, 60 x 130 ft. garage, brick and steel, plain foundation, Meriden Rd. $40,000.

N. Y., Brooklyn — Brooklyn Edison Co., Pearl St., having plans prepared 1 story, 58 x 112 ft., rein.-con., brick and steel substation, plain foundation, West 12th St. near Neptune Ave. $60,000. Private plans.

N. Y., Brooklyn—Columbia Machine Wks. & Malleable Iron Co., 269 Chestnut St., plans 1 story, 74 x 491 ft., rein.-con., brick and steel shop and foundry, plain foundation, Chestnut St. and Atlantic Ave. $194,000.

N. Y., Geneva—O'Malley Candy Co., Klube Blk., plans 2 story, 180 x 200 ft. factory, South Exchange St. $75,000. Engineer and architect not announced.

N. Y., Mt. Vernon—Eureka Garage, 213 11th Ave., plans rebuilding garage recently destroyed by fire. $60,000. E. Herz, purch. agt.

N. J., Hightstown—Peddie Institute plans steam plant. $50,000. R. W. Swetland, headmaster. Engineer and architect not selected.

Pa., Blairsville — Natl. Plate Glass Co., Blairsville, plans 1 story and basement, 190 x 300 x 500 ft. brick and steel addition to plant, here. $2,000,000. C. R. Dick, c/o Mississippi Valley Steel Co., Decatur, Ill., engr. See "Unclassified" under "Contracts Awarded."

Pa., Pittsburgh—Pittsburgh Auto Equipment Co., 5933 Baum Blvd., plans warehouse, Baum Blvd. $150,000. Private plans.

Md., Baltimore—Maryland Penitentiary having plans prepared by T. W. Pietsch, archt., American Bldg., 1 story, 100 x 230 ft. foundry, brick and steel, Eager and Forrest Sts. $100,000. H. Massart, 328 North Charles St., engr.

Md., Baltimore—G. Esselman, 3225 Greenmount Ave., had plans prepared 2 story, 75 x 110 ft. garage, concrete and brick, 3313-31 Greenmount Ave. $40,000. Private plans.

Ga., Perry—Clinchfield Portland Cement Corp., Kingsport, Tenn., plans 2,000 bbl. mill, here.

Fla., Tampa—Melville Fertilizer Co. plans addition to plant, 7th Ave. $60,000-$65,000. B. M. Banker, pres.

Ala., Fairfield — Rushton Corp., 2 story 130 x 300 ft., brick and concrete factory, Crawford St., to Holly & Davis, Fairfield, $150,000.

Ky., Bowling Green — Porter Provision Co., Inc., plans 1 story packing and cold storage plant. $40,000.

Ky., Louisville—Louisville Gas & Electric Co., 311 Chestnut St., plans 1 story, garage and repair shop, 7th and Ormsby Aves. $40,000.

Ky., Whitesburg — Wright Lumber Co. plans several saw mills along Beaver Creek, near here. $40,000.

O., Canton—Timken Roller Bearing Co., Dulber Ave. S. W., plans to expend $750,000 for plant extensions. Will build 2 story, 200 x 300 ft. factory to house roller bearing department, immediately. $250,000.

O., Cleveland—G. J. Paul had plans prepared by J. F. Steffens, Fidelity Mortgage Bldg., 1 story, 125 x 163 ft., brick, steel and concrete storage building, 4320 Superior Ave. $60,000.

O., Cleveland—D. J. Silverman, 3237 East 116th St., having plans prepared by L. Skolnik, 6th St., Clair Bldg., 1 story, 72 x 113 ft., brick and steel garage, Union Ave. near East 123rd St. $40,000.

O., Port Homer—Ohio Valley Clay Products Co. plans 4 story, 160 x 200 ft. tile plant, E. W. Cooper property. $150,000.

O., Toledo—Toledo Edison Co., Jefferson and Superior Sts., plans extensions and improvements to plant. $473,000. Engineer's name not announced.

O., Uhrichsville — Federal Collieries Co. plans 4 story plant, near here. $200,000.

Ind., Indianapolis—Indianapolis Light & Heat Co., 48 Manument Pl., plans power plant on White River, near here. $5,000,000. C. C. Perry, pres. Engineer and architect not selected.

Mich., St. Joseph—Auto Specialties Mfg. Co., plans 1 story, 100 x 200 ft. foundry. $100,000.

Wis., Ashland—Lange Canning Co., Mill St., Eau Clair, plans 2 story, brick and concrete or brick and timber cannery, plain foundation, here. $50,000. G. J. Lange, pres. Engineer and architect not selected.

Wis., Echo—Eastern Wisconsin Electric Co., c/o H. Ellis, genl. mgr., 428 North 8th St., Sheboygan, plans 1 story, power plant, rein.-con., brick and steel, plain foundation, also dam on Wolf River, here. $50,000. Engineer and architect not selected.

Wis., Milwaukee—Boston Store, 4th St. and Grand Ave., having plans prepared by C. Barkhausen, 69 Wisconsin St., 1 story, 158 x 172 ft., brick and timber, warehouse, plain foundation, Clinton St. $75,000.

Wis., Milwaukee — A. Golembiewski, c/o Gurda & Gurda, archts., 2nd Ave. and Mitchell St., preparing plans 1 story, 60 x 120 ft., brick and timber garage, plain foundation, Lincoln Ave. $40,000.

Wis., Milwaukee—Reitman-Straus Co., 97 Wisconsin St., plans 8 story and basement, 50 x 150 ft., light manufacturing plant and store building, brick and concrete, plain foundation, 3rd St. Engineer and architect not selected.

Neb., Omaha — I. Goldstein, 218 South 19th St., having plans prepared by J. T. Allan, 224 Brandeis Theatre Bldg., 3 story and basement, 80 x 119 ft. rein.-con., brick and steel garage, 19th and Capitol Sts. $90,000.

Mont., Billings — Badger Showcase Co., 133 North Pearl St., plans 2 story, 60 x 160 ft. brick and concrete factory with 35 x 40 ft. boiler house, South Bway. $60,000.

Tex., Ft. Worth—L. L. Burton, c/o F. J. Woerner, archt., Sumpter Bldg., Dallas, plans 1 story factory. $40,000.

Industrial Works (Continued)

Tex., Ft. Worth—Southwestern Bell Telephone Co., 211 West 10th St., plans 30 x 75 ft., brick warehouse, Throckmorton St. $40,000. Private plans.

Calif., Long Beach—Amer. Ave. Hardware Co., 133 Amer. Ave., plans warehouse. $60,000.

Calif., San Francisco—Hills Bros., 175 Fremont St., having plans prepared by H. J. Brunier, engr., and G. W. Kelham, archt., Sharon Bldg., 5 or 6 story, rein.-con-factory and warehouse, Harrison St. $750,000.

Calif., Sausalito—C. Mason, 31 El Monte Lane, had plans prepared by R. S. Chew, Rialto Bldg., San Francisco, 2 story garage, rein.-con., Water St. $45,000.

Que., Outremont—J. O. Villeneuve Co., St. James St., Montreal, plans 90 x 167 ft. rein.-con. garage, Bernard and De L'Eppee Sts., here. $150,000 bonds will be sold.

Ont., London—Ontario Hydro Power Comn., London, having plans prepared 2 auxiliary steam operated plants, one in London district and one likely to be at Windsor.

Ont., Port Colborne—J. Diffen, Welland, and R. W. Wright, Dunkirk, N. Y., plan plant, here. $40,000.

BIDS DESIRED

Mass., Quincy—H. L. Kincardie taking bids and opens same about Nov. 9, 4 story and basement, 48 x 52 ft. brick and rein.-con. warehouse, 1495 Hancock St. To exceed $70,000. J. W. Beal Sons Co., 62 Summer St., Boston, archts.

N. Y., Brooklyn—See "Buildings."

Pa., Pittsburgh—Pittsburgh & West Virginia Ry., Wabash Bldg., taking bids 1 and 2 story, 47 x 99 ft. power and boiler house, at Rook near here. Crecilius & Phillips, Hanna Bldg., Cleveland, O., engrs.

O., Lorain—Natl. Stove Co. taking bids 2 story, 100 x 220 ft. concrete, brick and steel factory addition. $100,000. T. Rath, supt. Noted Nov. 1.

Ill., Chicago—D. S. Klafter, archt., 64 West Randolph St., receiving bids 1 story, 100 x 120 ft. garage, 3401-11 Cottage Grove Ave., for W. B. Frankenstein, c/o archt. $75,000.

Wis., Durham (R. F. D. Hales Corners)—A. G. Wolff, archt., 453 Mitchell St., Milwaukee, taking bids and opens same about Nov. 12, 1 story and basement, 60 x 100 ft., brick and timber warehouse, plain foundation, for G. Bosch. $42,000.

Wis., Milwaukee—Federal Eng. Co., engrs. and archts., 440 Milwaukee St., taking bids and opens same about Nov. 12, 3 story and basement, 100 x 127 ft., brick and concrete garage, plain foundation, Bway., for Curtis Auto Co., 142 8th St. $200,000. Noted July 26.

Minn., St. Paul—Nov. 12, by E. A. Hancock, Laycock Bldg., Eau Claire, Wis., 2 story, 60 x 62 ft. factory, brick and concrete, plain foundation, for Western Display & Mfg. Co. 301 Chestnut St. $40,000.

Mo., Springfield—Heckenlively & Mark, archts. Landers Bldg., taking bids 3 story and basement 100 x 120 ft. rein.-con., brick, tile and terra cotta packing plant, East Niel St., here, for Banfield Bros. Packing Co., Sedalia. $50,000.

CONTRACT AWARDED

Conn., Glastonbury—Glastonbury Tobacco Warehouse Co., 3 story warehouse, brick and steel, plain foundation, to Bartlett-Brainard Co., 252 Asylum St., Hartford. Archts. est. $50.000.

N. Y., Buffalo—Pratt & Letchworth Co., 189 Tonawanda St., 1 story, 52 x 120 ft., and 1 story, 70 x 212 ft., brick and steel factories, to Hunkin-Conkey Constr. Co., Hunkin-Conkey Bldg., Cleveland. Archts. est. $85,000.

N. Y., Buffalo—Wickwire Spencer Steel Corp., River Rd., briquetting plant, to Wilbur G. Hudson Corp., 50 Church St., New York, $75,000.

N. Y., New York—S. Young, c/o M. Rothstein, archt. and engr., 26 Court St., Brooklyn, will build 1 story, rein.-con., brick and steel garage, plain foundation, 242 East 98th St., by day labor. $60,000.

N. J., Paterson—Alexander Hamilton Garage Co., Inc., 4 story, and part basement garage, 100,000 sq.ft. floor space, to John W. Ferguson Co., 253 Bway., New York City, and 152 Market St., Paterson.

Pa., Phila.—Fleischmann Co., 701 Washington St., New York City, garage, 20th and Venango Sts., here, to B. A. Groah Constr. Co., 847 West North St., Pittsburgh, $117,500. Noted Aug. 30 under "Buildings."

Pa., Phila.—Fable & Co., 837 North 3rd St., 2 story and basement, 60 x 176 ft. brick factory, 510-512 North 3rd St., to G. Kessler Constr. Co., 1733 Mervine St., $40,000.

Pa., Pittsburgh—Penna. Lubricating Co., 34th and Smallman Sts., general contract 2 story, 50 x 120 ft., brick and steel plant, Smallman St., to T. Coutts Co., 3320 Smallman St. Archts. est. $40,000.

Pa., Sharon—J. Meyer, 1 story, 60 x 170 ft. brick and tile garage, North Main St., to L. Vasconi, Sharon. Archts. est. $80,000.

N. C., Roanoke Rapids—Roanoke Rapids Power Co., new brick and steel power station, enlarging canal, altering head works and installing 3,200 hp. waterwheel to operate under 30 ft. net head and direct connected by vertical shaft to 3,000 kva. generator, to Stone & Webster, Inc., 147 Milk St., Boston, Mass.

O., Cleveland—Auer Register Co., 3618 Payne Ave., 1 story, 76 x 100 ft., brick and concrete factory addition, to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $40,000.

O., Cleveland—Cleveland Ry. Co., Hanna Bldg., 1 story, 40 x 43 ft. automatic substations, to Craig-Curtiss Co., 4614 Prospect Ave. Archts. est. $350,000. Noted May 24.

O., Cleveland—Cleveland Varnish Co., 3111 East 87th St., 3 story and basement, 47 x 66 ft., brick and timber factory, to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $50,000.

O., Cleveland—Cleveland Cutter & Reamer Co., 1619 Merwin Ave., 1 story, 40 x 100 ft., brick and timber factory, 7406 Madison Ave., to Lehder Constr. Co., Rose Bldg. Archts. est. $40,000.

O., Cleveland—Park Battery Co., 277 East 156th St., 2 story, 79 x 152 ft., brick, steel and concrete garage and factory, to Austin Co., 16112 Euclid Ave. Archts. est. $75,000.

O., Cleveland—A. C. Wolf, and F. M. Griffith, archts., Swetland Bldg., 1 story, brick and steel machine shop and foundry, East 55th St., to H. F. Juergens Co., 15430 Lake Dr., for Globe Brass Mfg. Co., 5532 Perkins Ave. Archts. est. $60,000. Noted Sept. 6.

O., Tiffin—Standard Sanitary Mfg. Co., 3 buildings, to C. E. Dennie, Tiffin, $300,000.

Mich., Detroit—Kroger Grocery & Baking Co., 4760 Merritt Ave., 1 story, 82 x 390 ft., concrete, brick and steel garage and bakery, plain foundation, Junction Ave., to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, O. Archts. est. $100,000. Noted Nov. 1.

Mich., Detroit—Michigan Stamping Co., 11631 Mack Ave., 1 and 2 story, 50 x 100 ft., rein.-con., brick and steel addition to plant, plain foundation, Hart Ave., to A. A. Albrecht, 1130 Penobscot Bldg. Engrs. est. $75,000. Noted Oct. 25.

Mich., Jackson—Michigan Seating Co., 5 story and basement, 72 x 132 ft., brick, steel and stone addition to factory, plain foundation, to North-Miller Co., Jackson. Archts. est. $150,000. Noted Oct. 4.

Wis., Beaver Dam—Roedl-Jacobs Lumber Co., 2 story, 30 x 120 ft., brick and timber warehouse, plain foundation, to H. Opitz, 111 Walnut St. Archts. est. $40,000. Noted Sept. 13.

Wis., Milwaukee—Modern Auto Repair Co., 2431 State St., 1 story, 112 x 125 ft., brick and concrete addition to garage, plain foundation, to H. Schmitt & Son, 430 Farwell Ave. Archts. est. $55,000. Noted June 21.

Wis., Milwaukee—Shellmar Products Co., 1613 Humboldt Ave., 1 story, 80 x 148 ft., brick and timber printing plant, plain foundation, Humboldt St., to Austin Co., 208 South LaSalle St., Chicago. $50,000. Noted Oct. 18.

Wis., Neenah—E. Defnet, 159 East Forest Ave., 1 story and basement, 50 x 80 ft., storage plant, brick and rein.-con., plain foundation, to A. Nielsen & Son, 702 South Commercial St. Archts. est. $40,000.

Minn., St. Paul—Ford Motor Co., Highland Park, Mich., 1 story, 606 x 1,726 ft. plant, brick, steel and rein.-con., plain foundation, here, to Stone & Webster Co., St. Paul. Noted Oct. 4.

Mo., Joplin—Kansas Exploration Co., remodeling concentration plant, to B. Hoskins, East 14th St., Baxter Springs, Kan., $60,000.

Tex., Houston—Houston Power & Light Co., brick and steel addition to power plant, Gable St., to D. Hall, Carter Bldg., $60,000.

Tex., Magnolia Park—City, general contract gas plant, 32 mi. distribution system and 50,000 ft. service connections, to N. A. Saigh Co., Gibbs Bldg., San Antonio, $264,453. Engrs. est. $275,000. Noted Oct. 25.

Okla., Shawnee—Chicago, Rock Island and Pacific R.R. Co., 139 Van Buren St., Chicago, new engine house, here, to J. E. Nelson & Sons, 3240 Michigan Ave., Chicago. Est. cost $50,000.

Utah, Salt Lake City—Ford Motor Co., Highland Park, Mich., 2 story, 165 x 247 ft. assembly plant, rein.-con. and brick, plain foundation, 3rd South St., here, to Villadsen Bros., Dooly Bldg., $250,000.

Calif., Fresno—C. H. Cobb, fireproof garage, Forthcamp St., to Trewhitt-Shields, Rowell Bldg., Fresno, $52,000.

Calif., San Francisco—Standard Sanitary Mfg. Co., 149 Bluxome St., 5 story, 100 x 180 ft., rein.-con. warehouse, 9th and Brannan Sts., to Cahill Bros., 110 Sutter St., cost plus basis, approximately $284,000. Noted Aug. 23.

Que., Drummondville—Southern Canada Power Co. Ltd., 20 St. Nicholas St., Montreal, 30,000 hp. power house at Hemming Falls, to Foundation Co., 120 Liberty St., New York City. Noted Sept. 6.

Buildings

PROPOSED WORK

Conn., Glenbrook—Apartment—C. E. Philips having plans prepared by Butler & Provost, 292 Main St., Stamford, 3 story, 122 x 122 ft., brick, plain foundation. $150,000.

Conn., Hartford—Apartment—N. Carabillo Co., 210 Farmington Ave., having plans prepared by Dunkelberger & Gelman, 721 Main St., 3 story, 80 x 125 ft., brick and lime stone, plain foundation, Willard St. $150,000.

Conn., Hartford—Apartment—Ferrigno & Perrone, 44 Garden St., having plans prepared by R. A. D'Avino, 647 Main St., 3 story, brick, plain foundation, Farmington Ave. $200,000. Noted Oct. 25.

Conn., Hartford—Hotel—Garde Hotel, Asylum St., having plans prepared by F. C. Walz, Trumbull St., 5 story, 50 x 60 ft. addition, rein.-con. and brick, plain foundation, Asylum St. $150,000.

Conn., Oakville—Community House—Town plans community house with swimming pool, gymnasium and auditorium, brick and steel, plain foundation. $150,000. H. Wheeler, member building com. Engineer and architect not selected.

Conn., Stratford—School—Bd. Educ. having plans prepared by F. I. Cooper Corp., 172 Tremont St., Boston, 2 story, 60 x 180 ft., brick, stone and steel, plain foundation. $200,000. F. J. Taylor, chn.

Conn., Waterbury—Apartment, etc.—Torrington Building Co., 197 Water St., Torrington, plans 5 story, brick, plain foundation, 1st St., here. $200,000. Engineer and architect not selected.

Conn., Waterbury—Hospital—Waterley Hospital plans 3 story addition, brick and stone, plain foundation. $150,000. H. Whittmore, pres. Engineer and architect not selected.

Conn., West Hartford (Branch of Hartford)—Community—Town plans community house. $150,000. H. C. Whitman, clk.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., 4 story, 178 x 279 ft., Bedford Ave. near Church Ave., $500,000, also P. S. 202, Hegeman Ave., $1,500,000, both brick, steel and stone, plain foundations.

N. Y., Gloversville—Hospital—Nathan Littauer Hospital having plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York, brick, steel and stone, plain foundation. $300,000.

N. Y., Jamaica—High School—Bd. Educ., 500 Park Ave., New York, plans brick, steel and stone, plain foundation, Grand Ave., here. $1,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—Apartment—N. C. Partos, c/o L. A. Abramson, archt. and engr., 46 West 46th St., having plans prepared 12 story, brick, steel and stone, plain foundation, East 97th St.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., plans 200 x 220 ft., brick, steel and stone, plain foundation, Sherman and Arden Aves. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, training school, West 135th St. between Convent and St. Nicholas Aves., $1,500,000,

Buildings (Continued)

also P. S. 173, 5 story, 175 x 200 ft., Ft. Washington Ave. and 173rd St., $1,000,000, both brick, steel and stone, plain foundations.

N. Y., New York—School—Bd. Educ., 500 Park Ave., plans brick, steel and stone, plain foundation, 1st Ave. and 99th St. $750,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York—School—Bd. Educ., 500 Park Ave., plans brick, steel and stone, plain foundation, Madison Ave. and 122d St. $750,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Roslyn—School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation, Walliston Rd. $250,000. W. B. Tubby, 81 Fulton St., New York, archt. and engr.

N. J., Hightstown—Administration, etc.—Peddie Institute plans administration building, $300,000; new athletic field, tennis courts, 4 baseball diamonds, 4 football gridirons, ¼ mi. track, $20,000; concrete bulkhead or retaining wall along lake $3,500. R. W. Swetland, headmaster.

N. J., Hoboken—Bank and Office—Second Natl. Bank, 79 River St., having plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, brick, steel and stone, plain foundation, River St. and Newark Ave. $350,000.

N. J., Paterson—Hospital—Paterson General Hospital, Market St., having revised plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, 4 story, brick, steel and stone addition, plain foundation. $350,000. Former bids rejected. Noted Sept. 21, 1922.

N. J., Trenton—Office—State Building Comn. having plans prepared by A. B. Mills, State Office Bldg., 4 story, 84 x 244 ft., brick, steel and stone, adjoining capitol, West State St. $350,000. Noted June 14.

Pa., Grove City—Church—First Presbyterian Church plans new church. $250,000. Engineer and architect not announced.

Pa., Kingston — Recitation — Wyoming Seminary plans new recitation building, here. $200,000. Engineer not selected. Architect not announced.

Pa., Phila.—Church and Sunday School—Frankford Methodist Episcopal Church having revised plans prepared by H. W. Castor, St. Girard Bldg., church and Sunday school, Oxford Ave. and Dyre St. Noted Sept. 20.

Md., Hagerstown — Bank and Office — Security Surety & Trust Co. having plans prepared by A. C. Bossom, archt. and engr., 680 5th Ave., New York City, brick, steel and stone, plain foundation, Court Pl. $200,000.

W. Va., Bluefield—Municipal—City having plans prepared by W. T. Mills, 900 Atlas Bldg., Columbus, O., 3 story and basement, 120 x 140 ft., rein.-con. and brick. $300,000. R. E. Ridley, city mgr. Noted Aug. 30.

W. Va., Bluefield—Physical Education—Concord State College plans 4 story, brick and stone, with concrete swimming pool. $150,000. C. E. Ridley, city mgr.

N. C., Charlotte—School—Dec. 11, to vote on $2,000,000 bonds for additional school buildings.

Fla., Crescent Grove—Hotel—Seaview, Inc., having plans prepared by J. C. Gault, Miami, constructing Seaview Hotel, 8 story, 231 x 322 ft., southern end Bay Shore Rd. $2,000,000. C. D. Briggs, pres.

Ala., Huntsville—Schools—Election Dec. 3, to vote on $150,000 bonds for new buildings and additions.

La., New Orleans—School—Bd. Educ. soon takes bids Capdau School, 3 story, 108 x 172 ft., brick, rein.-con. and stucco, on block bounded by Franklin, Jonquil, Lotus and Lavender Sts. $160,000.

Tenn., Nashville—Hotel—Hermitage Hotel Co., 6th Ave. N., plans 100 room annex, 6th and Union Sts. $300,000. P. D. Houston, secy.

Tenn., Nashville—Memorial—Vanderbilt University having revised plans prepared by H. C. Hibbs, 4th and 1st Natl. Bank Bldg., and takes bids about January for Memorial. $250,000. Noted July 19.

Tenn., Nashville—Station and Office—Tennessee Central R.R. Co., 319 7th Ave., soon takes bids 4 story, brick and concrete, Bway. H. C. Hibbs, 4th and 1st Natl. Bank Bldg., archt.

O., Archbold—Store—H. S. Winzeler, Bryan, plans 4 story, 30,000 sq.ft. floor space, here. $150,000. Engineer and architect not announced.

O., Canton—Mercantile—Stern & Mann Co., 227 Market Ave., N., plans 3 story and basement, 66 x 200 ft., Tuscarawas St. W. and Cleveland Ave. $500,000.

O., Chillicothe — Hotel — F. I. Pease, archt., East State St., Columbus, preparing plans 3 story and basement, fireproof, here. $150,000. Owner's name withheld.

O., Cincinnati—Hospital—Seton Hospital, 618 West 6th St., plans 3 story and basement, rein.-con., plain foundation, Clifton Ave. $500,000. G. W. Drach, 1701 Union Trust Bldg., archt.

O., Cleveland—Apartment—L. Arnoff, 545 East 117th St., having plans prepared by G. Rudolph, Hunkin-Conkey Bldg., 4 story and basement, 40 x 446 ft., brick, Lake Shore Blvd. $350,000.

O., Cleveland — Apartment — Atwater Realty Co., c/o H. G. Atwater, 13807 St. Clair Ave., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 36 x 120 ft., brick, St. Clair Ave. $150,000.

O., Cleveland—Apartment—H. A. Fishel, Society for Savings Bldg., had plans prepared by Best & Hoefler, B. F. Keith Bldg., 3 story, 52 x 109 ft., brick. $150,000.

O., Cleveland—Bank and Commercial—State Banking & Trust Co., East 55th St. and Bway., having plans prepared by E. McGeorge and A. G. Simon, 3024 Euclid Ave., 4 story, brick, steel and concrete, Hamm Ave. and Bway. $300,000.

O., Cleveland — Commercial — Hollenden Hotel Co., East 6th St. and Superior Ave., having preliminary plans prepared by Watson Co., 4614 Prospect Ave., remodeling 1 story, brick and steel, East 6th St. and Superior Ave. $150,000.

O., Lakewood (Cleveland, P. O.)—Apartment—Citizens Building & Constr. Co. c/o C. W. Winkler, 632 Linde St., Rocky River, plans brick and timber, Kenneth Court, here. $200,000. Private plans.

Ill., Chicago—Apartment—P. Zisken, c/o Dubin & Eisenberg, archts., 14 West Washington St., plans 3 story and basement, 100 x 178 ft., apartment, West End and Central Ave. $225,000.

Ill., Urbana—Library, Gymnasium and Hall—University of Illinois having preliminary plans prepared by J. M. White, 256 Administration Bldg., 3 story, 70 x 300 ft. library, 3 story, 190 x 300 ft. gymnasium and 3 story woman's hall, all brick, stone and rein.-con., on Campus, $750,000, $500,000 and $250,000 respectively. C. E. Platt, 101 Park Ave., New York City, associate archt.

Wis., Eau Claire—Theatre—Eau Claire Theatre Co., c/o H. Schwaber, secy., 717 South River St., having plans prepared by C. A. Pear Architectural Co., Truax Bldg., 1 and 2 story, 75 x 150 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Janesville—Hotel—M. G. Jeffres, 14 West Milwaukee St., having plans prepared by Rowe, Dillards & Rowe, 127 North Dearborn St., Chicago, 6 story, 60 x 145 ft., brick, rein.-con. and steel addition plain foundation. $225,000.

Wis., Milwaukee—Church—St. Leo's Congregation, c/o P. Theisen, pastor, 2442 Locust St., plans 2 story, brick and tile, plain foundation, 24th and Locust Sts. $250,000. Engineer and architect not selected.

Wis., Superior — Hotel — Citizens Hotel Co., c/o H. G. Pickering, 205 Rogers Ruger Bldg., plans 7 story, hotel. $400,000.

Kan., Dodge City—Hospital—Sisters of St. Joseph having plans prepared by Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, 3 story and basement, rein.-con., brick, steel and hollow tile. $150,000.

Kan., Leavenworth—City Hall—City having plans prepared by Feth & Feth, archts., Leavenworth, 2 story and basement, 90 x 125 ft., brick, rein.-con. and stone. $200,000. Noted Sept. 27.

Kan., Sabetha—Hospital—Sisters of St. Agnes, Salina, having plans prepared by C. A. Smith, 109½ South Santa Fe St., Salina, and take bids early in January, 3 story and basement, 44 x 140 ft., rein.-con., brick and stone, here. $150,000.

Kan., Salina—Schools—Voted $225,000 bonds completion Theodore Roosevelt Junior High School and erection of another school. C. W. Shaver, 147½ Santa Fe St., archt. Noted Aug. 30.

Neb., Falls City—Courthouse—W. F. Germandt, archt., 1408 North 34th St., Omaha, soon takes bids 2 story and basement, 66 x 100 ft. rein.-con., brick, steel and terra cotta, for Richardson Co. $200,000.

Neb., Omaha—Church—St. Peters Parish, had plans prepared by J. Latenser & Son, 722 Peters Trust Bldg., and soon takes bids 2 story, 57 x 87 ft. brick and stone, 27th and Leavenworth Sts. $250,000.

Mo., St. Joseph—Schools—Dec. 11 to vote on $3,000,000 bonds new schools and additions. Noted April 5.

Tex., Corsicana—Hotel—G. A. McGregor, Kirby Bldg., Dallas, had plans prepared by Young & Young, Southwestern Life Bldg., Dallas, 5 story, 65 x 80 ft., brick, stone, steel and concrete, plain foundation, 11th and 4th Sts., here. $300,000.

Tex., Ft. Worth—Sanitarium—C. H. Harris, 1028 5th Ave., had plans prepared by O. H. Atkinson, 806 Taylor St., 3 story, brick, stone and concrete, plain foundation, 5th and Rosedale Sts. $250,000. Noted Sept. 13.

Tex., San Antonio—Hotel—S. L. Jeffers, 1 Bushnell Pl., having preliminary plans prepared by H. T. Phelps, 519 Hicks Bldg., 10 story, 100 x 140 ft., rein.-con., brick and stone, plain foundation, Ave. E and 3rd St. $400,000.

Tex., Slaton—School—Bd. Educ. having plans prepared by E. F. Rittenberry, Amarillo, 3 story, brick and concrete. $150,000.

Tex., Waco—Dormitory—Methodist Home Bd. Trustees, W. F. Barnett, mgr., having plans prepared by M. W. Scott, 412½ Franklin Ave., brick, Herring Ave. $150,000.

Okla., Bristow—High School—Election in December to vote on $150,000 bonds 3 story and basement, 140 x 180 ft. brick, plain foundation, 9th and Pecan Sts. Architect not selected.

Ore., Astoria—Store, Office and Apartment—C. F. Purcell, Seattle, Wash., plans 3 story and basement, 100 x 100 ft., 14th, 15th, Duane and Commercial Sts., here. $225,000. Architect not selected.

Ore., Portland—Temple—Masonic Temple Assn., Masonic Bldg., receiving sketches 100 x 100 ft. temple, Main, Madison, West Park and 10th Sts., $1,000,000.

Calif., Alhambra—Hotel and Store—Community Hotel Corp. had sketches made by W. L. Stoddard, 50 East 41st St., New York City, 2 and 3 story, community hotel and store, Garfield Ave., here. $300,000.

Calif., Long Beach — Church — Second Church of Christ Scientist, Markwell Bldg., plans fireproof church. $250,000.

Calif., Los Angeles—Apartment—J. Jacobuwitz, c/o R. L. Jones, archt., 311 South Western Ave., having plans prepared 4 story and basement, 50 x 160 ft. concrete and brick, Virgil Ave.

Calif, Los Angeles—Office and Store—Birch Co., 108 Larchmont Blvd., had preliminary plans prepared by Austin & Ashley, et al., Detwiler Bldg., 14 story, 145 x 160 ft., fireproof, Hill and 9th Sts.

Calif., Pomona—Manual Training, etc.—Pomona City High School Dist. had preliminary plans prepared by W. H. Weeks, 369 Pine St., San Francisco, and R. H. Orr, associated archt., Corporation Bldg., Los Angeles, for brick manual training building and gymnasium. $150,000.

BIDS DESIRED

Mass., Boston—School—Nov. 10, by F. J. Kneeland chn. Pub. Building Dept. 2 story and basement, 55 x 130 ft., rein.-con. and brick, wood pile foundation, Bluehill Ave., known as William Endicott Grammar School, $375,000. O'Connell & Shaw, 134 Newbury St., archts. Noted Feb. 1.

Mass., Roxbury (Boston P. O.)—School—Nov. 18, by F. J. Kneeland, chn. Pub. Building Dept., Boston, 2 story and basement, 80 x 240 ft., rein.-con. and brick, wood pile foundation, known as Phillips Brooks Grammar School. $500,000. J. Gray, 175 High St., Boston, archt. Noted Feb. 1.

Conn., Hartford—High School—Nov. 20, by Bd. Contract and Supply at office of Mayor, Municipal Bldg., constructing Morgan Gardner Bulkeley High School. E. T. Wiley and Frank Irving Cooper Corp., Amer. Industrial Bldg., archts. Noted Sept. 27.

Conn., New Haven—School—Nov. 21, by Com. on Buildings of Bd. Educ., 169 Church St., school, Pope St. and Townsend Ave. R. B. Hall, secy. Brown & Von Beren, Chamber of Commerce Bldg., archts. Noted May 24.

N. Y., Brooklyn—Administration, etc.—Dec. 4, by E. S. Walsh, comr. Canals & Waterways, Albany, administration building and oil house, Gowanus Bay, here, Contr. 234; adv. E. N.-R. Nov. 8.

N. Y., New York—Hotel—M. Gerschlesser, c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build 15 story, brick, steel and stone, plain foundation, West 44th St. $1,250,000. Work will be done by separate contracts under supervision of architect.

N. Y., Schenectady—Bank—Nov. 10, by Schenectady Trust Co., 3 story, 82 x 105 ft., steel, stone and terra cotta, plain founda-

Buildings (Continued)

tion, Main St. $200,000. L. R. Nichols, 125 Bway., archt.

N. Y., West Haverstraw—Solaria—Nov. 14, by G. Blagden, pres. Bd. Mgrs. New York State Orthopedic Hospital for Children, solaria at hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Nov. 8. Former bids rejected. Noted Oct. 4.

Pa., Erie—Apartment—Nov. 10, by F. B. McBrier, pres. West 6th St. Apartment Co., 3 story, 125 x 125 ft., Chestnut St. $300,000. A. F. Janowitz, 811 Prospect Ave., Cleveland, O., archt.

Pa., Swissvale (Pittsburgh P. O.)—Church—Nov. 12, by A. F. Link, archt., North Craig St., Pittsburgh, 2 story and basemnt, stone and steel, here, for St. Anselms Congregation. $150,000.

Del., Newark—School—Nov. 28, by Bd. Educ. of Newark and Delaware School Auxiliary Assn., 4116 Du Pont Bldg., Wilmington, 2 and 3 story, 118 x 170 ft. W. H. Steel, pres. Bd. Educ.; adv. E. N.-R. Nov. 8.

W. Va., Huntington—School—Nov. 26, by Bd. Educ., constructing Lincoln High School, 3 story and basement, 146 x 230 ft., terra cotta, brick and steel. $200,000. R. M. Bates, Jr., 411 11th St., archt. Noted Oct. 25.

Ky., Louisville—Station and Office—Dec. 3, by Louisville R.R. Co., 314 West Jefferson St., 4 story, 76 x 490 ft. brick, 2nd and Liberty Sts. $1,250,000. Joseph & Joseph, Francis Bldg., archts. Noted Sept. 13.

O., Cleveland Heights (Warrensville P. O.)—Apartment—J. Narosny, 13407 3rd Ave., East Cleveland, taking bids 4 story, 41 x 190 ft., brick, 12479 Cedar Rd., here. $175,000. M. Weis, 617 Union Bldg., Cleveland, archt.

O., Dayton—Bank and Office—Nov. 20, by Third Natl. Bank, 4 story and basement, 120 x 187 ft., brick, stone and steel, Main St. $1,500,000. Schenck & Williams, Mutual Home Bldg., archts.

O., Lakewood (Cleveland P. O.)—High School—Nov. 24, by Bd. Educ., 2 story, 89 x 229 ft., brick, steel and concrete, Hilliard Rd. $425,000. Former bids rejected. C. W. Hopkinson, Rose Bldg., Cleveland, archt. Noted Nov. 1.

Mich., Detroit—Hotel—Bonnah & Chaffee, archts., 528 Farwell Bldg., taking bids and opens same about Nov. 15, 8 story and basement, 50 x 200 ft. rein.-con. and brick, plain foundation, Woodward Ave., for J. Barlum, 206 East Grand River Ave. Noted Oct. 25.

Mich., Grosse Pointe (Detroit, P. O.)—Church—Nov. 15, by W. E. N. Hunter, archt., 1436 Washington Blvd., Detroit, 3 story, 75 x 157 ft. rein.-con., brick and steel, plain foundation, for Grosse Pointe Presbyterian Church. $250,000. Noted Nov. 1.

Ill., Chicago—Memorial—Marshall & Fox, archts., 721 North Michigan Ave., receiving bids 3 story, fireproof, 44-48 East Erie St., for J. B. Murphy Memorial Assn., c/o archts. $500,000.

Minn., Virginia—School—Nov. 20 (extended date), by F. Johnson, chn. Bd. Educ., 2 story and basement, 60 x 115 ft., rein.-con. and brick, South Side. $150,000. C. W. Kelly, 505 Lonsdale Bldg., Duluth, archt. and engr. Noted Sept. 13.

Ariz., Tucson—Library—Nov. 26, by Lyman & Place, archts. and engrs., 76 North Stone Ave., 3 story and basement, 42 x 110 x 194 ft., brick, terra cotta, steel and rein.-con., on Campus, for Bd. Regents, Arizona University, here. $405,000.

Calif., Fresno—Bank and Office—R. L. Felchlin Co., archts., Patterson Bldg., receiving bids 15 story and baseemnt, fireproof, Mariposa and J Sts., for Pacific Southwest Trust and Savings Bank, Mariposa and J Sts. To exceed $750,000.

Calif., Los Angeles—Market and Loft—A. C. Martin, archt., Higgins Bldg., receiving bids 5 story and basement, rein.-con. and brick, Bway. near 7th St., for Desmond Store, 533 South Spring St., to exceed $250,000.

Calif., Los Angeles—Store, etc.—C. F. Plummer, archt., Story Bldg., receiving bids 3 story and basement, brick, 7th and Union Aves., for Youngs Market, 638 South Bway. To exceed $150,000. Noted May 3.

BIDS RECEIVED

N. Y., New York—High School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Oct. 30, James Monroe High School, Boynton Ave. from East 172nd to East 173rd Sts., here, for Bd. Educ., 500 Park Ave., from T. A. Clarke Co., 122 Livingston St., Brooklyn, (A) $2,145,000, (B) $2,195,000. Noted Oct. 11.

O., Piqua—High Schools—Bd. Educ. Bennett Jr. High School, 2 story and basement, 61 x 187 ft., rein.-con. and brick, also Wilder Jr. High School, 2 story and basement, 76 x 234 ft., brick, stone and terra cotta, Walker and Gill Sts., from Green & Sawyer, $167,824 and $201,536 respectively. Noted Oct. 25.

O., Springfield—School—Bd. Educ., Oct. 29, 2 story and basement, 71 x 163 ft., rein.-con. and brick, from T. A. Graham, 1519 Clifton Ave., $142,821. Noted Oct. 25.

Calif., Sacramento—Theatre—Paramount Theatre, Inc., c/o L. F. Starks, archt., 1010½ 8th St., general contract rein.-con. and steel, K St., from Mathews Constr. Co., Forum Bldg., $224,000. Noted Oct. 18.

WATERWAY—ILLINOIS

Following are lowest three bids opened by Dept. Pub. Wks. & Bldgs., Div. Waterways, Springfield, Sept. 19, for constructing Lockport Lock (exclusive of miter gates), (A) Greene & Sons Co., 705 Tower Bldg. (awarded contract); (B) M. E. White Co., 130 North Wells St.; (C) Byrne Bros. Constr. Co., 358 East 115th St. Contractors all of Chicago. The unit bids were as follows:

	A	B	C
Clearing (lump sum)	$8,750.00	$3,300.00	$3,200.00
Cofferdams, pumping, etc. (lump sum)	190,000.00	73,000.00	166,000.00
171,000 cu.yd. excavation	2.00	3.50	478,000.00
39,000 sq.ft. channeling	.50	1.00	1.27
12.3 M.ft. b.m. pine and fir timber	100.00	100.00	100.00
4.4 M.ft. b.m. white oak timber	200.00	200.00	200.00
1,564,000 lb. structural steel	.10	.105	.15
167,000 lb. steel castings	.17	.24	.30
22,000 lb. gray iron castings	.12	.18	.25
36,000 lb. steel forgings	.24	.18	.25
96,600 cu.yd. concrete	6.60	6.50	9.50
30,500 lb. metal reinforcement	.05	.55	.10
18 lin.ft. 30-in. vitrified pipe	5.00	7.00	5.00
48-30-in. vitrified pipe specials	16.00	25.00	20.00
58 lin.ft. 24-in. vitrified pipe	3.00	5.00	3.00
4-24-in. vitrified pipe specials	12.00	15.00	15.00
600 lin.ft. 18-in. vitrified pipe	2.70	2.50	1.60
29-18-in. vitrified pipe specials	8.00	8.00	10.00
170 lin.ft. 8-in. vitrified pipe and specials	1.00	1.00	2.00
1,770 lin.ft. 6-in. vitrified pipe and specials	.15	.75	1.20
120 lin.ft. 4-in. vitrified pipe and specials	.40	.50	.75
15,000 lb. 1, 2, 4½ and 6-in. W.S. pipe and railings	.15	.27	.50
12,800 lb. 6 and 8-in. c.i. pipe and specials	.07	.12	.10
6 valve sets for shuttle gate	390.00	825.00	800.00
3 6-in. quick oper. gate valves	40.00	55.00	60.00
3,850 lin.ft. 3-in. fiber conduit	.40	.30	.50
2 lift gate machinery	20,000.00	26,500.00	24,750.00
2-50-hp. electric motors	2,000.00	2,000.00	2,000.00
4 gate for culvert valves	2,000.00	2,300.00	3,500.00
Extended totals	$1,460,077	$1,643,249	$2,007,063

BULL RUN CONDUIT—PORTLAND, ORE.

Following are lowest three bids opened by city, Oct. 3, for constructing Bull Run Conduit, (A) Willamette Iron & Steel Works, Foot of Front St., N., (awarded contract for lock bar pipe); (B) J. H. Tillman Co., 622 Ry. Exch. Bldg., riveted steel pipe; (C) J. F. Shea, Henry Bldg., riveted steel pipe. The unit bids were as follows:

	A	B	C
36,200 lin.ft. 60-in. riveted steel pipe, $\frac{5}{16}$-in. plate	....	$16.49	$15.25
12,300 lin.ft. 60-in. riveted steel pipe, $\frac{3}{8}$-in. plate	....	18.96	17.71
1,600 lin.ft. 60-in. riveted steel pipe, $\frac{7}{16}$-in. plate	....	22.34	20.46
2,700 lin.ft. 60-in. riveted steel pipe, $\frac{1}{2}$-in. plate	....	30.90	26.54
35,400 lin.ft. 52-in. riveted steel pipe, $\frac{1}{4}$-in. plate	....	11.77	11.72
22,400 lin.ft. 52-in. riveted steel pipe, $\frac{5}{16}$-in. plate	....	14.18	13.60
21,800 lin.ft. 52-in. riveted steel pipe, $\frac{3}{8}$-in. plate	....	16.46	15.79
Alternate proposal for lock bar or hammer welded and annealed pipe	....	....	....
49,840 lin.ft. 58-in. lock bar pipe, $\frac{5}{16}$-in. plate	$16.09	....	....
500 lin.ft. 58-in. lock bar pipe, $\frac{3}{8}$-in plate	18.52	....	....
1,000 lin ft. 58-in. lock bar pipe, $\frac{7}{16}$-in. plate	20.56	....	....
1,460 lin.ft. 58-in. t.r. butt strap, $\frac{1}{2}$-in. plate	33.10	....	....
60,600 lin.ft. 50-in. lock bar pipe, $\frac{1}{4}$-in. plate	12.54	....	....
19,000 lin.ft. 50-in. lock bar pipe, $\frac{5}{16}$-in. plate	14.25	....	....
Items same for either	....	....	....
12-6-in. air valves with 6-in. gate valves	323.73	330.00	292.00
10-6-in. air valves with 6-in. gate valves offset	343.35	340.00	292.00
6-4-in. air valves with 4-in. gate valves	189.66	200.00	160.00
7-4-in. air valves with 4-in. gate valves offset	209.28	210.00	160.00
35-6-in. blow offs with 6-in. gate valves	71.94	30.00	34.00
2,000 lin.ft. 6-in. class "B" B. & S. c.i. pipe	1.31	1.50	1.50
22,200 lb. steel trestle bents	.095	.10	.14
720 lin.ft. boxing for 60-in. diameter pipe	4.09	5.50	4.50
780 lin.ft. boxing for 52-in. diameter pipe	3.81	5.00	4.50
310 cu.yd. concrete masonry, class A	32.70	25.00	30.00
600 cu.yd. concrete masonry, class B	30.52	21.00	28.00
1 venturi meter with recorder for 60-in. pipe in place	5,668.00	4,200.00	5,400.00
1 venturi meter with recorder for 52-in. pipe in place	5,014.00	4,000.00	4,700.00
2 reinforced concrete meter houses complete	1,308.00	650.00	1,250.00
1 reinforced concrete addition to gate chamber No. 1	2,398.00	1,800.00	1,800.00
1 concrete inlet chamber at res. No. 1	14,170.00	12,000.00	11,000.00
1-48-in. x 72-in. sluice gate with weatherproof stand	2,670.50	1,800.00	2,650.00
1-60-in. gate valve with weatherproof stand	4,251.00	4,200.00	4,000.00
1-7-ft. traveling intake screen (placing only)	545.00	400.00	800.00
2-6-ft. traveling intake screen (placing only)	872.00	300.00	1,200.00
10,000 cu.yd. solid rock excavation (trench)	3.82	3.50	4.50
290,000 cu.yd. other excavated material and refilling pipe trenches	1.11	.94	1.18
13,500 cu.yd. gravel backfill	2.18	3.00	3.00
70,000 lin.ft. 6-in. diameter drain tile in place	.17	.26	.20
21,000 ft. B.M. creosoted lumber in place	59.95	70.00	60.00
53 acres clearing and grubbing	599.50	350.00	700.00
6,700 cu.yd. solid rock excavation (roadway)	2.18	2.40	2.25
74,500 cu.yd. other excavated material (roadway)	.82	.60	.85
718,000 ft. B.M. road plank in place	39.24	40.00	36.00
96,000 ft. B.M. timber for bridges and guard fences in place	52.32	55.00	56.00
1,044 lin.ft. 9-in. corrugated iron culvert in place	1.64	1.25	1.50
630 lin.ft. 12-in. corrugated iron culvert in place	1.96	1.60	1.80
180 lin.ft. 15-in. corrugated iron culvert in place	2.29	2.00	2.10
108 lin.ft. 18-in. corrugated iron culvert in place	3.27	2.75	3.00
54 lin.ft. 24-in. corrugated iron culvert in place	4.09	3.75	3.75
36 lin.ft. 30-in. corrugated iron culvert in place	6.75	6.50	6.20
27,000 lb. structural steel girders, Gresham, 30 ft. and 61 ft.	.0893	.10	.12
150,000 lb. structural steel (Sandy River Bridge)	.0893	.10	.125
81,000 lb. structural steel (Bull Run River Bridge)	.0893	.11	.13
4,000 lb. reinforcing steel bars in place	.0872	.07	.10
Extended totals	$2,571,404	$2,628,645	$2,647,161

Buildings (Continued)

CONTRACTS AWARDED

R. I., Exeter—Administration, etc.—State School Bd., Providence, 3 story, 70 x 200 ft., brick and concrete addition, Exeter State School, to Hope Building Co., 87 Weybosset St., Providence, $142,000. Noted Sept. 20.

R. I., Providence—Armory—Comn. Armory of Mounted Commands, 1, 2 and 4 story, brick, plain foundation, North Main St., to E. Turgeon, 86 Weybossett St., $424,000. Archts. est. $380,000. Noted Oct. 11.

N. Y., Brooklyn—Apartment—Silco Realty Co., c/o Slee & Bryson, archts. and engrs., 154 Montague St., will build 6 story, brick, steel and stone, plain foundation, Clinton St., by day labor. $350,000.

N. Y., New York—Apartment—Dunnock Realty Co., Inc., c/o E. Roth, archt. and engr., 119 West 40th St., will build 10 story, brick, steel and stone, plain foundation, 325 West 45th St., by day labor. $500,000.

N. Y., New York—Apartment—Glick & Fein Building Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., will build 6 story, brick, steel and stone, plain foundation, 133rd St. and St. Nicholas Ave., by day labor. $400,000.

N. Y., New York—Apartment—H. J. Holding Co., c/o C. S. Clark, archt. and engr., 411 East Tremont Ave., will build 6 story, brick, steel and stone, plain foundation, 180th St. and Crotona Parkway, by day labor. $200,000.

N. Y., New York—Apartment—Hyman Realty Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, East 144th St., by day labor. $300,000.

N. Y., New York—Apartment—B. London, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 5 story, brick, steel and stone, plain foundation, St. Nicholas Ave., by day labor. $500,000.

N. Y., New York—Apartment—Shirbar Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, 87 x 105 ft., brick, steel and stone, plain foundation, Ft. Washington Ave. and 178th St., by day labor. $250,000.

N. Y., New York—Apartment—Wallart Constr. Co., 2209 University Ave., will build 6 story, brick, steel and stone, plain foundation, University Ave., by day labor. $500,000. Margon & Glaser, 2804 3rd Ave., archts. and engrs.

N. Y., New York—Museum—Hispanic Society of America, Bway. and 156th St., 3 story, 29 x 200 ft., brick, steel and stone, plain foundation, 610 West 156th St., to Marc Eidlitz & Son, Inc., 41 East 42d St. Archts. est. $400,000.

N. Y., Patchogue—Bank—City Trust Co., brick, steel and stone, plain foundation, to Burke Bros. Constr. Co., 1476 Bway., New York. Archts. est. $150,000.

N. Y., Woodhaven—Theatre—Home Building & Constr. Co., 1401 Flatbush Ave., Brooklyn, brick, steel and stone, plain foundation, 96th St. and Jamaica Ave., here, to A. H. Schwartz, 1401 Flatbush Ave., Brooklyn. Archts. est. $600,000.

Pa., Beaver Falls—School—St. Marys Roman Catholic Congregation, 2 story and basement, 62 x 114 ft. with 19 x 41 ft. wing, to Cook-Anderson Co., 5th and Insurance Sts., Beaver. Archts. est. $150,000.

Pa., Greensburg—Dormitory—Seton Hill College, 5 story and basement, 35 x 108 ft., to Duquesne Constr. Co., Cypress and Aspen Sts., Pittsburgh. Archts. est. $200,000.

Pa., Phila.—Exchange—Bell Telephone Co., 17th and Arch Sts., 2 and 3 story and basement, 91 x 220 ft. rein.-con., brick and steel, plain foundation, 3808-3810 Chestnut St., to Irwin & Leighton, 12th and Cherry Sts., $500,000.

Pa., Phila.—Office—Sterling Realty Co., c/o L. Rothchild, archt., 215 South Broad St., 12 story and basement, 45 x 65 ft., rein.-con. and brick, plain foundation, 16th and St. James Sts., to Roberts & Roller, 1904 Sansom St., $285,000.

Pa., Pittsburgh—High School—Bd. Educ., Fulton Bldg., 4 story and basement, brick and stone addition, Ruth St., to A. and S. Wilson, 541 3rd Ave., $756,735. Noted July 26.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., general contract 2 story and basement, 85 x 167 ft., Boggs Ave., to H. L. Ley Constr. Co., Westinghouse Bldg., $147,023. Noted July 26.

Va., Richmond—Bank and Office—State and City Bank, general contract 4 story, 100 x 105 ft., concrete, tile and steel, brick and concrete foundation, 3d and Main Sts., to J. T. Wilson, Mutual Bldg. Archts. est. $1,000,000.

La., Shreveport—Theatre—E. Weil, archt., Whitney Central Bldg., New Orleans, 111 x 150 ft., brick, steel and stone, Louisiana Ave., to Stewart-McGehee Constr. Co., Florida Ave., Baton Rouge, $439,561, for Saenger Amusement Co., Shreveport. Noted Oct. 11.

O., Cleveland—Commercial and Office—Seidman Mortgage Co., Discount Bldg., 6 story, 43 x 132 ft., brick, steel and concrete, East 9th St. and Vincent Ave., to Parker Constr. Co., 1836 Euclid Ave. Archts. est. $300,000.

O., Cleveland—High School—Bd. Educ., East 6th St. and Rockwell Ave., 3 story, 40 room, brick, steel and concrete, West 46th St. and Hyde Ave., to Drummond-Miller Co., 7500 Euclid Ave. Archts. est. $800,000.

O., Portsmouth—Hotel—Hurth Hotel Co., 8 story and basement, 40 x 110 ft., brick, steel and stone, Chillicothe and 3rd Sts., to Taylor & Linn, Zanesville, $300,000.

O., Zanesville—High School—Bd. Educ., Theodore Roosevelt High School, 2 story and basement, 92 x 175 ft., Belmont St. and Newark Rd., to Dunzweiler Constr. Co., Frazeysburg Rd., $209,650.

Ill., Litchfield—High School—Bd. Educ., 2 story and basement, brick and rein.-con., to G. D. Tillman, Central Trust Bldg., Centralia. Archts. est. $150,000. Noted June 14.

Ill., Niles (R. F. D. Norwood Park, Chicago P. O.)—Dormitory—E. Brielmaier & Sons Co., archts., 43 2Bway., Milwaukee, Wis., 3 story and basement, brick, tile and concrete, here, to Van Etten Bros., 11016 South Michigan Ave., Chicago, for St. Hedwig Industrial School. Archts. est. $300,000. Noted Oct. 11.

Ill., Springfield—Club—Knights of Columbus, 231½ South 6th St., 3 story and basement, 95 x 163 ft., rein.-con., brick and steel, 6th St., general contract to Murch Bros. Constr. Co., Railway Exch. Bldg., St. Louis, Mo. Archts. est. $300,000.

Wis., Milwaukee—Exchange—Wisconsin Telephone Co., 418 Bway., 5 additional stories, 120 x 120 ft., brick and concrete, to W. Winter & Son, 1025 2nd St. Archts. est. $500,000. Noted Apr. 26.

Ia., Marion—School—Bd. Educ., general contract 3 story and basement, 65 x 158 ft., rein.-con., brick, tile and stone, to Madsen & Peterson, 646 Builders Exch., Minneapolis, Minn., $91,400. Noted Sept. 27.

Mo., Nevada—High School—C. A. Smith, archt., 602 Finance Bldg., Kansas City, 3 story and basement, 64 x 120 ft., rein.-con. and brick, to Dean & Hancock, Sedalia, for Bd. Educ. $160,000. Noted Oct. 4.

Ark., Hot Springs—Hotel—Arlington Hotel Co., general contract 11 story, 200 x 200 ft., brick, stucco, tile and rein.-con., Central Ave., to Ault & Burden, Little Rock, $2,100,000. Noted Sept. 27.

Tex., San Antonio—Apartment—S. J. Jeffers, 1 Bushnell Pl., will build 6 story, 90 x 160 ft., rein.-con., brick and stone, plain foundation, Ave. E and 3rd St., by day labor. $200,000. M. L. Diver, Calcasieu Bldg., engr. H. T. Phelps, Hicks Bldg., archt. Noted Oct. 11.

Okla., Oklahoma City—Schools—Bd. Educ., 400 North Walnut St., 2 story and basement, 100 x 140 ft., brick and steel addition, 18th and Ellison Sts., general contract to W. S. Bellows Constr. Co., Hersk Bldg., $179,680, 3 story, 180 x 237 ft., brick and steel, 33rd and Lee Sts., general contract to A. F. Stewart Constr. Co., First Natl. Bank Bldg., $305,861, 3 story, 180 x 237 ft., brick and steel, 9th and Western Sts., general contract to C. M. Dunning, 322 North Robinson St., $319,450; heating contracts to A. F. Binns Plumbing Co., 806 West Grand St., $33,043, $57,361 and $57,361 respectively.

Calif., Hollywood—Apartment—G. W. Cowan et al, c/o Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, 14 story and basement, rein.-con., North Sycamore Ave., to Hennessy Bros., Bank of Italy Bldg., Los Angeles, percentage basis. Archts. est. $1,000,000.

Calif., Oakland—Store, Loft and Dance Hall—M. F. Smith, c/o Schirmer-Bugbee, archts., Thayer Bldg., 3 story and basement, rein.-con., to Schuler & McDonald, 308 12th St., $175,300.

Calif., Santa Rosa—Lodge and Store—Santa Rosa Lodge of Elks, 3 story, rein.-con. and steel, A St., to A. M. Hildebrand, 406 4th St., $250,000. Noted Sept. 6.

Federal Government Work

PROPOSED WORK

N. Y., Dunkirk—Superstructure—U. S. Engineer, Buffalo, rejected bids stone superstructure on breakwater, here. Noted Oct. 18.

Ala., Mobile—Lumber—U. S. Engineer, Mobile, plans to purchase about 150,000 ft. yellow pine for work on Warrior River.

Ky., Addison—Lock Gates—U. S. Engineer, P. O. Box 72, Louisville, plans mitering lock gates at Dam 45, here.

Tex., Galveston—Dredging—U. S. Engineer rejected bids dredging in Trinity River. Noted Aug. 30.

BIDS DESIRED

N. Y., Staten Island—Jetty—Nov. 3, at office Constructing Quartermaster, 39 Whitehall St., New York, stone jetty, Miller Field, here. Former bids rejected. Noted Oct. 4.

W. Va., Huntington—Quarterboat—Nov. 23 at office U. S. Engineer, one 5 x 26 x 80 ft. steel quarterboat.

Fla., Jacksonville—Catamarans—Nov. 28 at office U. S. Engineer, pontoon catamarans for Dredge Major J. C. Mallery; adv. E. N.-R., Nov. 8.

Ala., Mobile—Lumber—U. S. Engineer, Mobile, taking bids and opens same about Nov. 12, 680,000 ft. b.m. yellow creosoted pine.

Ala., Montgomery—Towboat—Dec. 10, at office U. S. Engineer, one 134 ft. steel hull stern wheel towboat; adv. E. N.-R. Nov. 8.

La., New Orleans—Barge and Hull—Dec. 3, at office U. S. Engineer, 329 Custom House, steel oil barge and steel hull for derrick boat; adv. E. N.-R. Nov. 8.

Mo., Harrisonville—Post Office—Nov. 30, by Treas. Dept., Wash., D. C., Post Office building, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Nov. 8.

Ark., Marianna—Post Office—Dec. 5, by Treas. Dept., Wash., D. C., constructing U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Nov. 8.

Porto Rico, San Juan—Quarters—Spec. 4909—Nov. 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., double quarters and auxiliary building, National Radio Station, here. Noted Sept. 20.

BIDS RECEIVED

Ill., Rock Island—Discharge Pontoons—U. S. Engineer, Rock Island, furnishing twenty 3 x 14 x 38 ft., steel discharge pontoons, from Dubuque Boat and Boiler Wks., Dubuque, Ia., $44,840. Noted Sept. 27.

Wis., Milwaukee—Steel Barge, etc.—U. S. Engineer, constructing steel barge and installing steel derrick, from Manitowoc Ship Building Co., 16th St. and River, Manitowoc, $103,250. Noted Oct. 25.

CONTRACTS AWARDED

Conn., Bridgeport—Dredging—U. S. Engineer, Providence, R. I., dredging 348,000 cu.yd. in Harbor, here, to Bay State Dredging and Contg. Co., 62 Condor St., East Boston (Boston P. O.), Mass., $80,360. Noted Nov. 1.

Md., Annapolis—Water Supply Improvements—Spec. 4890—Bureau Yards & Docks, Navy Dept., Wash., D. C., improvements to water supply at high power radio station, here, to A. Pope, 4722 15th St., N. W., $19,750 (120 days). Noted Oct. 25.

O., Cincinnati—Pontoons, etc.—U. S. Engineer, Cincinnati, furnishing 6 steel pontoons and riveted steel pipe, to Nashville Bridge Co., foot of Shelby St., Nashville, Tenn., $18,740. Noted Sept. 20.

Tex., San Antonio—Floors and Runways—Constructing Quartermaster, Ft. Sam Houston, concrete floors and runways at air intermediate depot, Kelly Field 1, here, to F. A. Wilson, San Antonio, Tex., $8,000. Noted Oct. 11.

Calif., Presidio (San Francisco P. O.)—Pump, etc.—Constructing Quartermaster, Fort Mason, San Francisco, 20 in. booster pump and motor f.o.b. Rio Vista, and addition to pump house, here, to Maine Iron Wks., 16th and Daggett Sts., San Francisco, $9,685. Noted Nov. 1.

INTAKE—NEW BEDFORD, MASS.

Following are lowest three bids opened by Water Bd., Oct. 5, for constructing intake pipe and accessories at Little Quittacas Pond. (A) R. H. Beattie, Buffington Bldg., Fall River, (awarded contract); (B) Merritt, Chapman & Scott Corp., 17 Battery Pl., New York; (C) New Bedford Boiler & Machine Co., 42 Front St. The contract for furnishing the pipe, etc., for this project (1,240 lin.ft.@ $18; 145 gaskets@ $4.50; 100 sets of tile bolts@ $4) was awarded to the Lock Joint Pipe Co., 9 Rutledge Ave., Ampere, N. J. The unit bids were as follows:

	A	B	C
400 yd. earth excavation above elevation 45.0	$11.20	$5.95	$4.00
240 yd. earth excavation below elevation 45.0	11.20	15.30	6.00
60 yd. rock excavation	39.40	20.00	24.00
80 lin.ft. laying 60 in. pre-cast concrete pipe	6.00	16.40	17.00
100 cu.yd. earth excavation for screen chamber above elevation 45.0	7.05	5.10	6.50
280 cu.yd. earth excavation for screen chamber below elevation 45.0	7.05	11.10	7.50
320 cu.yd. earth excavation for intake tower	17.40	12.40	13.50
300 cu.yd. dredging around intake tower	12.95	2.30	20.00
80 cu.yd. rock excavation	39.40	22.00	25.00
1,155 lin.ft. laying 60 in. pre-cast pipe	83.50	84.30	79.25
800 cu.yd. concrete masonry in screen chamber and intake tower	19.70	23.00	27.20
1,200 bbl. portland cement used in screen chamber and intake tower sub-structures	4.55	5.00	3.75
23,000 lb. reinforcing steel	.10$\frac{8}{10}$	.08	.06
1,700 lin.ft. intake tower foundation piles	1.26	.88	1.10
Screen chamber superstructure (lump sum)	5,500.00	9,800.00	14,516.00
Intake tower superstructure (lump sum)	3,700.00	8,000.00	13,200.00
150 cu.yd. retaining wall masonry	28.40	25.80	26.50
Furnishing and placing miscellaneous iron work, wood floor grills, etc., and for placing gates, furnished by city (lump sum)	2,600.00	2,940.00	2,200.00
Extended totals	$187,040	$191,685	$199,217

ROAD WORK—KENTUCKY

Following are lowest three bids opened by State Highway Comn., Frankfort, Sept. 26, for improving 6.502 mi. Mt. Sterling-Owingsville Rd., Montgomery Co., (A) Gradison Constr. Co., 701 1st Natl. Bank Bldg., Cincinnati, O.; (B) Metzel, O'Hearn, Vastine & Lewin, Covington; (C) J. A. Kreis, Knoxville, Tenn. The unit bids were as follows:

	A	B	C
1 acre clearing and grubbing	$50.00	$100.00	$100.00
524 trees and stumps	3.00	5.00	5.00
45,297 cu.yd. earth excavation	.50	.58	.50
984 cu.yd. borrow excavation	1.00	.60	.50
133 cu.yd. structural excavation	1.00	1.50	1.00
25,674 sq.yd. overhaul	.05	.05	.03
14,400 sq.yd. scarifying and reshaping	.05	.05	.10
1,326 ft. concrete curb and gutter	.50	[illegible]	1.40
257 cu.yd. class A concrete	14.00	24.00	26.00
8,700 lb. reinforcement	.06	.07	.07
1 rural catch basin	50.00	60.00	50.00
276 ft. 12 in. culvert metal pipe	1.50	2.50	1.40
1,000 cu.yd. rock excavation	1.25	2.50	1.40
69,188 sq.yd. rock asphalt	1.00	1.03	1.20
23,221 tons crushed limestone			3.60
69,188 sq.yd. 6 in. concrete base	2.15	2.18	2.07
69,188 sq.yd. reinforced concrete	2.65	2.69	2.94
938 ft. 18 in. vitrified pipe	1.75	2.25	1.80
172 ft. 24 in. vitrified pipe	2.25	3.00	3.40
103 cu.yd. encased concrete	12.00	20.00	24.00
938 ft. 18 in. concrete pipe	2.50	3.00	3.60
172 ft. 24 in. concrete pipe	3.50	4.00	5.00
Extended totals rock asphalt concrete base vitrified pipe	$251,283	$266,326	$265,605
Extended totals rock asphalt concrete base concrete pipe	250,968	265,146	265,102
Extended totals reinforced-concrete pavement vitrified pipe	220,504	234,278	247,351
Extended totals reinforced-concrete pavement concrete vitrified pipe	220,189	233,098	246,848

Federal Government Work (Continued)

California—Sheet Steel—Bureau Supplies & Accounts, Navy Dept., Wash., D. C., furnishing 229,990 lb. soft sheet steel for Navy Yards, at Mare Island and San Diego, here, to Holbrook, Merrill & Stetson, 665 6th St., San Francisco, $12,019 (60 days).

Unclassified

PROPOSED WORK

Grain Elevator—Buffalo, N. Y.—W. E. Kreiner, 652 Elk St., plans grain elevator, concrete. $30,000.

Athletic Field and Bulkhead, etc.—Hightstown, N. J.—See "Buildings."

Swimming Pool—Bluefield, W. Va.—See "Buildings."

Levee — New Orleans, La. — Bd. Levee Comrs., New Orleans Court Bldg., soon takes bids completing Couret Stanton Levee, 151,000 cu.yd. F. C. Hyme, pres.

Terminal—Ashland, Ky.—American Rolling Mill Co. plans river and rail freight terminal along Ohio River, to exceed $25,000.

White Way—Louisville, Ky.—Bd. Pub. Wks., City Hall, plans "White Way" system on 4th and Market Sts., to exceed $25,000.

Street Lighting—Cuba City, Wis.—Plans street lighting system. $25,000. W. Brewer, clk. Engineer not selected.

Transmission Line—Texas—Western Public Service Co., Navasota, making survey transmission lines from Hempstead to Anderson, etc. $75,000. P. Freeman, supt.

Pipe Lines—Electra, Tex.—Electra Gas Co., c/o R. Y. Smith, had plans prepared pipe lines. $45,000.

Stadium—Waco, Tex.—Dec. 18, to vote on $60,000 bonds for stadium and athletic field, for Bd. Educ. V. C. Koch, city engr. Noted July 12.

Levee — Waxahachie, Tex. — Ellis Co. Levee Impvt. Dist. 2, voted $40,000 bonds, levee construction Sand Lake. T. C. Forest, Waxahachie, engr.

Drydocks and Slips—Los Angeles, Calif.—Bethlehem Shipbuilding Corporation, H. W. Hellman Bldg., plans drydocks and slips. $1,250,000.

Levees, etc.—Ontario, Calif.—San Antonio Storm Water Dist. plans election to vote on $40,000 bonds for levees, embankments, etc.

Grade Elimination—San Jose, Calif.—Defeated $100,000 bonds for grade elimination over Southern Pacific R.R. tracks. Noted Oct. 18.

Breakwater—St. John, N. B.—Dept. Pub. Wks., Ottawa, Ont., soon takes bids extending breakwater 1,490 ft. to Patridge Island, in St. John Harbor, 380,000 tons rock for random stone core and 225,000 tons rock for cover stones. A. Gray, St. John, engr.

Drilling—Alliston, Ont.—Henderson Exploration Co. plans to drill for oil and gas in Tecumseh Twp. $50,000.

Grain Elevator — Port Arthur, Ont. — Gilespie Grain Elevator Co. soon takes bids 500,000 bu. grain elevator.

Grain Elevator — Port Arthur, Ont. — Grain Growers Elevator Co., Ltd., plans 1,000,000 bu. grain elevator.

Electric Power Supply—Wiarton, Ont.—Council asked Hydro Power Comn. to submit estimates of cost for developing electric power from Sauble River.

BIDS DESIRED

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Nov. 12, by Superintendent Bd. Educ., 500 Park Ave., heating, ventilating and temperature regulation apparatus in P. S. 6, Tremont Ave., and P. S. 1[illegible], Jerome Ave., Bronx Boro. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Signal Tower—New York, N. Y.—Nov. 9, by Transit Comn., 49 Lafayette St., signal tower in 239th St. Yard of White Plains Rd. Rapid Transit R.R., Route 18, Sect. 2, Bronx Boro, Agreement "CU."

Heating, Ventilating, Plumbing, etc.—Phila., Pa.—Nov. 21, by F. H. Caven, dir. pub. wks., 216 City Hall, and Bd. Trustees Free Library of Phila., heating, ventilating, plumbing, etc. in free library building. H. Trumbauer, 406 Land Title Bldg., archt.; adv. E. N.-R. Nov. 8.

Levee—Clarksdale, Miss.—Nov. 13, by Yazoo Mississippi Delta Levee Comrs., enlarging 5 mi. old Ward Lake Levee, incl. 75,000 cu.yd. banquette, 10,000 cu.yd. topping. W. L. Head, engr. Noted Oct. 25.

Tunnel—Oregon—See "Railways."

BIDS RECEIVED

Column Foundations, etc.—Long Island City, N. Y.—Transit Comn., 49 Lafayette St., New York, Nov. 2, column foundations for part of Rapid Transit R.R. Flushing Route, from Phoenix Constr. Co., 41 Park Row, New York, $140,000, structural steel, from Jobson-Gifford Co., 30 East 42nd St., New York, $442,239. Noted Oct. 25.

Relocating Entrance, etc. — New York, N. Y.—Transit Comn., 49 Lafayette St., Nov. 2, relocating entrances to 157th St. station of Manhattan-Bronx Rapid Transit R.R., Agreement "CR," from J. Riches, 23 Willow Pl., Brooklyn, $51,912; frogs, switches and tracks at 180th St. Yard, Route 18, from McElraey & Kerwin, $15,285. Noted Oct. 25.

Subway—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., subway under Ferry Loop at foot of Market St., here, from Tibbitts-Pacific Co., 16 California St., $238,700. Noted Oct. 11.

CONTRACTS AWARDED

Station Finish—Brooklyn, N. Y.—Transit Comn., 49 Lafayette Ave., New York, station finish work for part of Bway.-4th Ave. Rapid Transit R.R. in Willoughby St. between Lawrence and Bridge Sts., here, to Station Finish Corp., 7 East 42nd St., New York, $51,000. Noted Nov. 1.

Culvert—Asbury Park, N. J. — Neptune Twp., 1,600 lin.ft. rein.-con. culvert, near here, to Seaman & Letzkus, Stone Harbor, $35,672.

Foundation—Blairsville, Pa.—Natl. Plate Glass Co., foundation, excavation and track laying for 190 x 300 x 500 ft. plant addition, here, to J. F. Casey Co., Union Arcade, Pittsburgh. Total cost $2,000,000.

Tunnel—Phila., Pa.—Comrs. Fairmount Park, City Hall, tunnel between 23rd St. and Spring Garden Bridge, to A. J. O'Neill Co. Weightman Bldg., $166,000. Noted Oct. 25.

Wall and Dike—Shreveport, La.—Constructing 1,000 ft. sheet pile toe wall, 24 ft. deep, and 2,200 ft. pile dike, 55 ft. deep, willow fascine, to A. W. Farney, Kansas City, Mo., $48.50 per lin.ft.

Coaling Station—Madison, Wis.—Chicago & Northwestern Ry., c/o B. A. Kulp, div. engr., 201 Blair St., 200 ton mechanical coaling station, brick, rein.-con. and steel, to Ogle Constr. Co., 28 East Jackson Blvd., Chicago. This corrects report Oct. 18 issue.

Docks—Two Harbors, Minn.—Duluth & Iron Range R.R., Duluth, will replace present wooden Dock 6 with steel structure, and build steel approach to same; also replace wooden pockets on Dock 1 with concrete slabs, here. $400,000. Work will be done by day labor. W. A. Clark, ch. engr.

Gas Distribution System—Magnolia Park, Tex.—See "Industrial Works."

Cement Lining—Porterville, Calif.—South Tule Irrigation Dist., cement lining approximately 10 mi. ditches, to Carlson Bros., Turlock, approximately $48,000.

Arena—Port Arthur, Ont.—Port Arthur Arena Co., 1 and 2 story, rein.-con., brick and steel, arena, plain foundation, Machar Ave., to Carter-Halls-Aldinger Co., Union Bank Bld., Winnipeg, Man. $150,000.

Equipment and Materials

See p. 783, "From the Manufacturer's Point of View."

OFFICIAL PROPOSALS

Bids: Nov. 19.

Bridge and Bulkhead Construction

Clearwater, Fla.

Sealed proposals will be received by the Board of County Commissioners of Pinellas County, at the Courthouse at Clearwater, Florida, up until 10 o'clock a.m., Monday, November 19th, 1923, at which time they will be opened and read publicly for the furnishing of the necessary materials, equipment, tools and labor for the construction of one 8 x 4-foot concrete box culvert, concrete slab and combination concrete curb and gutter, 1,500 lineal feet of creosoted timber bulkheads.

The work to be done includes the following approximate quantities:

84	M. F. B. M. Creosoted bulkhead timber.
2,500	lineal feet Creosoted timber piles.
290	square yards 6"-8"-6" Reinforced concrete slab.
258	lineal feet concrete curb and gutter.
258	lineal feet concrete guard rail.
46	cubic yards class "A" concrete.
4,570	pounds reinforcing steel.

All complete in place according to plans and specifications on file in the County Engineer's office, Clearwater, Florida.

Proposals will be considered on the lump sum basis for structures complete in place.

Plans and specifications may be secured from the County Engineer, upon payment of five dollars ($5.00), which will be refunded upon return of said plans and specifications in good condition within fifteen (15) days from the date of opening proposals.

All proposals shall be accompanied by either a certified check on a Pinellas County bank, drawn to the order of Pinellas County, E. H. Beckett, Chairman, in the sum of three per cent (3 per cent) of the amount of the proposal accompanied by same up to fifty thousand (50,000) dollars, which is the maximum amount required to cover proposals for the entire work, or a Bidder's Bond executed by a resident Agent now doing business in Pinellas County, representing a Surety Company authorized to do business in the State of Florida, and otherwise acceptable to the County. Such bidder's bond shall be in the sum of five per cent (5 per cent) of the total amount of the proposal accompanied by the same.

A construction bond in the amount of fifty per cent (50 per cent) of the amount of the contract with a Surety Company complying with all the requirements above noted will be required.

The County reserves the right to select the type of structure and to reject any or all bids.

Board of County Commissioners, Pinellas County, Florida.

E. H. BECKETT,
Chairman.
C. E. BURLESON,
County Engineer.

Bids: Nov. 19.

Road Construction

Clearwater, Fla.

Sealed proposals will be received by the Board of County Commissioners of Pinellas County at the Courthouse at Clearwater, Florida, up until 10 o'clock a.m., Monday, November 19th, 1923, at which time they will be opened and read publicly, for the furnishing of the necessary materials, equipment, tools and labor for the construction of certain roads, all as herein referred to.

The work to be done shall include the construction of a paving surface—with all incidental work preliminary thereto—of vitrified brick with bituminous filler, or Asphalt Block with Asphalt filler, or sheet asphalt, or bituminous macadam penetration method, all on a compacted limerock base, with concrete curb; or Portland cement concrete pavement, as alternate types of construction on roads number 1, 2, 3, 4, 6, 7 and 8; and for the construction of re-laid vitrified brick surface with bituminous filler and double bituminous surface-treated lime rock shoulders on road number 5; all as indicated and described in the plans and specifications for the work.

The completed work will include approximately 250,000 square yards of re-laid vitrified brick surface with asphalt filler and approximately 550,000 square yards of new pavement surface of the alternate types above designated; together with all clearing, grubbing, grading, drainage structures, rock base, curb and other items appurtenant to the completed work.

The roads to be improved and constructed are divided in the following groups.

Group 1—Section 1 of road 1 and sections 1 and 2 of road 4.

Group 2—Section 2 of road 1 and roads 2-3 and 8.

Group 3—Roads 5-6 and 7.

Proposals will be considered only on the following basis; on the combined projects as a whole, or on the combined projects in any one group.

Bidders submitting proposals on any road in a single group must also bid on all other roads in that group.

Bids will also be considered on the combined projects as a whole or on any group as a whole on the lump sum basis, and the County reserves the right to award each contract on either a lump sum or unit price basis as it may consider to its best interest.

All items necessary for the completion of any road in connection with the type of wearing surface must be bid upon, and if not, same shall be sufficient cause to reject the proposals.

All work done and materials furnished shall be in accordance with the provisions of the plans and specifications therefor on file in the office of the County Clerk and of the County Engineer, Courthouse building, Clearwater, Florida.

Plans and specifications may be secured from the County Engineer upon payment of ten dollars ($10.00), which will be refunded upon return of said plans and specifications in good condition within fifteen days from the date of opening proposals.

All proposals shall be accompanied by either a certified check on a Pinellas County bank, drawn to the order of Pinellas County, E. H. Beckett, Chairman, in the sum of three per cent (3 per cent) of the amount of the proposal accompanied by same up to fifty thousand ($50,000) dollars, which is the maximum amount required to cover proposals for the entire work, or a Bidder's Bond executed by a resident Agent now doing business in Pinellas County, representing a Surety Company authorized to do business in the State of Florida, and otherwise acceptable to the County. Such bidder's bond shall be in the sum of five per cent (5 per cent) of the total amount of the proposal accompanied by the same.

A construction bond in the amount of fifty per cent (50 per cent) of the amount of the contract with a Surety Company complying with all the requirements above noted will be required.

The County reserves the right to select the type of pavement and to reject any or all bids.

Board of County Commissioners, Pinellas County, Florida.

E. H. BECKETT,
Chairman.
C. E. BURLESON,
County Engineer.

Bids: Nov. 27.

Bridge Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

For 15' widening of seven 85' arch spans, two 65' deck plate girder spans and one 60' bascule span including all foundations, changes to approaches for a distance of 140' on the west side and 550' on the east side including drainage, paving, curbing, walks, retaining walls together with the relocation of telephone, gas sewer lines and trolley tracks over Raritan River, M. P. 31.4, Route No. 1, Section No. 13, in the municipalities of New Brunswick and Highland Park, in the County of Middlesex.

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Tuesday, November 27th, 1923, at 12:00 Noon, Standard Time, and opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: Dec. 28.

Governor's Mansion

AT
KANAWHA, DUFFY AND VIRGINIA STREETS

Charleston, W. Va.

Sealed bids will be received by the State Board of Control at its office in Charleston, W. Va., until 2:00 p.m., Friday, December 28, 1923, for the furnishing of all labor and materials of every kind necessary in the completion of the building described below, according to the plans and specifications of Walter F. Martens, Architect, Charleston, W. Va.

The building is to be 73' 6" x 81' 2" with a service wing 58' x 17', and with additional areas for porches; semi-fireproof construction; two stories high, with half basement and attic; walls brick, hollow tile; exterior walls faced with Colonial Red Brick; Vermont Marble and Indiana Limestone trim; slate roofing; built-up roofing on decks; structural steel and steel lumber; tile floor in halls, baths, toilets and porches, oak floors elsewhere; wood stairs on steel frames; trim Birch, Oak and Poplar; metal lath; Gypsum and cement plaster; wood sash, frames and doors; electric wiring, conduit system; inter-communicating telephone system; plumbing; vapor steam heating system; incinerator; vacuum cleaner.

Plans, specifications and blank form for bids will be mailed by the State Board of Control, when request is accompanied with check for $25.00, which amount will be *refunded only on receipt of bona-fide bid* on or before the time named above, and the return of the plans.

Bids to be accompanied with certified check payable to the State Board of Control for an amount equal to 1% of the bid, as guarantee of good faith.

STATE BOARD OF CONTROL
By JAMES S. LAKIN, Pres.,
Charleston, Kanawha County, W. Va.

Bids: Dec. 4.

Three Dragline Machines

Greenville, Miss.

Proposals will be received by the Board of Drainage Commissioners of Washington County, Miss., at their office in Greenville, Miss., until eleven o'clock a.m., on Tuesday, December 4, 1923, for the furnishing of three dragline machines equipped with internal combustion engines and mounted on caterpillars.

Further information will be furnished upon request.

O. C. KULICKA,
Chief Engineer.

CONSTRUCTION NEWS

Engineering News-Record, November 15, 1923

The Construction Barometer

Gain in October Permits—Industrial and Residential Building Active—Other Classes Drop

CONTRACTS awarded on large engineering construction projects in the United States, during October, showed a drop of about 5 per cent in total money value, from the month preceding. This gain, however, was confined almost entirely to water-works, industrial building and Federal Government construction. Residential building gained heavily during the month, particularly in the Middle Atlantic states. This group was also the only one showing a gain in large engineering projects, as shown by the charts, the increase being due to four industrial jobs amounting to $32,000,000. October building permits gained more than 25 per cent over the month preceding. With ample building materials reserves and from 25 to 50 per cent of the building trades mechanics unemployed between December and February, an active Winter building program is being contemplated.

Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

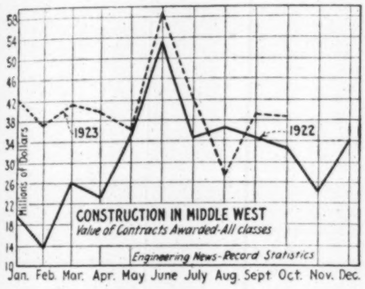
Week Ended	Public Work	Private Work	Total Contracts
Oct. 25	$8,452,000	$16,583,000	$25,035,000
Nov. 1	16,746,000	14,321,000	31,067,000
Nov. 8	9,434,000	17,689,000	27,123,000
3 weeks	$34,632,000	$48,593,000	$83,225,000

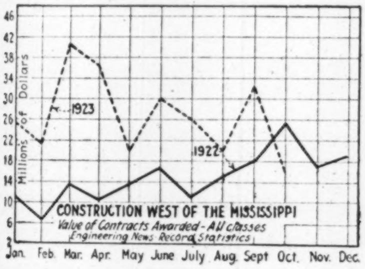
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

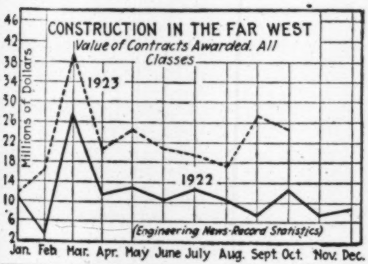
Week Ended	No.	Public Work	No.	Private Work
Oct. 25	6	$1,721,000	24	$9,184,000
Nov. 1	7	2,537,000	33	10,743,000
Nov. 8	12	3,833,000	27	12,150,000
3 weeks	25	$8,091,000	84	$32,077,000

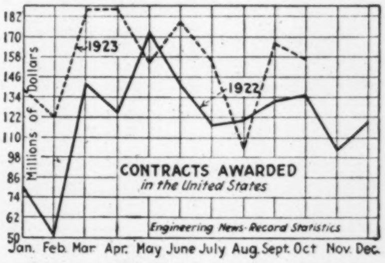
BASIC PRICES UNCHANGED IN TWO WEEKS—LUMBER MARKET SOFTER

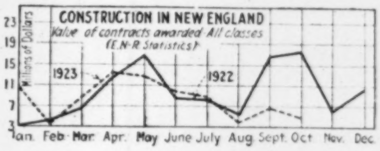
	Quoted on Nov. 15, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	61.00	62.00	Nov. 1
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common labor, hr.	0.54	0.53	June 28

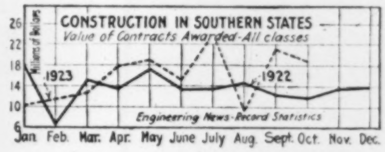


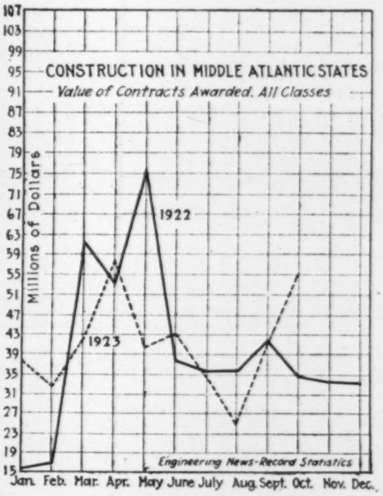












PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Nov. 16	New York, N. Y.	Nov. 8
Nov. 19	Grand Island, N. Y.	Nov. 15
Nov. 20	Durham, Calif.	Nov. 15
Nov. 20	St. Paul, Minn.	Nov. 15
Nov. 21	Waterville, Wis.	Nov. 15
Nov. 23	Brooklyn, N. Y.	Nov. 15
Nov. 23	New York, N. Y.	Nov. 15
Dec. 5	Webb, N. Y. Adv. Nov. 8 and 15.	Nov. 8
Dec. 12	Keyser, W. Va. Adv. Nov. 8 and 15.	Nov. 8
Dec. 14	Seattle, Wash. Adv. Nov. 15.	Nov. 15
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Nov. 19	Mamaroneck, N. Y. Adv. Nov. 8 and 15.	Nov. 8
Nov. 20	Ponchatoula, La.	Oct. 25
Nov. 20	Bartlesville, Ark.	Nov. 1
Nov. 22	Chicago, Ill.	Nov. 8
Nov. 26	Providence, R. I. Adv. Nov. 15.	Nov. 15
Dec. 5	Holland, Mich. Adv. Nov. 15.	Nov. 15
Dec. 10	New Orleans, La. Adv. Oct. 11 to Nov. 15.	Oct. 11
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Nov. 19	St. Paul, Minn.	Nov. 8
Nov. 19	Clearwater, Fla.	Nov. 15
Nov. 20	Beaumont, Tex.	Nov. 8
Nov. 20	Jefferson, Ia.	Nov. 15
Nov. 20	South Dakota	Nov. 15
Nov. 22	Prairie Siding, Ont.	Nov. 1
Nov. 22	Illinois	Nov. 15
Nov. 24	Canadian Tex.	Nov. 15
Nov. 26	Alabama	Oct. 25
Nov. 27	New Jersey Adv. Nov. 1 to 15.	Nov. 1
Nov. 27	New Jersey Adv. Nov. 8 and 15.	Nov. 8
Nov. 27	Florida Adv. Nov. 15.	Nov. 15
Nov. 27	Williamson, W. Va. Adv. Nov. 8 and 15.	Nov. 15
Nov. 30	Sydney, Australia	Apr. 19
Nov. 30	Greenville, Miss. Adv. Nov. 15.	Nov. 15
Dec. 5	Salem, Mass. Adv. Nov. 1 to 15.	Nov. 8
Dec. 5	Freehold, N. J. Adv. Nov. 15.	Nov. 15
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Nov. 27	Frederick, Md. Adv. Nov. 8 and 15.	Nov. 15

RAILWAYS

Bids Close		See Eng. News-Record
Nov. 22	Michigan	Nov. 8
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Nov. 19	Carroll, Ia.	Nov. 15
Nov. 24	Blythe, Calif.	Nov. 15
Nov. 26	Jonesboro, Ark.	Nov. 8

STREETS AND ROADS

Nov. 16	New York Adv. Nov. 1 to 15.	Nov. 1
Nov. 16	St. George, N. Y.	Nov. 8
Nov. 16	New York, N. Y.	Nov. 8
Nov. 17	Tonawanda, N. Y.	Nov. 1
Nov. 19	Waco, Tex.	Nov. 1
Nov. 19	San Jose, Calif.	Nov. 8
Nov. 19	Tavares, Fla.	Nov. 15
Nov. 19	Clearwater, Fla.	Nov. 19
Nov. 20	Massachusetts	Nov. 8
Nov. 20	Michigan	Nov. 15
Nov. 20	Walhalla, S. C.	Nov. 15
Nov. 20	Jefferson, Ia.	Nov. 15
Nov. 21	Brooklyn, N. Y.	Nov. 15
Nov. 22	Virginia	Nov. 8
Nov. 22	Jasper, Tex.	Nov. 8
Nov. 22	Illinois	Nov. 15
Nov. 23	Independence, Kan.	Nov. 8
Nov. 23	La Grange, Tex.	Nov. 8
Nov. 26	Alexandria, Ky.	Nov. 8
Nov. 26	Alabama	Nov. 1
Nov. 26	Seattle, Wash.	Nov. 15
Nov. 26	California	Nov. 15
Nov. 27	New Jersey Adv. Nov. 8 and 15.	Nov. 8
Noy. 27	Vernon, Tex.	Nov. 15
Nov. 27	North Carolina Adv. Nov. 15	Nov. 15
Nov. 27	Louisiana	Nov. 15
Nov. 27	Florida	Nov. 15
Dec. 3	Jacksonville, Fla. Adv. Nov. 15.	Nov. 15
Dec. 4	Rushville, Ind.	Nov. 15
Dec. 4	Logansport, Ind.	Nov. 15
Dec. 5	Raleigh, N. C. Adv. Nov. 15.	Nov. 15

INDUSTRIAL WORK

Nov. 20	Baltimore, Md.	Nov. 15
Dec. 11	Tampa, Fla. Adv. Nov. 15.	Nov. 15

BUILDINGS

Nov. 18	Roxbury (Boston P. O.), Mass.	Nov. 8
Nov. 20	Hartford, Conn.	Nov. 1
Nov. 20	Dayton, O.	Nov. 8
Nov. 20	Virginia, Minn.	Nov. 8
Nov. 20	Grosse Pointe (Detroit P. O.), Mich.	Nov. 15
Nov. 21	New Haven, Conn.	Nov. 8
Nov. 23	Sedalia, Mo.	Nov. 1
Nov. 24	Lakewood (Cleveland P. O.), O.	Nov. 8
Nov. 26	Galveston, Tex.	Nov. 1
Nov. 26	Huntington, W. Va.	Nov. 8
Nov. 26	Tucson, Ariz.	Nov. 8
Nov. 26	New York, N. Y.	Nov. 15
Nov. 26	Brooklyn, N. Y.	Nov. 15
Nov. 28	Middletown, N. Y.	Nov. 1
Nov. 28	Newark, Del. Adv. Nov. 8 and 15.	Nov. 8
Nov. 30	Maggie, W. Va.	Oct. 4
Nov. 30	Louisville, Ky.	Nov. 15
Dec. 1	Charleston, W. Va.	Oct. 25
Dec. 4	Brooklyn, N. Y. Adv. Nov. 8 and 15.	Nov. 8
Dec. 4	Louisville, Ky.	Nov. 8
Dec. 4	Greensboro, N. C.	Nov. 15
Dec. 5	St. Louis, Mo.	Nov. 15
Dec. 10	Indianapolis, Ind.	Nov. 15
Dec. 11	Tacoma, Wash.	Nov. 15
Dec. 12	Grand Rapids, Mich.	Nov. 15
Dec. 15	Wichita, Kan.	Nov. 15
Dec. 18	Ironwood, Mich.	Nov. 15
Dec. 20	Sioux City, Ia.	Nov. 15
Dec. 21	Charleston, W. Va. Adv. Nov. 15.	Nov. 15
Dec. 28	Morgantown, W. Va. Adv. Nov. 8 and 15.	Nov. 15
Jan. 2	Bloomington, Ind.	Nov. 15

FEDERAL GOVERNMENT WORK

Nov. 20	Post Office—Central City, Neb.	Oct. 18
Nov. 20	Barges—Chicago, Ill. Adv. Oct. 25 to Nov. 15.	Oct. 25
Nov. 21	Sewer—American Falls, Idaho	Oct. 25
Nov. 21	Post Office—Steubenville, O.	Oct. 25
Nov. 21	Dredging—Puget Sound, Wash.	Nov. 1
Nov. 21	Repairs to Seawall—Hingham, Mass.	Nov. 15
Nov. 23	Barges—Louisville, Ky. Adv. Oct. 25 to Nov. 15.	Oct. 25
Nov. 23	Post Office—Ripon, Wis.	Nov. 1
Nov. 23	Quarterboat—Huntington, W. Va.	Nov. 8

Bids Close		See Eng. News-Record
Nov. 24	Dredging—New York, N. Y. Adv. Oct. 25 to Nov. 15.	Oct. 25
Nov. 26	Post Office—Mystic, Conn.	Nov. 1
Nov. 27	Barge—New Orleans, La. Adv. Nov. 1 to 15.	Nov. 1
Nov. 27	Water Supply System—American Falls, Idaho	Nov. 1
Nov. 27	Post Office—Gallipolis, O.	Nov. 1
Nov. 28	Quarters—San Juan, Porto Rico	Nov. 8
Nov. 28	Catamarans—Jacksonville, Fla. Adv. Nov. 8 and 15.	Nov. 8
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
Nov. 30	Dredging, etc.—New York, N. Y. Adv. Nov. 1 to 15.	Nov. 1
Nov. 30	Post Office—Harrisonville, Mo. Adv. Nov. 8 and 15.	Nov. 8
Dec. 1	Steel Barges—Mobile, Ala. Adv. Nov. 8 and 15.	Oct. 25
Dec. 2	Fuel Oil Storage—Mare Island, Calif.	Nov. 15
Dec. 3	Barge and Hull—New Orleans, La.	Nov. 8
Dec. 4	Dredging—Phila., Pa.	Nov. 15
Dec. 5	Post Office — Marianna, Ark. Adv. Nov. 8 and 15.	Nov. 8
Dec. 10	Towboat—Montgomery, Ala. Adv. Nov. 1 to 15.	Nov. 8
Dec. 10	Maneuver Boat, etc.—Huntington, W. Va. Adv. Nov. 15.	Nov. 15
Dec. 10	Remodeling — Allentown, Pa. Adv. Nov. 15.	Nov. 15
Dec. 14	Dredging, etc.—New York, N. Y Adv. Nov. 15.	Nov. 15
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15

UNCLASSIFIED

Nov. 20	Sluice Gates—Exchequer, Calif.	Nov. 8
Nov. 21	Heating, Ventilating, Plumbing, etc.—Phila., Pa. Adv. Nov. 8 and 15.	Nov. 8
Nov. 26	Portland Cement—Los Angeles, Calif.	Oct. 18
Dec. 4	Dragline Machines—Greenville, Miss. Adv. Nov. 1 to 15.	Nov. 1
Jan. 2	Memorial—Bloomington, Ind.	Nov. 15
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia Adv. Nov. 1 and 15.	Nov. 1
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

MATERIAL AND EQUIPMENT

Nov. 17	Road Roller and Scarifier — Logansport, Ind.	Nov. 15
Nov. 21	Limestone, etc.—Brooklyn, N. Y.	Nov. 15

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford—Bd. Water Comrs. plans to lay mains in Burr, Cleveland, Hartland, Maple, Nelson, Goshen, Earl and Nepaug Sts., to exceed $15,000; 7,500 ft. of 8-12 in. mains in South Main St., West Hartford, $25,000. C. M. Saville, 1026 Main St., engr.

N. Y., Batavia—Voted $30,000 bonds extending pipe lines. F. R. Russell, city clk. Noted Nov. 8.

N. Y., Jamestown—Bd. Pub. Utilities rejected bids Nov. 1, hauling and laying 25,000 ft. 6-16 in. c.i. pipe, and 50,300 lb. fittings. Contract for power house piping and traveling water screens, to Ludwig & Guinnane, Jamestown, $2,784. Noted Oct. 25.

N. Y., Potsdam—Voted $175,000 bonds filtration plant. Will mature in spring. Engineer not announced.

Pa., Duquesne—Plans new filtration plant, reservoir, and bridge. $625,000.

Pa., McKeesport—Voted $233,000 bonds for extending and improving waterworks. Will mature in spring. Noted Nov. 1.

Pa., Phila.—Voted $6,000,000 bonds for waterworks improvements, and $200,000 for extending high pressure fire system.

Md., Baltimore—Voted $10,000,000 bonds for extending and improving water supply. V. B. Siems, water engr.

Va., Charlottesville — Voted $500,000 bonds for additional water supply, incl. laying of 12½ mi. 18 in. c.i. pipe (to be furnished by city f.o.b. cars). Bids will be received some time after Dec. 15. B. A. Bennett, city mgr. Noted Oct. 18.

W. Va., Fairmont—Voted $150,000 bonds for filtration plant. Noted Oct. 4.

W. Va., Lewisburg—Voted $40,000 bonds for waterworks.

W. Va., Parkersburg—Defeated $250,000 bond issue for water works and filtration plant. Noted Oct. 4, under "Streets and Roads."

N. C., Cullowhee—Normal and Industrial School plans new water supply system. $30,000. H. A. Underwood, Jt. Bl. Bldg., Raleigh, engr.

N. C., North Wilkesboro—Comrs. voted $85,000 bonds for water and power improvements.

Tenn., Jackson—Election soon to vote on $100,000 bonds for extensions and improvements to present water plant, new reservoir, pumps, pipe lines, etc.

Ky., Paintsville — Plans extension to waterworks and substitution of electrically operated pumping machinery for present steam plant. $50,000. Noted Nov. 7.

O., Lakewood (Cleveland, P. O.)—Voted $135,000 bonds mains. Work to proceed in spring. E. A. Fisher, City Hall, engr.

O., Mount Sterling—Plans rebuilding water and power plant, recently destroyed by fire. $50,000. Engineer not selected.

Mich., River View—Village, c/o R. A. Murdoch, engr., 603 Free Press Bldg., Detroit, having preliminary plans made laying 1 mi. 10 in. c.i. main from city limits of Wyandotte to supply newly incorporated village of River View. $20,000.

Mich., Royal Oak—Having preliminary plans prepared sinking new well and laying 5,000 ft. 12 in. c.i. pipe. $50,000. P. H. Beauvais, city mgr.

Ill., Belvidere—Making preliminary plans waterworks improvement, incl. repairs to reservoir. $25,000. W. L. Shields, 8 South Dearborn St., Chicago, engr.

Ill., Columbia—Plans distribution system, tower, tank, pumping equipment, etc. $50,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Ill., Trenton—Plans steel tank and tower, pumping equipment and distribution mains, etc. $50,000. W. A. Fuller Co., Ry. Exch., St. Louis, Mo., engrs.

Ia., Carlisle—Making plans and takes bids about Jan. 1, waterworks. $23,000. W E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs. Noted Nov. 8.

Ia., Greasers (Shellsburg P. O.)—Plans waterworks. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Sioux City—W. E. Buell & Co., engrs., 205 Davidson Bldg., preparing plans and take bids about Jan. 1, complete waterworks, sewers and disposal plant, for city.

Kan., Brookville—Voted $20,000 bonds for waterworks. R. L. Martin, city clk.

Mont., Missoula—Plans new water supply system. $900,000. Burns & McDonnell, 404 Marsh-Strong Bldg., Los Angeles, Calif., engrs. Noted July 19.

Mo., Farmington—Making plans and takes bids about Dec. 15 waterworks improvements. $15,000. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Nov. 8.

Mo., Joplin — Joplin Water Co. having preliminary plans prepared 20,000 ft. c.i. mains, valves, etc. $30,000. Private plans.

Mo., Potosi—Making preliminary surveys waterworks pumping plant, stand pipe, distribution mains, etc. To exceed $30,000. F. W. Graham, 5244 Cote Brilliante, St. Louis, engr.

Ark., Greenwood — Making preliminary survey to determine water needs of city. $30,000. W. L. Winters, 700 South 20th St., Ft. Smith, engr.

Tex., Corsicana—Making plans main extensions. $15,000. W. W. McClendon, city engr.

Tex., Dallas—Beverly Hills Fresh Water Supply Dist. No. 2, soon takes bids mains, tanks, etc. $35,000. Myers & Noyes, Merchantile Bank Bldg., Dallas, engrs.

Ore., Beaverton—Rejected bids waterworks improvements incl. 500,000 gal. reservoir, 1,966 ft. 12 in., 5,660 ft. 10 in. and

Waterworks (Continued)

26,750 ft. 8 in. c.i. pipe line from Bull Run. Poe & Allen, Spalding Bldg., Portland, engrs. Noted Nov. 8.

Calif., Daly City—Plans election to vote on bonds to improve system in Crocker tract. $30,000.

Ont., Newmarket—Plans 2½ mi. c.i. mains, mostly 6 in., to suburbs of town. $25,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Toronto—York Twp., 40 Jarvis St., plans 12 mi. 6-12 in. c.i. mains, in Area A, $88,000 and Area B $170,000. F. B. Goldike, 40 Jarvis St., engr.

Ont., Welland—Plans improving and extending waterworks, 2 mi. c.i. mains, 6 in. up, valves, hydrants, etc. $30,000 or more. Chipman & Power, Mail Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., Brooklyn—Nov. 23, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Dahill Rd., Aves. N and O, Linden, Schenectady, 9th, 20th and 26th Aves., 54th, 61st, 63rd, 69th, 76th, 91st and 98th Sts.; relaying, etc., mains in Kingshighway and Ave. P, here.

N. Y., Grand Island — Nov. 19, by E. Bucher, chn. Bd. City Comrs., water system. To exceed $25,000.

N. Y., New York — Nov. 23, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Lucerne St., Dwight and Robinson Places, Radio and Spencer Drives, Ampere, Bayview, Griswold, Library, Ohm, Research, Stadium and Watt Aves., Bronx Boro.

Minn., St. Paul—Nov. 20, by H. W. Austin, city purch. agt., three thousand ¾ in. corporation cocks, three thousand ¾ in. inverted key curb stops, five hundred ¾ in., three hundred 1 in., one hundred 1½ in. and fifty 2 in. tail pieces; 1,030 lin.ft. 36 in. concrete pipe and 170 piles; 3,580 disc type cold water meters, for Water Dept. G. M. Shepard, city engr.

Kan., Waterville—Nov. 21, by H. C. Strohm, city clk., addition to present system, incl. c. i. pipe line, well, furnishing and erecting motor driven centrifugal deep well pump. Black & Veatch, Mutual Bldg., Kensas City, Mo., engrs.

Wash., Seattle—Dec. 14, by Bd. Pub. Wks., inlet, outlet conduit controlling works and pipe lines, for Lake Youngs Development. J. D. Blackwell, city engr.; adv. E. N.-R. Nov. 15.

Calif., Durham—Nov. 20 by G. W. Clunt, clk. Durham Union High School Dist., Durham, furnishing and installing plunger or centrifugal type pump to deliver not less than 3,000 gal. per hour, under pressure not less than 25 lb., incl. 1,000 gal. pressure tank, valves, couplings, 3 phase motor, etc.

Ont., Windsor—Essex Border Utilities Comn. taking bids filtration beds and reservoir. Bids for pumphouse, pipe lines, pumping and filtration equipment will be called about Jan. 1. $150,000. J. C. Keith, c/o Comn. engr. Noted Sept. 20.

BIDS RECEIVED

O., Cleveland—Fairmount Rd. tunnel for Baldwin-Fairmount Project, Contr. 43, from P. F. Connelly Co., 2029 East 102nd St., $140,270.

CONTRACTS AWARDED

N. Y., Jamestown—See "Proposed Work."

N. Y., New York—Bd. Water Supply, Gas & Electricity, Municipal Bldg., mains in Boyd, Bronxwood, Colden, Delafield and Leland Aves., etc., to Knight & Demicco, 448 East Tremont Aves., $14,500. Noted Oct. 18.

N. Y., Long Island City—Bd. Water Supply, Gas & Electricity, Municipal Bldg., mains in Anable, Woolsey and 6th Aves., etc., here, to J. A. Gregory, 351 East 124th St., New York City, $42,572. Noted Nov. 1.

N. C., Andrews—See "Industrial Works."

La., West Monroe—Bd. Aldermen, laying 3 mi. 3-6 in. pipe here, to Merkel Mchy. & Constr. Co., 1733 Walnut St., Kansas City, Mo., $34,843. Noted Oct. 25.

Ky., Moorehead — Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., water treating plant, here, to J. E. Nelson & Son, 3240 South Michigan Ave., Chicago. Est. cost $25,000.

Ky., Pond Creek—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, pumping station, elevated steel tank, etc., here, to J. E. Nelson & Sons, 3240 South Michigan Ave., Chicago. Cost to exceed $40,000.

Ky., Powderly—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, water treating plant and pumping station, here, to J. E. Nelson & Son, 3240 South Michigan Ave., Chicago. Est. cost $40,000.

O., Cleveland—See "Unclassified."

O., Cleveland—Filter and administration buildings and 7 gate house superstructures for Baldwin filtration plant, Contr. 47, to Stange-Walsh Constr. Co., 2315 Fairmount Rd., $2,885,500. Noted Oct. 4.

O., Cleveland—Four 1 story, 30 x 40 ft., concrete gate houses at Fairmount Reservoir, to Schrader Constr. Co., Euclid-46th St. Market Bldg., $53,313. Noted Nov. 8.

Ia., Albia—Impounding reservoir, filtration plant, and pumping station, to A. Phelps & Son, Knoxville, approximately $50,000. Noted Oct. 25.

Ia., Lenox — Waterworks improvements, 420 lin.ft. 6 and 8 in. Class A, 2,400 lin.ft. 6 in. Class B c.i. pipe and fittings to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Blvd., Chicago; 3 pumps and motors, to Interstate Mchy. Supply Co., Omaha, Neb.; pipe line to F. Carruthers, Lenox; earth dam, concrete spillway, low service pump house, filter house, filter unit, and rein.-con. well, to Henningson Eng. Co., National Bldg., Omaha, Neb.

Ia., Washington—For 1,900 ft. well with casing to F. M. Gray, Jr., Co., 290 3rd St., Milwaukee, Wis., 15½ in. casing $20.75, 12 in. $10.80, 8 in. $8.95 and 8 in. hole $7, total $18,916. Noted Oct. 11.

Okla., Tulsa—Mohawk Pumping Station, Contr. 14, to E. J. Merkle, 1733 Walnut St., Kansas City, Mo., $220,000; concrete chimney, Contr. 15, to J. V. Boland Constr. Co., Chemical Bldg., St. Louis, Mo., $4,984; 21,500 ft. of 30 in. force main, hammer weld steel, Contr. 16, to H. L. Cannady Constr. Co., Tulsa. $9.90 per ft., etc., total $230,264. Noted Sept. 27.

Wash., Tacoma—Will repair and replace pipe line of gravity water system by day labor. Will take bids after Dec. 1, ½ mi. 48-54 in. steel pipe ⅝ in. plate, ½ mi. 39 in. steel pipe, ½ mi. 46 in. and ½ mi. 60 in. wood-creosoted, continuous. $100,000. W. A. Kunigk, supt. water system.

Ont., Oshawa—Constructing 500,000 imp. gal. water tower, 110 ft. high, to Dominion Bridge Co., Imperial Life Bldg., Toronto. Engrs. est. $30,000. Noted Oct. 18.

Sewers

PROPOSED WORK

N. J., Riverton — Making revised plans 11,500 lin.ft. 6-15 in. vitr. clay sewers, Imhoff tanks, disposal plant, pumping station, etc. $85,000. Sherman & Sleeper, Camden, engrs.

Pa., Phila.—Voted $9,000,000 bonds for sewage disposal plants, and $3,300,000 for constructing sewers.

Ky., Louisville—Comrs. of Sewerage plan Central Relief Sewer, Bway. to Main and 9th Sts., semi-elliptical, 9 ft. diam. $500,000. J. B. F. Breed, 417 West Main St., engr. Noted Oct. 18.

Ky., Sturgis — Plans sanitary sewerage system. $25,000. C. H. Jenks, Union City, Tenn., engr.

O., Cincinnati—Defeated $650,000 bonds extending sewerage system. Noted Nov. 1.

O., East Youngstown—Plans approximately 5 mi. sewers in Reed Ave., Gordon, Penhale, Princess, Picidilla, Regent, Oxford, Robinson and Tenney Sts. $225,000. Will mature in spring. A. Julius, city aud.

O., Massillon—Voted $300,000 bonds trunk sewers. Noted July 12.

Mich., Grand Rapids—Voted $5,000 000 bonds for disposal plant, storm water relief and intercepting sewers. M. P. Adams, city sanitary engr. Noted Oct. 18.

Ill., Breese—Making plans sewerage system. $75,000. Kelker, Deleuw & Co., 111 West Washington St., Chicago, engrs.

Ill., Deerfield—Making plans sewerage system and disposal plant. $150,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Lewistown—Takes bids about Nov. 26, 13,000 ft. 8 in. vitr. sewers, disposal settling tank, etc. $25,000. W. A. Fuller Co., Ry. Exch., St. Louis, Mo., engrs.

Ill., Madison—Making preliminary plans 3,000 ft. storm and sanitary sewers in 8th and Madison Sts., 12 in. up. $21,000-$25,000. City engineer in charge.

Ill., Pinckneyville—Plans 3,000 ft. 8-24 in. storm and sanitary sewers and disposal plant. $25,000. E. F. Harper, Murphy Bldg., East St. Louis, engr.

Ill., River Grove — Plans sanitary and storm sewerage system. $200,000. Consoer Eng. Co., 140 South Dearborn St., Chiciago, engrs.

Ill., Stickney—Plans sewerage system. $200,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ia., Sioux City—See "Waterworks."

Kan., Manhattan — Making preliminary survey storm sewers for West Manhattan. $100,000. H. W. Alexander, City Hall, engr.

Mo., Carthage—Voted $110,000 bonds and takes bids about Dec. 15, intercepting sewers, disposal plant, Imhoff tank, sludge beds, etc. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Oct. 18.

Mo., Carthage—Voted $110,000 bonds disposal plant. C. D. Drake, mayor.

Mo., Clayton (Branch of St. Louis)—Hodlamont Sanitary Sewer Dist., having preliminary surveys made 8, 10 and 12 in. sanitary sewers in Hodlamont Twp. To exceed $30,000. L. C. Dziatzko, Empire Bldg., Websteer, engr.

Mo., Clayton (Branch of St. Louis)—St. Louis Co. Sewer Dist. 2 soon takes bids 8,000 ft. 8, 10 and 12 in. vitr. sanitary sewers in Hanover Heights. $50,000. L. C. Dziatzko, Empire Bldg., Webster, engr.

Mo., Farmington—Making plans and takes bids about Dec. 15, storm and sanitary sewers, etc. $85,000 bonds voted C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Nov. 8.

Mo., Wellston (St. Louis, P. O.)—Wellston Sanitary Sewer Dist. having preliminary surveys made 8, 10 and 12 in. sanitary sewers. To exceed $35,000. L. C. Dziatzko, Empire Bldg., Webster, engr.

Tex., Burkburnett—Nov. 27 to vote on bonds for sewers. $50,000. J. L. Dellis, city engr.

Okla., Marlow—Preparing plans several lateral sanitary sewer districts, 15,000 ft. 8 in. and 5,000 ft. 10 in. vitr. clay sewers. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Stroud—Voted $52,000 bonds for sanitary sewers, disposal plant, Imhoff tanks, sledge bed, 3,000 ft. 10 in., 2,800 ft. 8 in. and 2,000 ft. 12 in. vitr. clay. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs. Noted Nov. 1.

Calif., Pasadena—Plans sewage disposal plant. Burns & McDonnell Eng. Co., 404 Marsh-Strong Bldg., Los Angeles, engrs.

Calif., San Bruno — See "Streets and Roads."

Calif., San Luis Obispo — Making plans storm sewers in Monterey St. $38,000. W. B. Roselip, city engr.

Que., Montreal—Plans 369 ft. of 66 in. steel sewer pipe in Fullum St. $41,800, and 999 ft. 2 x 3 brick sewer in Notre Dame deGrace Ave. $11,705. E. Gauthier, asst. city clk.

Ont., Niagara Falls — Stamford Twp. plans 7,000 ft. 9-24 in. vitr. tile sanitary sewers in various streets. M. F. Kerr, Ferry St., engr.

Ont., Ottawa—Bd. Control soon takes bids 30 in. sewer in Byng Dr. from Diana to Cornella Sts. $31,000. A. F. Macallum, city engr.

Ont., St. Thomas—Having plans prepared disposal plant. $50,000. Prices wanted on materials. A. Miller, City Hall, engr.

BIDS DESIRED

R. I., Providence—Nov. 26, at office E. D. Miller, city clk., City Hall, reconstructing brick sewer, etc. J. H. Gainer, mayor and chn.; adv. E. N.-R. Nov. 15.

Mich., Holland—Dec. 5, by Common Council at office R. Overweg, city clk., rein.-con. or segment block sewer; adv. E. N.-R. Nov. 15.

Tex., Houston—City Com. taking bids 8-15 in. sewers and pumping plant for Eastwood addition and Leeland. $33,500. J. C. McVea, city engr.

BIDS RECEIVED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., tile sewers in (1) Crystal Ave. between Hopkins St. and point 1,540 ft. east, (2) Crystal Ave. between 250 and 450 ft. west of South Park Ave. (3) Culver Rd. south side, between South Park Ave. and point 1,170 ft. east (4) Culver Rd. north side, between 100-1,170 ft. east of South Park Ave. (5) Culver Rd. north side, between 100 and 1,000 ft. west of McKinley Parkway (6) Culver Rd. south side, between McKinley Parkway and point 1,000 ft. west (7) Dewey Ave. between 1,612 and 1,920 ft. east of Fillmore Ave. (8) Dundee St. (9) Floss Ave (10) Olympic Ave. (11) Ridgewood Rd. north side, between 100 and 1,245 ft. east of South Park Ave. (12)

Sewers (Continued)

Ridgewood Rd. south side between South Park Ave. and point 1,245 ft. east **(13)** Ridgewood Ave. between 100 and 920 ft. west of McKinley Parkway **(14)** Ridgewood Rd. between McKinley Parkway and point 920 ft. west **(15)** Silverdale Pl. **(16)** Cloverdale Ave., from F. C. Strack, Jr., 428 Colton Ave., Lackawanna, **(1)** $9,150; J. M. Fahning, 460 Leroy Ave., **(2)** $1,172 **(3)** $2,848 **(4)** $2,319 **(5)** $1,764 **(6)** $2,100 **(8)** $3,220 **(11)** $2,467 **(12)** $2,676 **(13)** $1,469 **(14)** $1,768 **(16)** $5,600; J. J. Rupp, 2135 Fillmore Ave., **(7)** $1,549 **(10)** $4,200; Dark & Co., 654 Main St., **(9)** $3,025; W. C. Culliton, 2079 Main St., **(15)** $2,596. Noted Oct. 25.

Mo., St. Joseph—For 1,880 ft. of 16 ft. circular sewer, from Hanson & Willadsen, Omaha, Neb., $114,675. Noted Oct. 18.

O., Cleveland—Cuyahoga Co. Nov. 3, sewer in Snow Rd. Impvt. 39, from Duff & Champion, 1471 Arthur Ave., Lakewood, $38,386. Noted Nov. 1.

O., Zanesville—J. R. Tanner, dir. Pub. Serv., 24 mi. laterals and house connections for completion of Southwestern Sewer Dist. 5, from Adams Bros. Contg. Co., Mushingum Ave., $303,150. Noted Nov. 1.

Que., Montreal—Constructing 930 ft. 2 x 3 brick sewer and 2,100 ft. 12 in. tile sewer in Sherbrooke St. from Wurtele to Bourbonniere Sts., from C. Frascarelli, 654 Berri St., $38,245.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in West 176th and West 180th Sts., to Spedero & Turriamo, 3185 East Tremont Aves., $24,489 and $2,379 respectively; Davidson Ave., to M. Del Balso, 660 East 221st St., $1,298. Noted Nov. 8.

O., Columbus—Franklin Co. 12,608 ft. 8-18 in. vitr. sewer and 3,000 ft. 8 in. c.i. mains in Sewer Dist. Marion 2 (North Whittier Garden Area), Contr. 16, to W. D. Winchell, 338 Seibert St., $41,783; 3,556 ft. c.i. mains in Sewer Dist. Franklin 3, Contr. 29, and 2,644 ft. 8 in. vitr. sewers, in Sewer Dist. 3, Contr. 28, to W. Neilson, 169 Lane Ave., $5,626 each. Noted Nov. 1.

Mo., Clayton—(Branch of St. Louis) St. Louis Co. Sewer Dist. 1, 8, 10 and 12 in. sanitary sewers in Hanover and Fletcher Heights, to United Constr. Co., Pontiac Bldg., St. Louis, $26,999. Engrs. est. $27,314. Noted Nov. 1.

Mo., Marceline—For 2 disposal plants, 12,560 ft. 8-12 in. vitr. and 336 ft. c.i. pipe, etc., to Ray & Sons, Baxter Springs, Kan., $50,247. Noted Nov. 1.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 4,175 ft. segmental block and 2,000 ft. 10-16 in. vitr. sewer in Oakland Ave., to Martin & Riley, Title Guaranty Bldg., $35,252. Engrs. est. $40,000. Noted Nov. 8.

Mo., Unionville — Sanitary sewers, to Gjellefold-Chapman Co., Forest City, Ia., $71,835.

Tex., Ft. Worth—Riverside sewers, 6, 8, 12 and 15 in., to McKenzie Constr. Co., Riverside, $27,106. Noted Nov. 8.

Calif., Long Beach—Anaheim St. sewage disposal, etc., to S. P. Tomich, 425 North Fremont St., Los Angeles, $78,000.

Ont., Fort Erie—Concrete and vitr. clay sewers, to F. F. Fry Co. Ltd., 43 Scott St., Toronto, $43,270.

Waste Disposal

PROPOSED WORK

Tex., Austin—Dec. 14, to vote on $50,000 bonds for incinerator. C. E. Leonard, city engr. Noted Sept. 13.

Bridges

PROPOSED WORK

N. Y., Aurora — Plans reconstructing various bridges. $150,000. J. D. Bradburn, East Aurora, town clk.

Pa., Duquesne—See "Waterworks"

Pa., Phila.—Voted $500,000 for bridges.

Pa., Phila.—Voted $5,623,000 bonds for constructing approaches and superstructure of Delaware River Bridge.

Pa., Phila. — Bureau of Surveys, Dept. Pub. Wks., having plans prepared 70 ft. concrete and steel bridge, 2nd and Luzerne Sts., 120 ft. concrete and steel over Penn Ave. at Girard and 51st Sts., 100 ft. concrete and steel at 2nd and Stover Sts., connecting branch line of Pennsylvania R.R. at Glenwood Ave., 175 ft. concrete bridge at Walnut Lane over Lincoln Dr. and Croshem Creek. A. Vogelman, ch. engr.

N. C., Asheville — See "Streets and Roads."

N. C., Raleigh—City, Southern and Seaboard Air Line Rys., Yarborough Bldg., take bids soon extending Ashe Ave., by constructing overhead bridge over tracks at Blind Institution. $27,000.

Alabama—State Hy. Dept., Montgomery, plans 700 ft. concrete bridge, 26 spans, on Uniontown-Browns Sta. Rd., Federal Aid Project 142, Perry Co.; 1,200 ft. bridge on Monroeville-Bay Minette Rd., Federal Aid Project 140, Baldwin Co. W. S. Keller, state highway engr.

O., Cincinnati—Defeated $825,000 bonds 8th St. viaduct. Noted Nov. 1.

O., Milford—Clermont Co. (Batavia) and Hamilton Co. (Cincinnati) plan repairing superstructure of 275 ft. petit truss bridge. $80,000. E. A. Cast, Court House, Cincinnati, co. surv.

Ind., Evansville — Vanderburg Co. plans repairing and strengthening Franklin Ave. bridge over Pigeon Creek, near here, $30,000. R. W. Meisinger, co. engr.

Mich., Kalamazoo—See "Unclassified."

Ill., Chicago—Voted $2,650,000 bonds for 200 ft. double leaf bascule bridge and approaches, 86 ft. wide, on La Salle St. over Chicago River. J. Ericson, city engr.

Ill., Chicago—Soon takes bids 90 ft. single leaf bridge on Roosevelt Rd. over Chicago River. $150,000. J. Ericson, city engr.

Kan., Phillipsburg—Phillips Co. rejected bids 140 ft. bridge on Federal Aid Project 166, Sect. B, one 80 ft. span and two 30 ft. approach spans, 148.7 cu.yd. rein.-con., 141.6 cu.yd. concrete, 25,100 lb. reinforcing, and 90,513 lb. structural steel, etc. Will readvertise. C. E. Freeman, Phillipsburg, engr.

Wyoming—State Hy. Dept., Cheyenne, rejected bids constructing 22 pile timber bridges, 1-3 spans, on Federal Aid Project 158, Kemmerer-Marbleton Rd., Lincoln and Sublette Counties. Noted Nov. 1.

Mo., Marquand—State Hy. Dept., Jefferson City, plans two 130 ft. steel truss spans, 1 rein.-con. pier, 18 ft. roadway, etc., over Castor River, here, Madison Co. B. H. Piepmeier, state highway engr.

Tex., Junction—Kimble Co. having revised plans prepared 120 ft. concrete bridge over Bear Creek, near here, $40,000. Former bids rejected. W. E. Simpson Co., 414 N. B. C. Bldg., San Antonio, engrs.

Tex., San Antonio — Dec. 4, to vote on $100,000 bonds for 2 or 3 concrete bridges. D. D. Harrigan, city engr.

BIDS DESIRED

N. J., Freehold — Dec. 5, by Bd. Freeholders Monmouth Co., Bridge Hl-48, one 70 ft. plate girder encased in concrete, on Squankum-Lakewood Rd. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.; adv. E. N.-R. Nov. 15.

W. Va., Williamson—Nov. 27, by Mingo Co., constructing Tamcliff Bridge over Guyandotte River, on Co. Project 16. A. Bishop, pres.; adv. E. N.-R. Nov. 15.

North Carolina—See "Streets and Roads."

S. C., Walhalla—See "Streets and Roads."

Florida — Nov. 27, at office State Rd. Dept., Tallahassee, embankment, creosoted timber bridge and bulkhead portion of bridge across Escambia Bay, on Rd. 1, Project 38-A, Santa Rosa and Escambia Counties. J. L. Cresap, acting state highway engr.; adv. E. N.-R. Nov. 15.

Fla., Clearwater—Nov. 19, by Pinellas Co., concrete box culvert, concrete slab, combination concrete curb and gutter and 1,500 lin.ft. creosoted timber bulkheads. C. E. Burleson, co. engr.

Miss., Greenville—Nov. 30, by Hy. Comrs. Washington Co., furnishing material steel bridge. O. C. Kulicka, assistant engr.; adv. E. N.-R. Nov. 15.

Illinois—Nov. 22 by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 3 rein.-con. slab and 3 rein.-con. girder bridges, substructure for 1 steel and 1 steel superstructure, 1,534 cu.yd. concrete and 86,620 lb. structural steel. C. H. Older, ch. highway engr.

Ia., Jefferson—Nov. 20, by Auditor Greene Co., 13 circular and 4 box culverts, 4 culvert extensions, one 24 x 40 ft. I beam bridge, and widening Eureka Mill Bridge, on Lincoln Highway. Iowa Hy. Comn., Ames, engrs.

South Dakota—Nov. 20, by State Hy. Dept., Pierre, constructing 160 ft. concrete viaduct, incl. 241.2 cu.yd. concrete, 24,310 lb. reinforcing and 114,929 lb. structural steel, on Federal Aid Project 168 Haakon Co., also 33 ft. concrete viaduct and 15 ft. wooden bridges incl. 42 cu.yd. concrete, 7,065 lb. reinforcing and 4,924 lb. structural steel, on State Aid Project 75, Butte Co. F. D. Hudgins, ch. engr.

Tex., Canadian—Nov. 24, by J. E. Stephens, judge Hemphill Co., 620 ft. extension to bridge over Canadian River, 4 steel spans, concrete piers. R. H. Spiller, co. engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, 65 ft. double leaf bascule highway span, 30 ft. roadway and two 5 ft. 6 in. roadway extensions, over Inland Waterway Canal, Route 4, Sect. 21, Point Pleasant, Ocean Co., also 80 ft. single leaf overhead bascule highway span, concrete piers, etc., over Cedar Bonnet, Manahawken Bay, Stafford, Ocean Co., from S. S. Thompson, 111 Chestnut St., Red Bank, 99% engrs. est. ($127,435) and 21% ($69,847) respectively. Noted Oct. 25.

O., Cleveland—Cuyahoga Co. steel superstructure, concrete substructure, for bridge on Hillside Rd., 363,000 lb. steel, etc., from Standard Eng. Co., Toledo, $30,987. Engrs. est. $31,750. Noted Oct. 18.

Okla., Tulsa — Tulsa Co., bridge over Homony Creek, two 50 ft. and one 140 ft. steel truss spans, from Patterson Steel Co., Zanthus and Chalmers Sts., $27,096.

Calif., Salinas — Monterey Co., 712 ft. bridge, 21 ft. wide, near Hilltown, from J. G. Williams Constr. Co., 519 California St., San Francisco, $32,437; furnishing and delivering 500 tons steel for same, from Judson Mfg. Co., 817 Folsom St., San Francisco, $42,440.

CONTRACTS AWARDED

Conn., Avon—Ensign Bickford Co., 100 ft. (3 span) steel truss bridge, to Natl. Iron Wks., Windsor St., Hartford. Engrs. est. $25,000.

Pa., Pittsburgh—Reconstructing 83 ft. bridge steel floor plates, beams and girders, two 10 ft. rein.-con. walks and 39 ft. rein.-con. roadway over Pennsylvania River on Penn Ave., to Independent Bridge Co., May Bldg., $44,450.

W. Va., Weston—Lewis Co., several small bridges, to Luten Bridge Co., Weston $35,300.

Ga., Macon—Central of Georgia R.R. Co., Savannah, substructure for 8 steel girder span bridge over Okmulgee River, here, to Nichols Contg. Co., T. C. Ga. Bldg., Atlanta, here.

Alabama—State Hy. Dept., Montgomery, creosoted timber bridges on Selma-Montgomery Rd., Federal Aid Project 139, Lowndes Co., to W. C. McCoy, Layfette, Ala., $48,391; substructure and approaches of rein.-con. bridge over Alabama River at Reeses Ferry, to Koss Constr. Co., 2818 5th St., Des Moines, Ia., substructure; 147.6 cu.yd. Class A concrete $35, 2,148.2 cu.yd. Class B $24.70, 1,805.4 cu.yd. Class C $15, 3,372 cu.yd. dry excav. $4, 2,229 cu.yd. wet excav. $12, approaches; 2,789.36 cu.yd. Class A concrete $21, 497.64 cu.yd. Class B $15, etc., total $249,985. Noted Nov. 1 and 8.

O., Fremont—Sandusky Co., 5 arch rein.-con. bridge over Sandusky River, State St., to Jones Bros., Fremont, $184,078. Noted Oct. 11.

Ill., East St. Louis—East Side Levee & Sanitary Dist., setting piers and abutments, for three 80 ft. span, rein.-con. bridge 24 ft. roadway, over Project 12 canal, to H. H. Hall Constr. Co., Murphy Bldg., $25,865. Contract for superstructure will be let next spring.

Kan., Topeka—For 3 bridges on Dover Rd., one 140 ft. steel span, two 100 ft. Marsh arch spans, 20 ft. roadways, to F. Luttiohann, Topeka, $17,544, $20,729 and $20,359 respectively. Engrs. est. $60,000.

Tex., Centerville—Leon Co. 1,370 ft. timber pile trestles with 8,160 ft. earth approaches over Keechi, Beaver and Boggy Creeks, to W. L. Sanders, Cooledge, $37,613. Noted Nov. 8.

Dams

PROPOSED WORK

Tex., Ft. Worth—Southwestern Portland Cement Co. rejected bids earth dam with concrete spillway, on Sycamore Creek. $60,000. Plans to be revised. J. B. Hawley, Cotton Exch., engr. Noted Nov. 1.

Tex., San Antonio—See "Unclassified."

Que., Chicoutimi—Donnacona Paper Co. plans logging dam and hydro electric power house near here.

Dams (Continued)

BIDS DESIRED

Md., Frederick—Nov. 27, by E. C. Crum, city engr., earth dam on Fishing Creek, 575 ft. concrete cutoff and core wall, 48,000 cu.yd. rolled embankment, etc. Norton, Bird & Whitman, advisory engrs.; adv. E. N.-R. Nov. 15.

Railways

PROPOSED WORK

Connecticut—Connecticut Co., State St., Hartford, plans laying double tracks on Windsor Ave. and paving stretch 2,500 ft. long, 17 ft. wide, with 3 in. asphalt on 6 in. concrete in Hartford. $50,000.

Pennsylvania—City of Philadelphia voted $750,000 bonds for extending and improving surface railways from point near Bridge St. to Poquessing Creek, Philadelphia.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Lake Worth — Palm Beach Co. (West Palm Beach) plans election to vote on $125,000 bonds for inlet 108 ft. wide. C. Holstlaw, West Palm Beach, will probably be engineer.

Miss., Greenwood—See "Unclassified."

Miss., Senatobia—Panola-Tate D. D., plans moving approximately 510.000 cu yd. earth, suitable only for drag line machine. $80,000-$100,000. Southern Eng. Co., Clarksdale, engrs.

Ark., Morrillton—Conway Co. D. D. 3, making preliminary plans drainage system and levee along Arkansas River to provide protection for several thousand acres. $25,000. S. G. Davies, engr.

Tex., San Antonio—See "Unclassified."

Calif., Santa Ana—Newhope Irrigation Dist. had plans prepared 6-30 in. underground tile drains, approximately 8 ft. deep, to drain 3,568 acres. To exceed $130,000. R. L. Loucks, Box 16, engr.

BIDS DESIRED

Florida—See "Bridges."

Ia., Carroll—Nov. 19, by W. T. Bohnenkamp, aud. Carroll Co., and G. A. Coburn, aud. Greene Co. (Jefferson), for Joint D. D. 86, Carroll Co. and 150, Greene Co., 8,600 lin.ft. open ditch, 40,000 cu.yd. excav., 76,370 lin.ft. 6-38 in. tile, etc., $32,000.

Calif., Blythe—Nov. 24, by Trustees Palo Verde D. D., 8 mi. open drain, Riverside Co., 300,000 cu.yd. earth excav., 2,000 lin.ft. piling, 50,000 ft. lumber, etc. F. F. Friend, ch. engr. D. W. Murphy, Blythe, consult. engr.

BIDS RECEIVED

Calif., Turlock—Turlock Irrigation Dist., from C. F. Tullock, Merced, excavating Item 3, high line main canal and Cross Ditch 1 enlargement $7.375, Item 4, Ceres Main Canal enlargement $6,840; from Byron Jackson Pump Mfg. Co., 55 New Montgomery St., San Francisco, 24 drainage pumping plants $15,488. Concrete lining and transmission lines will be built by day labor, estimated costs $105.252 and $350,000 respectively. Noted Oct. 18.

CONTRACTS AWARDED

Ky., Calhoun—Drainage Comrs. McLean Co., San Ferguson Drainage Ditch, to J. C. Carr Constr. Co., Ft. Wayne, Ind., $0.085 per cu.yd., total $101,990.

Ia., Ft. Dodge—C. A. Snook, aud. Webster Co., open ditch and tile drains in Joint D.D. 315-156, Webster and Greene Counties, 8,900 cu.yd. excav., 116,560 lin.ft. 6-38 in. tile, etc., tile material to Humboldt Gravel & Tile Co., Humboldt, $87,615; tile labor to Jefferson Cement Products Co., Jefferson. $54,443. Noted Oct. 11.

Streets and Roads

PROPOSED WORK

Conn., Hartford — See "Railways" under Connecticut.

Pa., Catasauqua—Plans to pave 1½ mi. various streets incl. excav., concrete curbing, sewers, etc. $50,000. Bascom & Sieger, Catasauqua, engrs.

Pa., Cresson—Cresson Boro. approved $40,000 bond issue improving Centre St., Park, Powell, Laurel, Ashcroft, Keystone, Columbus and Cathedral Aves. D. W. Dillman, Altoona Trust Bldg., Altoona, engr.

Pa., Lewistown—Boro. approved $125,000 bond issue for improving and paving Pine, Walnut, Spruce, Chestnut, Wayne, 5th, 4th, 3rd, Hale, Charles and Brown Sts., also extending and improving sewers in Walnut St. and several other streets. Banks & Craig, Telegraph Bldg., Harrisburg, engrs. Noted Sept. 27.

Pa., Phila.—Voted $2,400,000 bonds for improving and paving streets and $500,000 for grading.

Pa., Sayre—Plans paving and guttering 1 mi. Stevenson, Lincoln and Desmond Sts. $40,000.

Pa., Somerset—Somerset Co. voted $2,000,000 bonds rebuilding various sections of roads throughout county.

W. Va., Moundsville—Marshall Co. election Dec. 8, to vote on $50,000 bonds for roads in Washington Dist. A. Purdy, co. engr.

N. C., Asheville—Comrs. Buncombe Co. plan to sell $200,000 bonds for road and bridge construction. C. M. Lyda, chn. Bd. Comrs.

S. C., Sumter—Sumter Co. voted $1,500,000 bonds for road work extension.

S. C., York—York Co. voted $2,000,000 bonds for road work. L. A. Harris, secy. York Co. Highway Comn. Noted July 12.

Fla., Sebring—Voted $45,000 bonds asphalt and concrete paving streets in Lakeview Pl. Peacock & Hood, Sebring, will probably be engineers.

Alabama—State Hy. Dept., Montgomery, plans grading and surfacing 25 mi. Monroeville-Bay Minette Rd., from Little River to Stockton, 24 ft., Federal Aid Project 140, Baldwin Co.; grading and gravel surfacing 8.966 mi. Uniontown-Browns Sta. Rd., 24 ft., Federal Aid Project 142, Perry Co.; grading and concrete surfacing 2 mi. Tuscaloosa-Northport Rd., 26 ft., Tuscaloosa Co. W. S. Keller, state highway engr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading 11 mi. highway from Lewis Co. line to Linden, Perry Co. $50,000. J. G. Creveling, highway comr. Noted Aug. 31.

Tenn., Tullahoma—Voted $40,000 bonds improving city streets, gravel and oil asphalt.

O., Canton—Takes bids after Jan. 1, asphalt resurfacing and widening 6 blocks Walnut Ave. N. E., from 60 to 80 ft., $100,000 or more. W. E. Sarver, City Hall, engr.

O., Cincinnati—Defeated $3,330,990 bonds Canal Blvd. and $1,850,000 bonds widening and extending 5th St. Noted Nov. 1.

O., Lakewood (Cleveland, P. O.)—Voted $165,000 bonds grading, curbing and paving various streets. Work will proceed in spring. E. A. Fisher, City Hall, engr.

O., New Philadelphia—Plans repaving Bway., East Ave., High and East High Sts., sheet asphalt on 7 in. concrete. $191,246. G. E. Arnold, City Hall, engr.

O., Zanesville—Plans repaving 1 mi. West Main St., 60 ft. $100,000. C. Spencer, city engr.

Ill., Altamont—Had plans prepared paving 3 mi. Main and other streets, 24-30 ft., 47,250 sq.yd. 6 in. concrete, 15,840 cu. yd. excav., etc. $150,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Ill., McLeansboro — Plans grading and concrete paving 3,600 ft. various streets, 27 ft. average width. $35,000. Engineer not announced.

Mich., Detroit—Plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete 68,200 sq.yd. Lawrence, Devereaux, Nardin, Floyd, Ironwood, Diversey, Princeton, Trenton, Mitchell and Roselawn Aves. $390,660. G. Jerome, city engr.

Wis., Port Washington — Ozaukee Co. making preliminary plans concrete surfacing, etc., in city of Cedarburg and 8 mi. State Trunk Highway 57, 18 ft. Wisconsin Hy. Comn., at Div. Office 2, Stephenson Bldg., Milwaukee, engrs.

Minn., St. Paul — Rejected bids opened July 24, paving Grand Ave. between Milton St. and Cretin Ave., 41,134 sq.yd. 3½ in. creosoted wood blocks, etc., and Grand Ave. between Oakland Ave. and Milton St., 13,570 sq.yd. 3½ in. creosoted wood blocks. May readvertise. H. W. Austin, city purch. agt.

Minn., St. Paul — H. W. Austin, city purch. agt., rejected bids paving Minnehaha St. between Lexington and Fairview Aves., and between Fairview and Prior Aves. Will make new plans. Noted Oct. 4.

Kan., Ft. Scott—Plans grading and paving with bituminous filled brick on macadam, Kentucky rock asphalt on macadam, tarvia bound macadam or asphaltic concrete on 6th St., waterbound macadam on Pine St., total length 7,500 ft. $70,000. R. Toles, city engr.

Kan., Salina — Making plans paving 1½ mi. various streets, brick, concrete and asphalt. W. L. Theisner, city engr.

Kan., South Hutchinson (Hutchinson P. O.)—Ruckel Eng. Co., engrs., Interurban Bldg., Hutchinson, ready for bids about Jan. 1, 1½ mi. asphalt paving, for city.

South Dakota—State Hy. Dept., Pierre, soon takes bids grading 10.8 mi. Federal Aid Project 145, Beadle Co. $36,821. F. D. Hudgins, ch. engr.

Ark., Little Rock — See "Contracts Awarded."

Missouri — State Hy. Dept., Jefferson City, plans grading Sects. A and D, Federal and State Project 236, Route 2, Warren Co., 65,010 cu.yd. earth, 1,354 cu.yd. loose and 4,483 cu.yd. solid rock excav. B. H. Piepmeier, state highway engr.

Missouri—State Hy Dept., Jefferson City, plans concrete paving 154,376 sq.yd. Federal and State Project 236 D, Route 2, Warren Co., and Sects. D and E, Federal and State Project 238, Route 2, Saline Co. B. H. Piepmeier, state highway engr.

Mo., Hannibal—Made plans and lets contracts early in 1924, grading, curbing and concrete paving 38,534 sq.yd. 8th, South 6th and Chestnut Sts., Lyon St. from 4th to 5th Sts., Lyon St. from 10th to Maple Sts., Lyon St. from 5th to 10th Sts., Lyon St. from Maple to Market Sts., 6th St. from Center to Bird Sts., 6th St. from 4th to 3rd Sts., 6th St. from 3rd to Front Sts., Hill St. from 7th to 8th Sts. and Hill St. from 4th to 5th Sts. $118,140. W. R. Gettler, city engr.

Tex., Alice—Jim Wells Co. making plans grading, etc., 40 mi. State Highway 9, 24 ft. shoulder to shoulder, concrete or bituminous macadam. $90,000. L. W. S. Mantel, co. engr.

Tex., Angleton—Brazoria Co. voted $350,000 bonds improvement 12 mi. Glacier to Gulf Motorway 16 ft. also constructing concrete bridge across Brazos River. Noted Oct. 4.

Tex., Austin—Travis Co. defeated $1,500,000 bonds highway improvements and road construction. New election soon. O. Leonard, co. engr. Noted Oct. 4.

Tex., Bryan—Brazos Co. plans election to vote on $1,500,000 bonds, constructing and maintaining various highways and laterals. H. Boyett, co. engr.

Tex., Callahan—Baird Co. plans bituminous macadam paving and bridging 35 mi. various roads, 18 ft. $550,000. T. H. Webb, co. engr. $200,000 bonds recently voted and $350,000 appropriated by State and Federal Government.

Tex., Carthage—Attorney Generals Dept., Austin, approved $127,000 bonds improving State Highway 8 and various other roads, in Panola Co. Titus & Dillon, Center, engrs.

Tex., Corpus Christi—Nueces Co. making plans concrete paving 10.01 mi. Corpus-Bishop Rd. 18 ft. $330,500. C. E. Cocke, co. engr.

Tex., Corsicana—Having plans prepared bituminous paving, curbing and guttering, etc., various streets. $75,000. W. W. McClendon, city engr.

Tex., Crockett—Houston Co. election Nov. 24, to vote on $80,000 bonds grading gravel or macadam surfacing State Highway 21, etc. 16 ft. C. H. Milburn, co. engr.

Tex., Decatur—Wise Co. election Nov. 17 to vote on $75,000 bond issue, grading and gravel surfacing, Bridgeport-Sandy Creek Rd., in Rd. Dist. No. 3. H. R. Smith, co. engr.

Tex., Del Rio—Val Verde Co. soon takes bids graveling 12.74 mi. State Highway 41, south, 16 ft. $94,000. G. M. Gowers, El Paso, engr.

Tex., Eagle Pass—Maverick Co. election soon to vote on $150,000 bonds for highway improvements. State and Federal Government will appropriate $150,000. W. A. Bennett, judge.

Tex., Ft. Worth—Plans graveling, curbing and guttering, etc., Daggett Pl. on Riverside Blvd. D. L. Lewis, city engr.

Tex., Georgetown—Williamson Co. making plans gravel surfacing 13 mi. Florence-Georgetown Rd., 18 ft. $80,000. R. A. Nichols, co. engr. Noted Aug. 9.

Tex., Houston—Harris Co. plans grading, etc., 5 mi. San Felipe Trail. $25,000. Howe & Wise, co. engrs.

Tex., Lamesa—Dec. 6, to vote on $60,000 bonds, paving, curbing and guttering 8-12 blocks, brick or bituminous. $60,000. Address J. R. Williams, Lamesa. Engineer not announced.

Street and Roads (Continued)

Tex., Marlin — Falls Co. making plans grading and rein.-con. surfacing 1.84 mi. State Highway 2-A. $65,000. J. P. Wehrung, co. engr.

Tex., Marshall—Harrison Co. making plans reshouldering and resurfacing with bituminous topping 16.3 mi. State Highway 15, 16 ft. $75,000. E. F. Maddox, co. engr.

Tex., San Antonio — May 4, to vote on $250,000 bonds widening Market and South Flores Sts. J. W. Tobin, mayor. Engineer not selected.

Tex., Waxahachie—Ellis Co. soon takes bids grading and gravel surfacing, 3.04 mi. Exall Highway between Ennis and Palmer Sts., 18 ft. $52,000. W. A. Spaulding, co. engr.

Okla., Henessey—Making surveys grading and paving 11 blocks Main St., 36 to 70 ft. wide. $75,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Tecumseh—Pottawatomie Co. election Dec. 11, to vote on $665,000 bonds grading and paving 40 mi. Postal and Ozark Highways, 450,000 sq.yd. concrete, 200,000 cu.yd. earth and 2,500 cu.yd. rock excav. F. D. Browne, Shawnee, engr.

Okla., Weleetka—Preparing plans grading and paving 6 blocks Seminole, Creek and Chickasaw Sts., 7,300 sq.yd. concrete, 3,100 lin.ft. curbing, etc. $32,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colorado—State Hy. Dept., Denver, concrete paving and grade separation on 0.852 mi. Federal Aid Project 230 A, Douglas Co., 18-30 ft., to Kenney Constr. Co., Bank Blk., Denver, $82,710, engrs. est. $146,733; concrete paving 3.995 mi. Federal Aid 230 B, Douglas Co., 18 ft., to Brodie & Anderson, Interstate Trust Bldg., Denver, $139,974, engrs. est. $154,484. Noted Nov. 1.

Washington—State Hy. Dept., Olympia, plans to expend $200,000 during 1924 for hard surface paving in Lewis Co. Work includes concrete paving 6 mi. highway, 18 ft., between Ethel and Silver Creek. J. Allen, superv. of highways.

California—State Hy. Dept., Sacramento, plans grading and gravel surfacing 3.9 mi. road between Westmoreland and point 4 mi. west, Imperial Co. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, plans improving 10 mi. road between Sacramento and Elk Grove, Sacramento Co., approximately 3 mi. concrete paving and widening to 24 ft., widening remaining 7 mi. to 20 ft. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, making plans constructing concrete shoulders, etc., on approximately 15 mi. San Diego-Oceanside Rd., San Diego Co. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, making plans concrete paving 9 mi. Redding-Bayha Rd., Shasta Co. R. M. Morton, state highway engr.

Calif., Oakland—Plans improving 4th St., 56,174 sq.ft. grading, 53,751 sq.ft. 3 in. warrenite on 4 in. asphaltic concrete. W. W. Harmon, city engr.

Calif., San Bruno—Making plans grading, paving , etc., streets in Huntington Park, 120,000 sq.ft. asphaltic concrete base, warrenite surface, with necessary grading, curbing, storm water conduit and sanitary sewers, etc. G. A. Kneese, Court House, Redwood City, engr.

Calif., San Diego—Plans improving Front and Dickson Sts., 113,075 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 2,249 sq.ft. concrete sidewalk, 2,952 lin.ft. concrete curb, etc. F. A. Rhodes, city engr.

Calif., San Diego—Rejected bids improving 23,905 sq.yd. Granada Ave., 29th, Dale and Palm Sts., 1½ in. asphaltic concrete on 4 and 5 in. concrete. Will revise plans. F. A. Rhodes, city engr. Noted Nov. 8.

Calif., Watts—Had plans made 6 in. concrete paving 108,090 sq.ft. Randolph St., 108,090 sq.ft. Ruoff St., 72,328 sq.ft. Elm St.; 5 in. concrete paving 71,651 sq.ft. Hickory St. L. D. House, city engr.

Ont., Chatham—Suburban Roads Comn. plans 4 mi. cement highway on Dover Harwich town line, Kent Co. $300,000. A. Clements, chn.

Ont., Peterboro—Plans 3,000 sq.yd. asphalt or concrete pavements with concrete curbs and gutters on George St. $26,683, McDonnell St. $19,795, Water St. $63,240, Aylmer St. $10,712. R. H. Parsons, city engr.

Ont., Toronto—Plans asphalt pavements 11,000 sq.yd. on 2nd St. $6,605, St. Clair Ave. $39,935, 15,000 sq.yd. on Coxwell Ave. $10,000, St. Clair Ave. $41,800, Belhaven Rd. $17,580, Marlborough Pl. $9,800; concrete sidewalks 12,000 ft. 4, 6 and 8 ft. on Hiawatha Rd., Ballenburg, Cranbrooke and Hillsdale Ave. $15,899, 40,000 sq.ft. on Coxwell Ave. $12,700, 5,300 sq.yd. 4-6 ft. on Benson Ave. $1,300; grading Edith Dr. $5,000; concrete curbs on 700 lin.ft. Glendonwynne Rd. $665; concrete pavement on 1,600 sq.yd. lane north of Lappen Ave. $7,500; asphaltic concrete surface on 6,000 sq.yd. Castle Frank Rd. and Elm Ave., $12,138; asphaltic concrete pavement on 4,500 sq.yd. Glendonwynne Rd., $21,395; asphalt, asphaltic concrete or concrete pavements on 17,000 sq.yd. Chatham Ave. $15,800, Scarboro Rd. $14,300, Front St. $13,300, Hillsdale Ave. $40,500, Division St. $6,300, Beresford Ave. $2,300, lane north of Mansfield Ave. $2,400. R. C. Harris, city engr.

Ont., Toronto—Plans 240,000 sq.ft. 4 ft. 6 in.-8 ft. concrete sidewalks on Bayfield Crescent, Kingsmere and Mt. Pleasant Rds., Lascelles and Milverton Blvds., Marlborough Pl., Coxwell, Gales, 8th, Birdsall, Dundurn, Harris, Rhodes, Pinehurst, Welland and Rosewell Aves., Ardagh, Durie, Annette and Spring Sts., $71,578; 7,000 lin.ft. concrete curbs on Marlborough Pl., Glendonwynne Blvd., Bowmore and Mt. Pleasant Rds., Bingham, 8th and Strickland Aves., $6,000; grading 7th and Welland Sts. and lane between Constance and Marmaduke Sts., $12,936; asphalt, bitulithic or asphaltic concrete pavements on concrete on Marlborough Pl., Montcrest and Glendonwynne Blvds., Kingsmere, Bowmore, Belhaven, Kingswood, Mt. Pleasant Rds., Coxwell, Golfview, Bingham, 8th, Aldergrove, Pinehurst, St. Clair, Nasmith and Welland Aves., Gifford, Durie, Heath, Pearl and Lexie Sts., $394,525. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Nov. 21, by E. Riegelmann, boro pres., Boro Hall, paving Ave. D, Carroll and Crown Sts., repaving 14th and Wilson Aves., sheet asphalt on concrete; Concord St. granite block on concrete; grading, curbing and flagging Ave. D.

North Carolina—Nov. 27, by State Hy. Comn., Raleigh, grading and concrete or asphaltic paving, etc. 24.9 mi. road in Orange, Montgomery, Richmond and McDowell Counties; sand asphalt paving 27 mi. road in Sampson, Brunswick and Moore Counties; topsoiling, sand clay, gravel or grading 76.17 mi. roads in Johnston, Caswell, Lincoln, Stokes, Yadkin, Cherokee and Jackson Counties; 760 ft. bridge Hertford and Gates Counties, 65 ft. bridge Carteret Co., 65 ft. bridge Lincoln Co.; adv. E. N.-R. Nov. 15.

N. C., Raleigh—Dec. 5, by E. E. Culbreth, mayor, and City Comrs., at City Hall, paving, etc., 75,000 sq.yd. various streets, sheet asphalt or other bituminous pavement on concrete or one course concrete. W. C. Olsen, Raleigh, engr.; adv. E. N.-R. Nov. 15.

S. C., Walhalla—Nov. 20, by Oconee Co., 6.4 mi. State Rd. 18, incl. 49,600 cu.yd. common excav., 20,000 cu.yd. topsoiling, etc., also 79 ft. rein.-con. bridge. E. D. Sloan, Court House, Greenville, engr.

Florida—Nov. 27, by State Rd. Dept., Tallahassee, grading, surfacing, etc., 12.42 mi. Project 521, Nassau Co., plain concrete, asphaltic surface on rock; clearing, grading, rock base, etc., 13.59 mi. Project 40-E, Brevard Co., 7.72 mi. Project 604, Volusia Co., 11.33 mi. Project 544B, Pasco Co., 5.68 mi. Project 576, Sarasota Co.; clearing, grading and sand clay surfacing 14.73 mi. Project 571, Madison Co.; rock base on 8.75 mi. Project 544, Pasco Co.; ditching and 6 in. rock shoulders on 0.21 mi. Project 605, Polk Co. J. L. Cresap, state highway engr. Noted Nov. 8.

Fla., Clearwater—Nov. 19, by Pinellas Co., paving, etc., Rds. 1 to 8 inclusive, vitr. brick with bituminous macadam penetration, etc. C. E. Burleson, co. engr. Noted Oct. 11.

Fla., Jacksonville—Dec. 3, by Comrs. Duval Co. constructing approximately 84 mi. permanent roads. C. S. Coe, co. engr.; adv. E. N.-R. Nov. 15.

Fla., Tavares—Nov. 19, Comrs. Lake Co. shell surfacing 10 mi. Rd. H from Paisley to Crows Bluff, South Lake Special Road & Bridge Dist. $25,000. G. E. Heller, Tavares, engr.

Louisiana—Nov. 27, by State Hy. Dept., Reymond Bldg., Baton Rouge, 8 mi. Sect. B, and 7.74 mi. Sect. C State Project 374, Slaighter-Mississippi Highway, East Feliciana Parish; 8 mi. Sect. A and 7.81 mi. Sect. B Federal Aid Project 141, Ferriday-Jonesville highway, also furnishing 9,767 cu.yd. washel gravel and 19.734 cu.yd. 40% sand clay gravel. J. M. Fourmy, ch. engr.

Kentucky—Nov. 27, by State Hy. Dept., Frankfort, paving various roads **(F. A. P. means Federal Aid Project, S. P. State Project)**, 10.156 mi. Scottsville-Glasgow Rd., 18 ft., F. A. P. 112, Allen Co., 14.032 mi. Princeton-Marion Highway, 18 ft., S. P. 10, Sect. C, Caldwell Co., 7.212 mi. Princeton-Marion Rd., 18 ft., S. P. 10, Sect. C, Crittenden Co., 17.035 mi. Barboursville-Corbin Rd., 18 ft., S. P. 5, Sect. D, Knox Co., 3.747 mi. Louisville-Bardstown Rd., 20 ft., F. A. P. 50, Sect. B, Jefferson Co., 9.498 mi. London-Mt. Vernon Rd., 18 ft., S. P. 5, Sect. B, Laurel Co., 17.082 mi. Owenton-Georgetown Rd., 14 ft., S. P. 49, Sect. A, Owen Co.; grading 16.628 mi. Somerset-Whitley Rd., 26 and 30 ft., F. A. P. 110, Pulaski Co., 9.5 mi. Richmond-Mt. Vernon Rd., 26 and 30 ft., Madison and Rockcastle Counties, 9.94 mi. Beattysville-Booneville Rd., 24 and 28 ft., S. P. 31, Sect. A, Lee and Owsley Counties, 10.941 mi. Irvine-Beattysville Rd., 24 and 28 ft., S. P. 29, Sect. B, Estill Co.; constructing and surfacing 7.766 mi. Mannington-Crofton Lake Rd., 18 ft., F. A. P. 111, Christian Co. J. S. Boggs, state highway engr.

Ind., Logansport—Dec. 4, by Cass Co., improving Lawrence Nealey et al. Rd., Jefferson Twp., gravel. $34,846. H. M. Gardner, aud.

Ind., Rushville—Dec. 4, by Council, curbing, guttering and paving 10,000 sq.yd. Morgan St., rein.-con., brick, bituminous concrete and wood block types. $35,000-$60,000. A. L. Stewart, city engr.

Michigan—Nov. 20, by State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 53-3 and 38-7, Sanilac Co., 21,903 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Illinois—Nov. 22, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 168.67 mi. with portland cement concrete, 4 in. monolithic brick, 4 in. bituminous filled brick, bituminous concrete with or without binder course. Cement will be furnished. Grading 25.76 mi. involving 385,632 cu.yd. excav. and 2,328 cu.yd. concrete. C. H. Older, ch. highway engr.

Ia., Jefferson—Nov. 20 by Auditor Greene Co., gravel surfacing 16.916 mi. Primary Rd.; paving and incidental work on 0.95 mi. Primary Rd. east and west of here, 6,245 cu.yd. earth excav., 10,928 sq.yd. concrete pavement, 16.667 mi. Primary Rd., 77,989 cu.yd. excav., 175,755 sq.yd. concrete, 104,492 ft. tile drain, etc. Iowa Hy. Comn., Ames, engrs.

Tex., Ennis—City Com. taking bids and opens same about Nov. 17 paving 57 blocks McKinney, Decatur, Dallas, Baylor, Knox, Main and Ennis Sts., bituminous brick, etc. $125,000. H. McCanless, city engr.

Tex., Houston — City Com. taking bids paving North Main St. from Houston St. to city limits, bituminous of various types. $30,000. J. C. McVea, city engr.

Tex., Marlin—Falls Co. taking bids grading and concrete, surfacing 1.8 mi. State Highway from Eddy to country line. $50,000. J. P. Wehrung, Chilton, engr. Noted Nov. 15.

Tex., Vernon—Nov. 27, O. T. Warlick, judge Wilbarger Co., concrete surfacing 38,255 sq.yd. State Highway 5, incl. 116,860 lb. reinforcing. $105,000 incl. engineering and contingencies. J. B. Nabors, co. engr.

Wash., Seattle—Nov. 26, by Comrs. King Co., grading and graveling 1.4 mi. Auburn Pierce County Rd., 28,683 cu.yd. borrow, 32,449 cu.yd. embankment. $25,000. T. R. Beeman, co. engr.

California—Nov. 26, by State Hy. Comn., Sacramento, grading and gravel surfacing 3.9 mi. road between Westmoreland and point 4 mi. west, Imperial Co. R. M. Morton, state highway engr.

Calif., El Centro—Receiving bids improving various streets, 156,000 sq.ft. asphaltic concrete pavement, 4 in. base, 2 in. surface, 391,000 sq.ft. concrete pavement, 3½ in. base, 1½ in. surface, 30,000 lin.ft. cement curb, etc. F. C. Dyer, city engr. Noted Nov. 1.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Clarkson Ave., asphalt, from Borough Asphalt Co., 1301 Metropolitan Ave., $32,001; repaving 2nd Ave., granite block, from Leonard Paving Co., 233 Bway., New York, $88,262; grading, curbing, flagging, paving and repaving Sheepshead Bay, asphalt, from Cranford Co., 52 9th St., $70,086. Noted Nov. 1.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, Nov. 5, repaving Richmond Ave. and St. Marks Pl., bituminous macadam, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $40,874 and $7,810 respectively. Noted Nov. 1.

Pa., Phila.—Dept. Pub. Wks., City Hall, paving from Barber Asphalt Paving Co., 239 North 30th St., Emlen Ave. $5,410,

Streets and Roads (Continued)

Kingsessing Ave. $12,785, Ruscomb St. $4,914, 15th St. $12,759, 65th Ave. $8,634. Noted Nov. 1.

Tex., Amarillo—Potter Co., grading and gravel surfacing 6.13 mi. Bushland Rd., State Highway 13, Federal Aid Project 430, 16 ft., 95.5 cu.yd. concrete, 44,108 cu.yd. roadway, 22,032 cu.yd. borrow, 2,099 lb. reinforcing, 220,149 cu.yd. gravel, from Hoffman Constr. Co., Eastland, $49,517. Engrs. est. $65,000. Noted Oct. 25.

Tex., Hondo—Medina Co., grading and gravel surfacing 2.65 mi. State Highway 3, Federal Aid Project 270 E, 427 cu.yd. concrete, 14,104 cu.yd. roadway and 17,861 cu.yd. borrow excav., 36,197 lb. reinforcing, 7,728 cu.yd. gravel, (no bids received for bituminous topping) and grading gravel surfacing and bituminous topping 1.56 mi. State Highway 3, Federal Aid Project 270 B, 374.8 cu.yd. concrete, 13,649 cu.yd. roadway, 7,126 cu.yd. borrow excav., 14,884 cu. yd. bituminous macadam, 33,874 lb. reinforcing and 71,290 lb. structural steel, from P. Schriever, Seguin, $26,540 and $24,491 respectively. Engrs. est. $47,265 and $38,842 respectively. Noted Oct. 11.

Wash., Kelso—City Council, Nov. 1, paving 8,700 sq.yd. Main St. in West Kelso, one course concrete, from Lindberg, Avidso & Laird, Kelso, $25,003. Engrs. est. $25,500.

Wash., Seattle—Bd. Pub. Wks., paving Avalon Way, from Goetz & Brennan, Seaboard Bldg., 41,144 sq.yd. 7 in. concrete $2, 15,550 sq.yd. 6 in. concrete $1.80, 4,532 lin.ft. asphaltic concrete curbing $0.65, 21,850 lin.ft. concrete curbing $0.35, 105,000 cu.yd. earth excav. $0.61, etc., total $294,808 (with clay) and $294,400 (with concrete). Noted Nov. 1.

California—State Hy. Comn., Sacramento, surfacing 2 mi. road from south of Weaverville to Tom Long Gulch, Trinity Co., 17,200 cu.yd. broken stone or gravel, from Englehart Paving & Constr. Co., Eureka, $68,800. Noted Oct. 11.

Calif., Bakersfield — Grading, curbing, paving, etc., portions 21st and 4th Sts., etc., 220,375 ft. grading, 220,375 ft. 3½ in. asphaltic concrete base with 1½ in. warrenite surface, 11,829 ft. concrete gutter, etc., from Union Paving Co., Call Bldg., San Francisco, $73,003. Noted Nov. 8.

Calif., Fresno — Improving Fresno Ave. between Olive and Belmont Sts., 139,358 sq. ft. 6 in. concrete pavement, 161,496 sq.ft. grading, 18,247 sq.ft. walks, 2,445 lin.ft. curb, etc., from W. F. Hanrahan, Brix Bldg., $43,199. Noted Oct. 11.

Calif., Los Angeles—Bd. Pub. Wks., paving Denison Ave., 144,800 sq.ft. 5 in. concrete, 6,275 ft. curb, 36,081 sq.ft. walks, etc., from Griffith Co., Los Angeles Ry. Bldg., $51,952.

Calif., Los Angeles—Bd. Pub. Wks., paving, curbing, etc., Melrose Ave., 180,090 sq. ft. 6 in. bituminous, 9,510 ft. curb, 646 sq. ft. warrenite bitulithic, 3,278 sq.ft. bituminous base, etc., from G. R. Curtis, 2440 East 26th St., $71,256. Noted Oct. 25.

Calif., Newport Beach—Improving Ocean Blvd., etc., 147,644 sq.ft. 6 in. clay and gravel, 16,680 sq.ft. 5 in., 152,080 sq.ft. 6 in. and 212,354 sq.ft. 8 in. concrete pavement, 20,200 lin.ft. concrete curb and 101,767 sq.ft. concrete walks, etc., from California Constr. Co., Union Bldg., San Diego, $276,506. Noted Oct. 18.

Calif., Redwood City—Supervs. San Mateo Co., improving various streets in Lomita Park, from Municipal Impvt. Co., 306 12th St., Oakland, 16,000 cu.yd. excav. $1.85, 542,900 sq.ft. pavement, 4 in. concrete base, 1½ in. warrenite bitulithic surface, $0.314, 942 ft. 18 in. vitr. storm sewer $2.85, 5,400 ft. 4 in. vitr. laterals $1.59, etc., total $211,491. Noted Oct. 25.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalk, etc., on 101st (Jerome) Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $110,020. Noted Nov. 8.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc. on Davidson Ave., to C. D. Beckwith, Inc., 2875 Bway., $15,485; West 195th St., to F. Hanratty, 605 Beach Terrace, $8,447; grading, building inlets, basins and drains in Golden Ave., to I. F. Cavaluzzo, 1538 Walton Ave., $23,317; 25,000 gal. road surfacing material, to Barrett Co., 17 Battery Pl., $4,125. Noted Nov. 8.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 49th St., sheet asphalt, to W. J. Fitzgerald, 547 West 45th St., $20,110, Tiemann Pl., sheet asphalt, to Brusstar Constr. Co., Harlem River and 150th St., $10,089, Dyckman St., granite block, to Asphalt Constr. Co., 208 Bway., $52,248; widening and repaving 56th St., sheet asphalt to Cleveland Trinidad Paving Co., Flushing, $28,322, 60th St., sheet asphalt, to Sicilian Asphalt Paving Co., 41 Park Row, $53,858, 58th St., stone filled sheet asphalt, to Uvalde Asphalt Paving Co., 1 Bway., $24,989. Noted Oct. 25.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Sea Ave., bituminous concrete, to J. W. Donovan, 2205 Richmond Terrace, Port Richmond, $39,910, Center and Moore Sts., concrete, to J. Johnson Sons, 455 Bway., West New Brighton, $21,598; concrete sidewalks on Curtis Ave., to Arco Constr. Co., 31 Nassau St., New York, $4,844; grading Shaughnessy Lane, to J. Kelly, 1150 Forest Ave., West New Brighton, $6,731. Noted Oct. 18 and 25.

Pa., Ebensburg — Paving 1 mi. Dunlo-Salix Rd. Extension, brick on concrete, Adams Twp., to McClure & Bingner Co., Swank Bldg., Johnstown. Engrs. est. $30,000.

Pa., Phila.—Dept. Pub. Wks., City Hall, asphalt pavements to Eastern Paving Co., Colonial Trust Bldg., on Camac, Iseminger and 12th Sts., $6,715; Warrington Ave. $6,632; to Barber Asphalt Paving Co., 239 North 30th St., asphalt pavement on Lee and Viola Sts. $1,265 and $3,088 respectively; to Municipal Paving Co., 632 Kate St., repaving with granite block Delaware Ave. $3,668; to Brown-King Constr. Co., Commercial Trust Bldg., reconstructing bridges $18,075; to Penna. Steel Export Co., G and Venango Sts., furnishing material for repairing bridges $2,685; to Richards Kelly Co., 349 North 57th St., furnishing 1,000 tons crushed stone $2.87; to West Jersey Sand & Supply Co., Beach and Marlboro Sts., 3,500 cu.yd. 1:3:6 ready mixed concrete $8.60; to Robbins Contg. Co., 1137 North Front St., constructing ramp for ash dumping platform at Green St. Wharf $7,307.

Fla., Tavares—Lake Co., sand clay surfacing 10.08 mi. Group "C," and 25.25 mi. Group "B" South Lake Special Road & Bridge Dist., to Bryson Live Stock Co., 1418 West Church St., Jacksonville, $32,086 and $150,205 respectively; 12.18 mi. Group "D" and 14.55 mi. Group "E" South Lake Co. Special Road & Bridge Dist., to Barnes & Smith, Bushnell, $38,460 and $59,941 respectively.

Miss., New Albany—Union Co. grading and gravel surfacing 8.812 mi. Federal Aid Project 122, to Boddie Constr. Co., Ellisville, 17,525 cu.yd. common excav. $0.35, 11,882 cu.yd. borrow excav. $0.36, 208.2 cu. yd. concrete $26, 15,998 cu.yd. gravel 1 mi. haul $0.88, 25,332 units gravel overhaul $0.18, etc. Noted Oct. 4.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 51-2, 4.731 mi. Sect. A to Marsman & Taber, 211 Ashton Bldg., Grand Rapids, 49,866 sq.-yd. 8 in. concrete pavement $1.57, etc., total $82,276; 3.962 mi. Sect. B to P. W. O'Conner & Son, 250 Charles Ave., S. E., Grand Rapids, 39,947 cu.yd. excav. $0.64, 41,758 sq.yd. 8 in. concrete pavement $1.45, 421.2 cu.yd. concrete $17, etc., total $97,298. Noted Oct. 18.

Kan., Oberlin — Decatur Co., 9.602 mi. earth road, Federal Aid Project 165, Sect. A, to G. F. Bump, Prairie View. $50,165.

Wyoming—State Hy. Dept., Cheyenne, gravel surfacing 8.8 mi. Federal Aid Project 49, Lincoln Highway from Thayer Junction to Point of Rocks, 24 ft., Sweetwater Co., to Tyler & Baker, Rock River, $41,200; grading 35.4 mi. Federal Aid Project 158, Kemmerer-Marbleton Rd., 20 ft., Lincoln and Sublette Counties, to Utah Constr. Co., Eccles Bldg., Ogden, Utah, $147,449. Noted Nov. 1.

Mo., Hayti — Graveling, etc., various streets, to Morgan & Little, Hayti, $25,136.

Ark., Little Rock—Comrs. Pulaski Rd. Impvt. Dist. 10, grading and graveling 11 mi. Perryville Rd., to Oliver Constr. Co., 322 West Markham St. Bids rejected paving West Markham and Victory St. Noted Sept. 27.

Ark., Morrilton — Impvt. Dist. 4, incl. 11,900 sq.yd. 2 in. asphaltic concrete on 5 in. concrete, 9,300 ft. curb and gutter, etc., to Mobley Constr. Co., Morrilton. Engrs. est. $42,500. Noted Sept. 13.

Tex., Beaumont—Paving Emma, Magnolia and Victoria Sts., 2½ in. cold rolled rock asphalt on shell base, and 15,000 sq. yd. grade B cold rolled Uvalde rock asphalt 1 in. top on 5 in. concrete, to Uvalde Rock Asphalt Co., Beaumont, $2.20 per sq.yd. Noted Oct. 25.

Tex., Centerville—Leon Co. grading D C D Highway, to W. L. Sanders, Cooledge, $38,000. Noted Oct. 4.

Tex., Dallas — Paving with Willite asphaltic concrete 2 in. top on 6 in. concrete 137,058 sq.yd. Marlborough, Bannock, Montreal, Velasco, Thomas, 8th, 2nd, Euclid, Edgefield, Spencer, Lewis, Colonial, Central, Pine, Beacon and Tyler Sts., to Fuller Constr. Co., Slaughter Bldg., $2.94 per sq.yd., total $455,697. Noted Nov. 1.

Tex., Hemphill—Sabine Co. grading, gravel surfacing and bridging 7.19 mi. State Highway 21, Federal Aid Project 357-B, 195.7 cu.yd. concrete, 53,426 cu.yd. roadway and 16,354 cu.yd. borrow excav., etc., to E. M. Wood, Royse City, $60,003, 14,911 cu. yd. local gravel to be furnished by county, engrs. est. $67,650; 8.38 mi. State Highway 8, Federal Aid Project 327-A, 141.2 cu.yd. concrete, 35,826 cu.yd. roadway and 80,351 cu.yd. borrow excav., etc., to George & Kerr, Lufkin, $65,394, 12,843 cu.yd. gravel to be furnished by county $18,000, engrs. est. $90,000. Noted Nov. 1.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing with gravel sledged stone and crushed stone and bridging 15.47 mi. State Highway 1, Federal Aid Project 382, 18 ft. and 3.37 mi. State Highway 1, Federal Aid Project 383, 18 ft., to McClung Constr. Co., Cleburne, $200,847 and $24,258 respectively, engrs. est. $262,200 and $60,254 respectively. Gravel to be furnished by county. Noted Nov. 8.

Oklahoma—State Hy. Dept., Oklahoma City, grading and paving with Bates type concrete 1.63 mi. road in Creek Co., Federal Aid Project 88, 17,213 sq.yd. concrete, 6,575 cu.yd. excav.; also 3.64 mi. road from Ottawa to Commerce, 38,440 sq.yd. asphalt, 1,800 cu.yd. excav., to General Contg. Co., Herskowitz Bldg., Oklahoma City, $54,169 and $85,315 respectively. Noted May 3.

Oklahoma — State Hy. Dept., Oklahoma City, grading and paving 11.57 mi. road East of Pawnee, Federal Aid Project 85, Pawnee Co., 122,000 sq.yd. gravel, 47,500 cu.yd. excav., to McCoy & Son, Pawnee, $144,974.

Okla., Edmond—Grading and paving 17 blocks Jackson, 4th and Lincoln Sts., 17,809 sq.yd. concrete, 7,200 lin.ft. curbing, 5,150 cu.yd. excav., to Greene Beekman Co., 1st Natl. Bank Bldg., Oklahoma City, (6 in. concrete paving $2.50 per sq.yd., excav. $0.55 per cu.yd.) etc., total $57,631.

Okla., Oklahoma City—Grading and pav- 5 blocks 4th St., 9,860 sq.yd. asphalt, 4,600 lin.ft. curbing, etc., to Western Paving Co., Tradesmens Bldg., $52,836.

Wash., Everett—City Council, concrete paving 5 blocks Rockefeller Ave. from Hewitt to 33rd St. to E. Wahl & Co., Everett, $25,874.

Calif., Fresno—Improving McKinley Ave., 182,530 sq.ft. grading, 144,798 sq.ft. asphalt pavement, 12,958 ft. gutter, 25,132 ft. walks, 6,898 ft. curb, etc., to W. F. Hanrahan, Brix Bldg., $59,890. Noted Oct. 25.

Calif., Inglewood — Improving streets in Fairview Heights Dist. 4, 573,720 sq.ft. grading, 115,590 sq.ft. 6 in. concrete, 106,550 sq.ft. 2 in. macadam, 98,050 sq.ft. walks, 21,660 lin.ft. curb, etc., to J. L. McLain, Inglewood, $91,950. Noted Nov. 1.

Calif., Los Angeles—Bd. Pub. Wks., grading and paving Vermont and Western Aves., to G. R. Curtis, 2240 East 26th St., 180,090 sq.ft. 6 in. bituminous pavement $0.2275, 9,512 ft. curb $0.65, 44,710 sq.ft. walks $0.20, 10,800 sq.ft. gutter $0.30, grading $7,500, total approximately $71,255; Denison Ave. to Griffith Co., Railway Exch., grading $7,311, 114,880 sq.ft. concrete pavement incl. bituminous base $0.213, 6,275 lin. ft. curb $0.70, 36,081 sq.ft. walks $0.21, sanitary sewer $1,350, 5,075 lin.ft. sewers $1.35, total $51,951.

Calif., San Diego—Improving 13,550 sq. yd. Ray, Dwight and Wightman Sts., 1½ in. asphaltic concrete on 4 and 5 in. concrete, to G. R. Daley, 4430 Boundary St., $29,995. Noted Nov. 8.

Calif., San Francisco — Curbing, paving and laying sewers in Buchanan St. between Herman and Duboce Aves., to J. D. McElroy, 180 Jessie St., $29,022; Jamestown St. between 3rd and Ingalls Sts., etc., to C. B. Eaton, 715 Ocean Ave., $20,077. Noted Oct. 4.

Calif., Stockton—San Joaquin Co. to C. Moreing, Commercial and Savings Bldg., improving 2.5 mi. Harney Lane Rd., 3,000 cu.yd. grading, 7,300 ton rock, etc., 4 mi. Farmington Rd., 7,500 cu.yd. grading, 9,650 ton gravel, etc., and 1.5 mi. Fairchild Lane, 2,700 cu.yd. grading, 4,220 ton gravel, $23,951, $16,691 and $11,562 respectively; to Hutchinson Co., 17[illegible] Bway, Oakland, furnishing 2,75[illegible] cu.yd. gravel for road work, f.o.b. cars Holt Station, $5,238.

Streets and Roads (Continued)

Calif., Stockton — San Joaquin Co. improving Naglee-Burk Highway, 7,500 cu.yd. grading, 10,872 tons gravel or 9,227 tons crushed rock, from Irey & Holden, Lodi, $29,205.

Calif., Ventura — Ventura Co., grading and paving Paula Ojai Rd., to Southwest Paving Co., Washington Bldg., Los Angeles, 6,000 cu.yd. excav. $0.65, 21,765 ft. rolling $0.20, 348,224 sq.ft. 5 in. asphaltic concrete paving $0.178, etc., total $70,236. Noted Oct. 11.

Industrial Works

PROPOSED WORK

Mass., Cambridge—(Branch of Boston)—J. F. Linckman, 33 Edinboro St., Boston, having plans prepared by Brainerd & Leeds, 89 Franklin St., Boston, and takes bids early in winter, 5 story and basement, 100 x 150 ft factory, rein.-con. and brick, wood pile foundation, here. $300,000.

Mass., Southbridge — Hamilton Woolen Mills plan 3 story, 50 x 150 ft. brick addition to mill.

Conn., New Britain — Landers Frary & Clark, Commercial and Center Sts., had plans prepared by M. J. Unkelbach, Main St., 6 story, 65 x 160 ft. factory, brick and steel, plain foundation, Ellis St. $100,000.

Conn., New Britain—M. Zucker, 516 Main St., having plans prepared by G. Zunner, 182 High St., Hartford, 3 story, 30 x 70 ft. storage house, brick and steel, plain foundation. $50,000.

N. Y., Geneva—O'Malley Motor Co., 347 Exchange St., plans rebuilding garage and service station, recently destroyed by fire. $100,000.

N. Y., Peekskill—Union Stove Wks. plans rebuilding plant, recently destroyed by fire. $500,000.

N. Y. Seneca Falls—Seneca Rug. Co., Inc., plans rebuilding factory. $60,000.

Pa., Erie—Erie Steam Shovel Co. having preliminary plans prepared by Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., 1 story, brick and steel factory, to exceed $40,000.

Pa., Phila.—J. J. Greenberg, Morris Bldg., having plans prepared by L. B. Rothchild, 215 South Broad St., 6 story and basement, rein.-con. and brick warehouse, plain foundation, 6,000 sq.ft. floor space, 30th and Walnut Sts. $200,000.

Pa., Phila.—Hardwick & Magee Co., 1220 Market St., having revised plans prepared by Ballinger Co., 12th and Chestnut Sts., plant here. Former bids rejected. Noted Sept. 20.

Md., Baltimore—E. H. C. Browne, archt., Equitable Bldg., soon lets contract 2 story, 25 x 104 ft. garage and office, concrete and brick, plain foundation, 423 Exchange Pl., for H. Gamse & Bros., 421 Exchange Pl. $40,000.

W. Va., Huntington—Fesenmeier Packing Co., West 14th St., plans addition to ice and cold storage plant, brick, 14th St. $40,000. E. F. Glaser, 2841 Madison Rd., Cincinnati, O., archt.

W. Va., Keyser — Potomac Pottery Co., Keyser, plans 1 story addition to plant. $40,000.

N. C., North Wilkesboro—See "Waterworks."

Ala., Birmingham — Southern R.R. Co., 13th St. and Pennsylvania Ave., Wash., D. C., plans to construct and equip shops at Findley Yards, here, for building and rebuilding railroad cars. Will take place of one destroyed by fire at Gadsden. $1,000,000.

Tenn., Chattanooga—See "Unclassified."

Tenn., Nashville—See "Buildings."

O., Cincinnati—H. Belmar Co., 628 West 3rd St., having plans prepared by O. H. Bardon, 1051 Overlook Ave., 3 story, 65 x 108 ft., brick warehouse. $60,000.

O., Mount Sterling—See "Waterworks."

Ind., Connersville—Connersville Automobile Dealers Assn. plans repair shop. $65,000.

Ind., Indianapolis—W. J. Holliday & Co. having plans prepared by J. C. Troyer, engr., c/o owner, 300 x 400 ft. warehouse, and 3 story and basement office, 600 Block on West McCarty St. Will build substructure late fall, superstructure about Mar. 1.

Mich., Detroit — Consolidated Bakeries Co., c/o R. R. Pereira, archt., 333 State St., had plans prepared by R. R. Pereira, 333 State St., 2 story and basement, 60 x 118 ft. brick and steel plant, plain foundation, McClellan Ave. $75,000.

Mich., Detroit—C. H. Koerber, 200 McLean Ave., having plans prepared by S. E. Remey, 1140 Griswold St., 1 story, 100 x 200 ft. brick and steel garage, plain foundation, Woodward and Stevens Aves. $50,000.

Mich., Kalamazoo—Kalamazoo Vegetable Parchment Co., River Rd., having plans prepared by Billingham & Cobb, 404 Press Bldg., 1 story, 100 x 200 ft. rein.-con. and brick plant, River Rd. $80,000.

Ill., Chicago—Florsheim Shoe Co., 3927 Belmont St., plans addition (150,000 sq.ft. floor space). $700,000.

Ill., Chicago—Howard Building Corp., c/o Leichenko & Esser, archts., 140 South Dearborn St., plans 3 story, 100 x 160 ft. warehouse, fireproof, Randolph and Morgan Sts. $500,000.

Ill., Chicago—Nugent Electric Steel Casting Co., 3100 South Wood St., plans 2 story, (ultimately 3 story), 40 x 120 ft. storage building, fireproof. $70,000. F. D. Chase, Inc., 645 North Michigan Ave., archt.

Ill., Madison—Amer. Car and Fdry. Co., Jeffersonville, Ind., plans foundry, here. $85,000.

Ill., Moweaqua — Having preliminary plans prepared by Holbrook, Greeley & Hanson, engrs., Decatur, oil engine plant, generators, switchboard, transmission lines, etc., here. $75,000.

Wis., East Troy—Brown & O'Malley Co. plans 2 story and basement, 48 x 80 ft. rein.-con., brick and steel garage, plain foundation, Main and Brown Sts. $40,000. Architect not selected.

Wis., Madison—Fox Motor Car Co., c/o C. W. Fox, 107 East Doty St., plans 2 story, 60 x 95 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, University St. $40,000. Engineer and architect not selected.

Minn., Minneapolis — Bureau of Engraving, 500 South 4th St., having plans prepared by Magney & Tusler, 126 South 9th St., 3 story and basement, rein.-con., brick and tile factory, store and school, 5th Ave. S. and 4th St. $100,000.

Kan., Kansas City—See "Unclassified."

Kan., Kansas City—P. W. White, Pittsburg, plans 1 story marble works, rein.-con., stone and brick, here. $100,000. Private plans.

Mo., St. Joseph — St. Joseph Light & Power Co. plans new power plant. $2,000,000. Engineer and architect not selected.

Tex., Abilene—C. W. Clark plans 1 story, 50 x 140 ft., brick laundry, Pine and 5th Sts. $40,000. Engineer and architect not announced.

Tex., Beaumont—Eastern Texas Electric Co. plans 2 story, 80 x 100 ft., brick and concrete power plant and distributing station. $40,000-$50,000. Private plans.

Tex., Dallas—E. P. Fisher, 2428 South Harwood St., having plans prepared by Flint & Broad, Andrews Bldg., 1 story, brick warehouse, Harwood and Santa Fe Sts. $100,000.

Tex., Dallas—B. E. Keith Co., 2018 Cadiz St., soon takes bids 3 story and basement, 90 x 105 ft., brick and concrete warehouse, etc., Preston and Cadiz Sts. $175,000. C. A. Moore, Minneapolis, Minn., engr. Noted July 10.

Tex., Houston—Magnolia Macaroni Mfg. Co., San Felipe St., plans 2 story, brick and concrete factory. $40,000. Engineer and architect not announced.

Tex., Texas City—Pierce Oil Corp. takes bids before Jan. 1 rebuilding and equipping refinery. $200,000. Private plans.

Calif., Claremont — Amer. Crushed Rock Co., Amer. Bank Bldg., Los Angeles, plans rock crushing plant, here. Cost incl. equipment $100,000.

Calif., Fresno—Benham Ice Cream Co., 1420 H St., having plans prepared by Trewhitt-Shields (archts. and contrs.), Rowell Bldg., 3 story, rein.-con. warehouse addition, H St. $60,000.

Calif., Los Angeles—Los Angeles Warehouse Co., 316 Commercial St., having plans prepared by A. C. Martin, Higgins Bldg., 10 story and basement, 100 x 190 ft. warehouse, rein.-con., San Pedro and Commercial Sts. $500,000.

Calif., Los Angeles—Los Angeles Warehouse Co., 316 Commercial St., having plans prepared by A. C. Martin, Higgins Bldg., 4 story, 125 x 175 ft., rein.-con. warehouse, Market and Alameda Sts. $250,000.

Calif., Los Angeles—Meier & Bounetheau, archts., Title Insurance Bldg., preparing plans 1 and 2 story, 200 x 350 ft. factory, rein.-con. $150,000. Owner's name withheld.

Calif., Los Angeles — Weber Show Case Co., 316 South Los Angeles St., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 1 story, brick and steel factory, approximately 250,000 sq.ft. floor space, Slauson Ave. Noted Oct. 18.

Calif., Los Angeles—O. H. Neher, archt., Marsh-Strong Bldg., receiving bids 1 story, 85 x 150 ft. bakery, brick, Kearney and Clarence Sts., for Mama Cookie Bakery, 3554 Griffith St.

Calif., Merced — California Chain Stores Co., 355 South Bway., Los Angeles, plans condensery, here. $100,000.

Calif., Sacramento—Russell & Macauley, 426 J St., plan warehouse, B St. First unit $50,000.

Que., Chicoutimi—See "Dams."

Que., Lachine Rapids — Montreal Light, Heat & Power Co., Craig St. W., Montreal, plans new power house here for developing 100,000 hp. $2,000,000. R. M. Wilson, ch. electrical engr.

Ont., Cornwall—Courtlands Ltd. of London, England, having plans prepared by C. R. Tetley, 314 Beaver Hall Hill, Montreal, Que., and takes bids about Nov. 30, various factory buildings. $1,000,000.

Ont., Galt—P. W. Gardiner & Son, (owners and engineers), plan factory. $100,000.

Ont., St. Davids—Dominion Canners plan to rebuild plant recently destroyed by fire. $200,000. Private plans.

Ont., Welland—Gram Bros. having plans prepared 2 story fireproof garage, East Main and Burgar Sts. $40,000.

BIDS DESIRED

Md., Baltimore — Nov. 20, by Rennous Kleinle Div. of Pittsburg Plate Glass Co., 3221 Frederick Ave., 5 story, 100 x 100 ft. factory, concrete and brick, plain foundation, 3221 Frederick Ave. $100,000. Wight & Lockhart, Munsey Bldg., archts.

Fla., Tampa—Dec. 11, by City Comn., 75 x 694 ft. warehouse at City Docks. A. W. D. Hall, Box 2736, engr.; adv. E. N.-R. Nov. 15.

Mich., Detroit — Raseman & Freier, archts., 1302 Penobscot Bldg., taking bids and opens same about Nov. 15, 3 story and basement, 60 x 150 ft. rein.-con. and brick factory, plain foundation, Franklin St., for Capitol Brass Co., 2306 Franklin St., $100,000.

Wis., Madison—G. Ripp, 20 South Bassett St., taking bids 2 story, 40 x 60 ft. mill and wood working shop, rein.-con., brick and tile, plain foundation, Main St. $40,000. Private plans.

Tex., Elgin—Elgin Light & Power Co. taking bids power plant, concrete. $500,000. Private plans.

Calif., Los Angeles—Monaco & Bordeaux, Bank of Italy International Bldg., receiving bids 1 story, 100 x 150 ft., brick garage, Hoover and 11th Sts., for J. Green, 1758 North Spring St.

Calif., Los Angeles—Southern Pacific Ry. Co., 5th St. and Central Ave., receiving bids 1 story, 80 x 500 ft., (52 ft. high), locomotive erecting shop, brick and steel, with 24 engine pits, equipped with two 15 ton and one 200 ton traveling cranes. To exceed $300,000. G. W. Boschke, 65 Market St., San Francisco, ch. engr. Noted July 12.

BIDS RECEIVED

N. Y., Palmyra — **E. S.** Walsh, comr. Canals & Waterways, Albany, Nov. 8, completing new power station, Lock 29, here, Contr. 193, from T. H. Ryan, Inc., 184 Cleveland Ave., Buffalo, $59,529. Engrs. est. $62,949. Noted Oct. 11.

N. Y., Vischers Ferry—E. S. Walsh, comr. Canals & Waterways, Albany, superstructure of power house and work incidental thereto, at dam, here, Contr. B-4, from McCann Building Co., Sheridan Ave. and Dove St., Albany, $143,567. Engrs. est. $122,568. Noted Oct. 25.

CONTRACTS AWARDED

Conn., Bristol—Truden & Platt, Inc., 67 Prospect St., 1 story, 60 x 70 ft. garage and office, fireproof, to L. A. Miller, 22 Church St., Meriden. Archts. est. $40,000. Noted Oct. 11.

Conn., Buckland—Wapping Manchester Warehouse Co., Manchester, 3 story, 80 x 145 ft. warehouse, steel and brick, plain foundation, here, to E. W. McCoy, Glastonbury. Archts. est. $80,000.

Conn., Hartford—S. Kaplan, 105 Windsor Ave., 1 story and basement, 60 x 100 ft. garage, brick and steel, plain foundation, to Southern New England Contg. Co., 703 Main St. Archts. est. $40,000. Noted Apr. 26.

Industrial Works (Continued)

Conn., Thompsonville—Bigelow Hartford Co., 58 Main St., 4 story, 140 x 2[illegible]0 ft. factory brick and steel, plain foundation, to Locke & Sons, Lawrence. Archts. est. $70,000. Noted Nov. 8.

N. Y., Brooklyn—Cordial Realty Co., c/o E. M. Adelsohn, archt. and engr., 1778 Pitkin Ave., will build rein.-con., brick and steel garage, plain foundation, Pitkin Ave., by day labor. $60,000.

N. Y., Linoleumville (Staten Island P. O.)—Amer. Linoleum Mfg. Co., rein.-con. and steel power plant, plain foundation, to Wilbur G. Hudson Corp., 50 Church St., New York. Archts. est. $100,000.

N. J., Morsemere—Barclay & Co., 1 story, 45 x 76 ft. powerhouse, to John W. Ferguson Co., 253 Bway., New York City, and 152 Market St., Paterson.

Pa., Phila. — L. Rothschild, archt., 215 South Broad St., 1 story garage, Carlisle Ave. near Montgomery Ave., to Kober Constr. Co., 34 South 17th St., for L. Friedman, 251 South 15th St., $97,600. Noted Oct. 18.

Pa., Sharpsburg (Pittsburgh P. O.) — Pennsylvania R.R., Union Sta., Pittsburgh, 1 story, round house and machine shop, here, to J. F. Casey Co., Union Arcade, Pittsburgh.

N. C., Andrews—Town hydro electric power house, dam and 11 mi. transmission lines, to Tucker & Lexton, Realty Bldg., Charlotte, $230,000; equipment to General Electric Co., 120 Bway., New York, $50,000; waterwheels, to S. Morgan Smith Co., York, Pa., $20,000. Noted Oct. 4.

N. C., Greensboro — Greensboro Daily News, 3 story and basement, 50 x 174 ft. newspaper plant, Davie and Gaston Sts., to J. L. Crouse, Greensboro, $150,000.

Ky., Louisville—Beha Laundry Co., 813 Clay St., 2 story, 60 x 100 ft., brick laundry, Breckenridge and Underhill Sts., to J. B. Miller, 1628 Edenside Ave. Est. cost $40,000.

Ky., Murray—Dark Tobacco Growers Cooperative Assn., Hopkinsville, 1 story, brick and frame warehouse, to A. Baily & Co., Chapel Hill, Tenn., $40,000. Noted June 14.

O., Cleveland—B. Ris, c/o A. N. Ferguson, archt., 12821 Phillips Ave., 2 story, 40 x 156 ft., brick and steel factory, 3035 St. Clair Ave., to Super-Built Constr. Co., Union Bldg. Archts. est. $60,000.

O., Cleveland—White Motor Co., 824 East 79th St., 1 story, 100 x 100 ft., brick factory, to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $60,000. Noted Oct. 25.

O., Lima — Lima Glass Co., Pearl and Union Sts., new plant, to Green & Sawyer, Lima, $50,000.

O., Lorain—Amer. Stove Co., 4301 Perkins Ave., Cleveland, 1 story, 65 x 195 ft. shop and factory, 1 story, 82 x 110 ft. japanning building, and 1 story, 50 x 82 ft. warehouse, brick and steel, here, to P. J. Hume, Lorain. Archts. est. $150,000.

Mich., Detroit—Buhl Sons, Adair St., 1 story, 132 x 180 ft. brick and steel garage, plain foundation, Wright and River Sts., to Talbot & Meier, 206 Owen Bldg. Est. $55,000.

Mich., Detroit—Cadillac Motor Car Co., 2060 Clark Ave., 1 story, rein.-con., brick and steel foundry buildings, plain foundations, (3 units), Clark Ave., to A. A. Albrecht Co., 1130 Penobscot Bldg. Engrs. est. $350,000.

Ill., Chicago—V. A. Hackel, 6827 Creiger Ave., 1 story, 150 x 190 ft. garage, fireproof, 7221-39 Exchange Ave., to Turnquist Bros. Constr. Co., 217 East 67th Pl. Archts. est. $65,000. Noted Nov. 1.

Ill., Quincy — Michaelman Steel Co., Quincy, 3 and 4 story foundry and warehouse, rein.-con. and brick, to Buerkin & Buerkin, 721 Main St. Archts. est. $100,000.

Wis., Arpin—J. Ganzley will build 2 story, 40 x 60 ft., concrete and tile creamery, plain foundation, by day labor. $40,000.

Wis., Ashland—Ashland Daily Press, 321 West 3rd St., 2 story and basement, 64 x 100 ft., brick and concrete newspaper plant, plain foundation, to C. Bloss, 901 4th St. Archts. est. $55,000. Noted Sept. 27.

Wis., Beloit—E. R. Branigan, 398 Eclipse Ave., 2 story, 40 x 80 ft., brick and timber ice plant, plain foundation, to Petitt & Howard, 140 Argill Ave. Archts. est. $40,000.

Wis., Beloit—W. A. Rossow, 4th St., 2 story and basement, 40 x 65 ft., brick and tile laundry, plain foundation, to W. H. Quinn, 840 East Grand Ave. $40,000.

Wis., Birchwood—Clover Valley Cheese Co. will build 2 story brick factory, plain foundation, by day labor. $40,000.

Wis., Hurley—Norman Auto Co. will build 1 story and basement, 97 x 100 ft., brick and concrete garage, plain foundation, by day labor. $50,000. N. A. Nelson, Ironwood, Mich., archt. Noted Nov. 1.

Wis., Ladysmith—Arts & Diedreich Co., will build 2 story, 50 x 90 ft. rein.-con. and brick garage, plain foundation, by day labor. $40,000. Private plans.

Wis., Milwaukee — Kletzsch Realty Co., 3rd and Cedar Sts., 50 x 150 ft., brick and concrete addition to light manufacturing plant, to J. L. Stanage, 3216 Vliet St. Archts. est. $40,000.

Wis., Milwaukee—Luick Ice Cream Co., 183 Ogden Ave., 4 story, 120 x 120 ft. brick and concrete garage, Van Buren St., to W. W. Oeflein, 86 Michigan Ave. Archts. est. $180,000. Noted Oct. 18.

Wis., Milwaukee—Milwaukee Electric Ry. & Light Co., Pub. Serv. Bldg., 1 story, 60 x 100 ft., brick and concrete garage, plain foundation, 38th St., to Dahlman Const. Co., 456 Bway. Archts. est. $40,000.

Wis., Milwaukee—Republic Bldg. Co., 204 11th St., 1 story and basement, 60 x 150 ft., brick, concrete and tile, plain foundation, Wells St., to S. H. Siesel, 160 Ogden Ave. $40,000.

Wis., Milwaukee—Vilter Mfg. Co., 937 Clinton St., 1 story, 92 x 126 ft., brick and steel warehouse plain foundation, to Meredith Bros., 1043 Kinnickinnic Ave.; steel to Wisconsin Bridge & Iron Co., North Milwaukee. Archts. est. $45,000.

Wis., Racine—F. H. Applegate, 1043 Washington Ave., 1 story, 100 x 174 ft., brick, rein.-con. and steel garage, plain foundation, to Driver & Seater, c/o W. F. Mickelsen, archt., 502 Main St., Milwaukee. Archts. est. $55,000. Noted Aug. 9.

Wis., Racine—Belle City Malleable Iron Co., Kewanee St., 1 story, 77 x 100 ft., brick and steel addition to annealing building, plain foundation, to Nelson & Co., Janes Bldg. Archts. est. $45,000.

Wis., Spring Green—Spring Green Canning Co., c/o W. P. McDonnel, chn., 2 story, 30 x 140 ft. brick, rein.-con. and steel factory, plain foundation, to Hastings Industrial Co., 326 West Madison St., Chicago. Archts. est. $50,000. Noted Oct. 25.

Ia., Cedar Rapids—Iowa Railway and Light Co., Bowes Bldg., 1 story, 45 x 100 ft. power plant addition, rein.-con., brick and steel, to T. Stark & Co., 118 South 11th St. Archts. est. $365,000.

Minn., Duluth—Cutler-Magner Co., 1115 Fidelity Bldg., 2 story, 135 x 364 ft. refinery and warehouse, rein.-con., Railroad St., to Barnett & Record Co., 420 Fidelity Bldg., $400,000. Noted Nov. 1.

Minn., Minneapolis — Northern States Power Co., 15 South 5th St., will build 4 story, 56 x 57 130 ft. sub-station, concrete, brick and steel, 1075 1st Ave. N., by day labor. $90,000. Private plans.

Mo., St. Louis—Green Fdry. Co., 3003 North Bway., 1 and 2 story, 215 x [illegible] ft., brick and concrete foundry, 5380 Kingshighway Blvd., to Gamble Constr. Co., 620 Chestnut St. Archts. est. $100,000.

Tex., Dallas—A. L. Black, Hope, Ark., 2 story, 50 x 160 ft., brick and concrete warehouse, to R. O'Rourke, Kirby Bldg., $40,000. Noted Oct. 11.

Tex., Denison—Missouri Kansas & Texas R.R., Missouri Kansas & Texas Bldg., Dallas, railway car shops, brick and steel, to H. D. McCoy, Cleburne, $200,000.

Tex., Ft. Worth—Southwestern Bell Telephone Co., Throckmorton and 11th Sts., 1 story, 60 x 150 ft., brick and concrete warehouse, plain foundation, Railroad Ave., to J. D. Johnson, Dan Waggoner Bldg., $40,000. Noted Nov. 8.

Tex., Houston—Hambrick & Dryling, 712 Louisiana St., 2 story, brick and tile factory, to H. H. Yates, 1211 Wrightwood St., $70,000.

Calif., Fresno—United Warehouse Co., 2 story, rein.-con. warehouse, San Benito and O Sts., to Trewhitt-Shields, Rowell Bldg., $60,000. Haas Bros., 3rd and Channel Sts., San Francisco, lessees.

Calif., Los Angeles—Bd. Educ., 5 story, rein. con. warehouse, San Pedro St., general contract to J. B. Harris, 4928 West Pico St., $150,550. Noted Nov. 1.

Calif., Sausalito—C. Mason, 31 El Monte Lane, 2 story, rein.-con. garage, Water St., to J. Spargo, Russ Bldg., San Francisco, $50,000. Noted Nov. 8.

Buildings

PROPOSED WORK

Mass., Webster—School—St. Josephs Parish having plans prepared by H. F. Ludorf, Main St., New Britain, 3 story, 120 x 140 ft., rein.-con., brick and stone, plain foundation. $150,000.

Conn., Hartford—Apartment—M. F. Morrissey, 26 Dennison St., having plans prepared by G. H. Matthews, 48 Campfield Ave., two 3 story, 40 x 100 ft., brick, plain foundations. Vine St. $200,000.

Conn., Hartford — Office — Connecticut General Life Insurance Co., 64 Pearl St., plans 6 story, brick, stone and steel, plain foundation, Elm St. $500,000. J. G. Rogers, 367 Lexington Ave., New York City, archt.

Conn., Wallingford—Town Hall—Town having plans prepared by C. S. Palmer, 114 Whitney Ave., New Haven, 3 story, brick, plain foundation. $150,000. J. A. Portin, 401 Center St., clk. Noted May 31.

N. Y., Buffalo—Museum—Voted $1,000,000 bonds for natural science museum, in Humboldt Park. Noted Feb. 1.

N. Y., New York—Apartment—J. Sager, 299 Bway., plans 6 story, 50 x 100 ft., brick, steel and stone, plain foundation, 140th St. near Bway. Engineer and architect not selected.

N. Y., New York—Loft—E. Margolies, 10 East 33rd St., having sketches made by Cross & Cross, archts. and engrs., 385 Madison Ave., 12 story, brick, steel and stone, plain foundation, West 47th St. $2,000,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone, plain foundation, East 11th St. $500,000.

N. Y., North Tonawanda—Schools—Bd. Educ. plans new schools. $750,000.

N. Y., Schenectady—Hotel—Chamber of Commerce having plans prepared by H. L. Stevens & Co., 522 5th Ave., New York, 14 story, rein.-con., brick and steel, plain foundation. $1,000,000. Amer. Hotel Co. subsidiary of United Hotels Co. of America, 25 West 45th St., New York, will lease for 30 years.

Pa., Coraopolis—High School—City plans high school. $200,000.

Pa., Erie — Temple — Fraternal Order Eagles, c/o J. M. Schilling, secy., 425 East 28th St., having plans prepared 4 story, Holmes St. $225,000. Architect not announced.

Pa., Forty Fort — High School — City plans new high school. $290,000 will mature in spring.

Pa., Johnstown—High School—Bd. Educ., Swank Bldg., having plans prepared by J. E. Adams, archt., Nemo Bldg., and E. L. Tilton, associated archt., 141 East 45th St., New York City, 3 story and basement, 180 x 200 ft. rein.-con., brick and steel, Napoleon St. $500,000.

Pa., Langhorne—School—School Bd. plans 2 story, brick and steel. $155,000. A. W. Morris, pres. Engineer and architect not selected.

Pa., Mercer — Hospital — Mercer Co. plans hospital here. $175,000 will mature in spring.

Pa., Midland — School — Voted $250,000 bonds for new school.

Pa., Phila.—Apartment—Thirteenth and Locust Realty Co., 13th and Locust Sts., having revised plans prepared by L. Rothschild, 215 South Broad St., 12 story and basement, 33 x 115 ft., 13th and Locust Sts. Former bids rejected.

Pa., Phila.—Library, City Hall, etc.—Voted $1,000,000 bonds for library building. $2,000,000 for City Hall Annex, $2,500,000 for pub. health buildings, $2,000,000 for Art Museum, $500,000 for pub. welfare building, $500,000 for House of Detention.

Pa., Westmont — School — Upper Yoder School Dist. plans election in December to vote on $100,000 bonds for 3 story and basement, 100 x 130 ft. addition to present school. $45,000 already available for work.

N. C., Asheville—Court House—Comrs. Buncombe Co. plan to sell $250,000 bonds for annex to court house.

N. C., Durham—Hotel—Citizens Hotel Co. takes bids about Dec. 15, 8 and 12 story, brick and hollow tile, Market and Parrish Sts. $1,000,000. J. A. Buchanan, chn. S. H. Johnson, Lynchburg, Va., archt. Noted May 17.

N. C., Hamlet—Hotel—Mohawk Hotel Co. plans 100 room hotel. $200,000. E. A. Lackey and others, Hamlet, owners.

Buildings (Continued)

N. C., High Point—Y. M. C. A. plans to construct 2 units, bids soon on first unit. $250,000. E. Hartley, High Point, secy.

N. C., Wilmington—Court House—New Hanover Co. plans to expend $150,000 for enlarging court house. Will place jail on 3rd floor. A. Hewlett, chn. Bd. Co. Comrs.

Fla., St. Petersburg—Hotel—S. Lund & Son, Hotel Soreno, plan 7 story, 50 x 75 ft. annex, 1st Ave. N. $150,000.

Fla., Tampa—Office—Hillsborough Co. Medical Society plans 10 story, 105 x 105 ft., Twiggs and Marion Sts. $400,000.

Ala., Selma—Y. M. C. A. having plans prepared by W. L. Welton, Amer. Trust Bldg., Birmingham, and takes bids about Jan. 1, 3 story, 100 x 175 ft. building. $150,000.

La., Jackson — Hospital — State having preliminary plans prepared by Favrot & Livaudaus, Hibernia Bank Bldg., New Orleans, 3 story, rein.-con. and brick, for East Louisiana State Hospital, here. $150,000.

La., New Orleans—Restaurant—See "Unclassified."

Tenn., Nashville—City Hall and Market —City plans 3 story City Hall and market house, 150 stalls, on Public Sq. $800,000. H. E. Howse, mayor.

Ohio—Schools—Harrison Twp., Montgomery Co., (Dayton), voted $460,000 bonds for 2 new schools, 1 at Ebenezer (Dayton P. O.), and 1 at Fort McKinley (Taylorsburg P. O.).

O., Cincinnati — Library — Defeated $2,500,000 bonds for library, Vine St. Noted Oct. 11.

O., Cincinnati — School — Cincinnati Woman's Club, 643 Oak St. W. H. conducting campaign to raise $200,00 for new school for Sacred Heart College, Heywood Ave. C. W. $200,00. Engineer and architect not announced.

O., Cleveland — Apartment — H. Shifrin, 1224 East 124th St., having plans prepared by Braverman & Havermaet, Ulmer Bldg., 3 story, 75 x 183 ft., brick, Noble Rd. $175,000.

O., Cleveland — Commercial and Apartment—W. Rosensweig, Society for Savings Bldg., plans 3 story, brick, on lot 300 x 508 ft., 8406 Euclid Ave. $250,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Coitsville (Youngstown P. O.)—School —Coitsville Twp. voted $150,000 bonds modern school. Will mature in spring.

O., Elyria—Station, etc.—New York Central R.R., Grand Central Terminal, New York City, had plans prepared by Fellheimer & Wagner, East 42nd St., New York City, brick and stone station, incl. subway under tracks, here. $250,000. G. Kittredge, ch, engr.

O., Marietta—High School—Voted $450,000 bonds high school. Will mature in spring.

O., Niles—High School—Voted $350,000 bonds high school. Will mature in spring.

O., Tiffin—Auditorium, etc.—Voted $150,000 bonds auditorium and gymnasium for present high school.

O., Youngstown—Hospital—Mahoning Co. takes bids in 2 weeks hospital. $150,000. Stanley & Schieble, Wick Bldg., archts.

O., Warren—City Hall—Defeated $200,000 bond issue new city hall. Noted March 29.

O., Warren—High School—Voted $900,000 bonds high school. Will mature in spring. Noted Oct. 4.

Ind., Indianapolis—Church Auditorium—North Methodist Episcopal Church Building Com. had plans prepared by C. H. Hopson, Healey Bldg., Atlanta, Ga., and takes bids early in winter, first unit of church, Maple Rd., Boulevard and Meridian St., $350,000. Total cost $600,000.

Mich., Ann Arbor—Nurses Home—University Hospital having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 4 story and basement, rein.-con., brick and steel, plain foundation, University Ave. $750,000.

Mich., Detroit — Apartment — W. Schumaker, 309 Savannah Ave., having plans prepared by Hull & Owen, 1212 Griswold St., 3 story and basement, 72 x 108 ft. brick and frame, plain foundation, Savannah Ave. $150,000.

Mich., Detroit — Church and Sunday School—Donaldson & Meier, archts., 1314 Penobscot Bldg., preparing plans 2 story, 60 x 125 ft. rein.-con., brick and stone, plain foundation. $185,000. Owners name withheld.

Mich., Detroit—Hotel—O. Kavieff, archt., 712 Empire Bldg., preparing plans 6 story and basement, 80 x 126 ft. rein.-con., brick and steel, plain foundation, 2nd Ave. $220,000. Owners name withheld.

Mich., Holland—Hotel—A. H. Landwehr plans hotel. $365,000. Engineer and architect not selected.

Mich., Kalamazoo—Gymnasium—Western State Normal School having plans prepared by L. W. Fry, state archt., Lansing, 2 story, 86 x 170 ft. rein.-con., brick and steel, plain foundation. $190,000.

Ill., Springfield — Apartment — Lincoln Apartment Building Co., 500 Forest Ave., having preliminary plans prepared by Helmle & Helmle, 1st Natl. Bank Bldg., 3 story and basement, 40 x 214 ft., rein.-con., brick and stone, Lincoln Park. $150,000.

Wis., Prairie du Sac—High School—Bd. Educ. c/o F. J. Schultz, clk., having plans prepared by J. R. and E. J. Low, 1st Central Bldg., Madison, 2 story, 60 x 150 ft., rein.-con., brick and steel, plain foundation.

Wis., Rice Lake—Hotel—W. W. Allen & Son, proprietors Hotel Tourist, plan 3 story and basement, brick and concrete, plain foundation. Architect not selected.

Ia., Des Moines—Office—Southern Security Co., Register and Tribune Bldg., having preliminary plans prepared by Sawyer & Watrous, 401 Hippee Bldg., 13 story and basement, 66 x 132 ft., rein.-con., brick and stone. $600,000.

Minn., Duluth—Hotel—W. Schroeder, 86 Michigan St., Milwaukee, Wis., takes bids about Jan. 1, superstructure, 16 story and basement, 125 x 140 ft., rein.-con., stone and brick, Superior St. and 3rd Ave. E., here. $1,500,000. W. Tullgren & Sons Co., 425 East Water St., Milwaukee, Wis., archts. and engrs. Noted Sept. 13.

Mo., Carthage—College—St. Louis Conference of Methodist Episcopal Church, c/o Ozark Wesleyan College, Marion, having preliminary plans prepared 2 and 3 story, rein.-con., brick and stone, here. $1,500,000. Private plans.

Mo., Caruthersville — Court House — Pemiscot Co. soon takes bids 3 story, rein.-con., brick and stone, Square St. $150,000.

Mo., Columbia—Dormitory—Order of De Molay having preliminary plans prepared 3 story and basement, rein.-con., brick and stone, Missouri University campus. $200,000. R. V. Denslow, c/o Alhambra Grotta, St. Louis, secy. Private plans.

Mo., Mexico—High School—Election in early spring to vote on $225,000 bonds for high school. L. B. Hawthorne, secy. Bd. Educ.

Mo., St. Louis—Office—Local syndicate, c/o B. P. Bogy, 300 Odd Fellows Bldg., having preliminary plans prepared by Mauran, Russell & Crowell, Chemical Bldg., 12 story, 100 x 120 ft., Delmar Blvd. $1,500,000.

Mo., St. Louis—Office—Local syndicate, c/o P. J. Bradshaw, archt., International Life Bldg., having preliminary plans prepared by P. J. Bradshaw, International Life Bldg., 12 story, 60 x 60 ft., rein.-con., brick and stone, concrete pile foundation, 4th St. $500,000.

Mo., St. Louis—Office—Missouri Diocese of Episcopal Church, c/o W. Scarlett, locust St. near 12th St., plans 8 or 10 story, rein.-con., brick, stone and steel, Locust St. between 12th and 13th Sts. $750,000. Engineer and architects not announced.

Mo., St. Louis—School—Bd. Educ., 911 Locust St., having preliminary plans prepared by R. N. Milligan, archt. and engr., c/o owner, 2 story, rein.-con. and brick, Euclid St. $150,000.

Ark., Little Rock—Apartment—F. W. Allsopp, c/o Thompson & Harding, archts., 504 South Trust Bldg., had preliminary plans prepared 3 story and basement, rein.-con., brick and stone. $150,000.

Tex., Austin—Schools—Dec. 14, to vote on $500,000 bonds, construction new school and additions to present schools. A. N. McCollum, supt. schools.

Tex., Beaumont—Church—Baptist Church had plans prepared by Barglebaugh & Barnes, 905 San Jacinto St., Houston, 54 x 138 ft. (first unit) and 72 x 138 ft. (second unit), rein.-con., brick and stone. $225,000.

Tex., Medina Lake—Hotel and Clubhouse —Seutter & Simons, archts., 424 Moore Bldg., San Antonio, prepared plans and soon take bids 2 story, 90 x 160 ft., stone and rein.-con., plain foundation. $150,000. Owner's name withheld.

Tex., Nevada—Greenville Cotton Oil Co., Greenville, plans gin and warehouse, here. $40,000. Engineer and architect not announced.

Tex., New Braunfels — Hotel — H. S. Green, 203 Alamo Natl. Bank Bldg., preparing plans 6 story, 96 x 150 ft., rein.-con., brick and stone, site of present Plaza Hotel, for newly incorporated company. F. G. Blumberg, chn. of building com.

Tex., Slaton—High School—Election soon to vote on bond issue, 3 story, rein.-con., brick and stone, 25 classrooms and auditorium. $150,000. E. F. Rittenberry, Amarillo, archt.

Tex., Tyler—Office and Bank—Citizens Natl. Bank takes bids in January, 6 story and basement, brick, steel, terra cotta and concrete, North Bway. $300,000. Lang & Witchell, North Texas Bldg., Dallas, engrs. and archts.

Okla., Tulsa—Office—C. P. Alexander, 344 Robinson Bldg., plans 8 story and basement, 140 x 150 ft. $500,000. Engineer and architect not selected.

Utah, Salt Lake City—Stores and Office—C. A. Quigley, c/o Walker & Eisen, archts., Pacific Finance Bldg., Los Angeles, Calif., having plans prepared 14 story and basement, rein.-con., Exchange Pl., here. $1,000,000.

Wash., Seattle—Apartment—Colonial Investment Co., Amer. Bank Bldg., plans 4 story, brick and terra cotta, 9th and Spring Sts. $235,000. Engineer and architect not selected.

Wash., Seattle—Schools—School Bd. having plans prepared by F. A. Naramore, school archt., and takes bids early in 1924, addition to West High School, $190,000 and new Montlake Grade School, $120,000. Noted Sept. 27.

Wash., Walla Walla—School—St. Patricks Catholic Church plans school and central heating plant. $175,000.

Calif., Bakersfield — Hospital — Kern County having plans prepared by C. H. Biggar, Bank of Italy Bldg., womens ward and nurses home, 2 and 3 story, brick, steel, and concrete. $150,00.

Calif., Bakersfield — School — Kern Co. Union High School Dist. having plans prepared by C. H. Biggar, Bank of Italy Bldg., 2 story, brick and concrete. $150,000.

Calif., Berkeley—Bank and Office—Amer. Bank, Amer. Bank Bldg., Oakland, having plans prepared by E. T. Foulkes, Crocker Bldg., San Francisco, 8 story and basement, rein.-con. and steel, Shattuck and University Aves., here.

Calif., Gridley—High School—Gridley Union High School Dist. to vote on $225,000 bonds for high school buildings.

Calif., Long Beach—Apartment—W. Horne Co., 101 American Ave., having plans prepared by Walker & Eisen, Pacific Finance Bldg., and H. L. Gogarty, 239 East Bway., 12 and 14 story, rein. con. Ocean Ave.

Calif., Long Beach — Apartment — Local syndicate having plans prepared by Walker Eisen Pacific Finance Bldg., 12 story, 84 x 121 ft., brick and concrete, Ocean Ave. $900,000.

Calif., Long Beach—Schools—Plans election to vote on $3,500,000 bonds for new schools and additions.

Calif., Los Angeles—Bank and Office—Pacific Southwest Trust and Savings Bank, 565 South Spring St., plans brick bank, University Ave. and Jefferson St. $150,000. Architect not selected.

Calif., Los Angeles—Bank and Office—Southwest Trust and Savings Bank, 565 South Spring St., having preliminary plans prepared by Dodd & Richards, Brack Shops Bldg., rein.-con. bank and office, approximately 12 story, Main and Commercial Sts.

Calif., Los Angeles—Hotel—A. C. Blumenthal et. al., having plans prepared by Walker & Eisen, 330 Pacific Finance Bldg., 11 story and basement, 125 x 145 ft., brick and rein.-con., Wilshire Blvd. and New Hampshire St. $1,000,000.

Calif., Palo Alto—Hotel—W. H. Weeks, archt., 369 Pine St., San Francisco, and B. M. Clark, archt., 600 Embarcadero Rd., Palo Alto, preparing plans 3 story and basement, rein.-con. and tile, Hamilton Ave. and Ramond St. Company being organized. $250,000.

Calif., San Francisco—Apartment—W. F. Gunnison, archt., 57 Post St., preparing plans 6 story and basement, Class A construction, downtown section. $200,000. Owners name withheld.

Calif., San Francisco — Hotel — D. J. Clancy, c/o Baumann & Jose, archts., 251 Kearny St., having plans prepared 6 story and basement, rein.-con., Ellis St. and Cohen Pl. $200,000.

Calif., San Francisco—Store and Office—W. H. Crocker, Crocker Bldg., plans fireproof building, to replace structure destroyed by fire, Market St. near Kearny St., will exceed $150,000. Architect not selected.

Calif., San Jose—High Schools—Voted $760,000 bonds for 2 junior high schools. W. L. Bachrodt, supt. schools.

Buildings **(Continued)**

Calif., San Pedro—Hotel—Noernberg & Johnson, archts., Los Angeles Ry. Bldg., Los Angeles, preparing plans 6 story, rein.-con., here. To exceed $350,000. Company being organized.

Calif., Stockton—Auditorium—City had revised plans prepared by Stone, Wright & Allen, (City Architectural Comn.), Belding Bldg., for memorial auditorium. $600,000.

Ont., London—High Schools—Bd. Educ. having plans prepared by L. E. Carrothers, archt., c/o Bd. Educ., 2 high schools. $550,000.

BIDS DESIRED

N. Y., Brooklyn—School—Nov. 26, by Superintendent Bd. Educ., 500 Park Ave., New York, P. S. 202, brick, steel and stone, plain foundation, Hegeman and Atkins Aves., here. $1,500,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Nov. 8.

N. Y., New York—School—Nov. 26, by Superintendent Bd. Educ., 500 Park Ave., P. S. 99 Exterior St. $1,500,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted Nov. 8.

W. Va., Morgantown—Chemistry—Dec. 28, by State Bd. of Control, Charleston, 4 story and basement, 79 x 305 ft., fire-proof, here. J. S. Lakin, pres.; adv. E. N.-R. Nov. 15. Noted Apr. 12.

W. Va., Charleston—Office—Dec. 21, by Capitol Comn., office building. C. Gilbert, 244 Madison Ave., New York City, archt.; adv. E. N.-R. Nov. 15.

N. C., Greensboro—College, etc.—Dec. 4, by J. F. Foust, pres. North Carolina College for Women, 3 dormitories, physical education building, dining hall, new wing and pavilion, brick, $600,000; bids also on plumbing, heating and electrical equipment for above. H. Barton, Greensboro, archt.

La., Baton Rouge—Chemistry—R. L. Himes, secy. building comn. of State Agricultural College, taking bids 2 story, 150 x 400 ft. rein.-con. $325,000. T. Link, Capitol Bldg., state archt.

Tenn., Memphis—Hospital—W. F. Schultz, archt. Shrine Bldg., taking bids 4 story, 46 x 235 ft., brick, steel and hollow tile, for Methodist Episcopal Church. $250,000. Noted Oct. 4.

Ky., Ashland—Hotel—Buckingham Hotel Co. receiving bids and opens same about Dec. 3, 9 story, 142 x 200 ft., rein.-con. and brick. $1,000,000. Noted Sept. 13.

Ky., Louisville—Temple—Nov. 30, (extended date) by Nevin, Wischmeyer & Morgan, archts., Starks Bldg., temple, 4th and Breckenridge Sts., for Scottish Rite Assn. 438 6th St. $750,000. Noted Nov. 1.

O., Cleveland—Apartment—S. Epstein, 9303 Adams Ave., taking bids 3 story and basement, 39 x 142 ft., brick, Wymore Ave. near Euclid Ave. $150,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Cleveland Heights (Warrensville, P. O.)—Apartment—H. Caplan, 3464 East 123rd. St., Cleveland, taking bids 3 story and basement, 99 x 145 ft., brick, Hampshire Rd., here. $150,000. M. Weis, 617 Union Bldg., Cleveland, archt.

Ind., Bloomington—Memorial—Jan. 2, by University of Indiana, 3 story and basement, 40 x 280 ft., rein.-con. and stone. $330,000. Lowe & Bollenbacher, 108 South La Salle St., Chicago, archts. Noted June 7.

Ind., Indianapolis—Orphans Home—Dec. 10, by Comrs. Marion Co., 1 and 2 story, 100 x 120 ft. administration, two 50 x 84 ft. cottages, 1 story, 30 x 50 ft. power plant and refrigeration plant, for Colored Orphans Home. D. Graham, Hume-Mansur Bldg., archt.

Ind., Indianapolis—School—E. J. Hecker, trustee, 5241 East Washington St., taking bids high and grade school, brick and hollow tile, in Warren Twp. $150,000. Harrison & Turnock, 500 Bd. of Trade Bldg., archts.

Mich., Grand Rapids—High School—Dec. 12, by G. A. Davis, pres. Bd. Educ., constructing Harrison Park Junior High School, 2 story and basement, rein.-con., brick and steel, plain foundation, Harrison Park Grounds. $300,000. Robinson & Campau, 715 Michigan Trust Bldg., archts.

Mich., Grosse Pointe (Detroit P. O.)—School—Nov. 20, by C. A. Payne, business mgr., Bd. Educ., 399 St. Clair Ave., 2 story and basement, 90 x 95 ft. rein.-con., brick and steel, plain foundation, Rivard Blvd. $150,000. Malcomson & Higginbotham, 1217 Griswold St., Detroit, archts.

Mich., Ironwood—High School—Dec. 18, by Bd. Educ., 3 story and basement, rein.-con., brick, stone and tile. $700,000. Croft & Boerner, 1006 Marquette Ave., Minneapolis, Minn., archts.

Ill., Chicago—Bank—C. E. White, Jr., & Pomeroy, archts., 343 South Dearborn St., receiving bids 4 story, 50 x 140 ft., fireproof, Houston and 92nd Sts., for Union State Bank of South Chicago, 3066 East 92nd St. $350,000.

Ia., Sioux City—High School—Dec. 20, by Bd. Educ., 4 story and basement, 230 x 230 ft., rein.-con., brick, tile and stone, Morningside and Orleans Aves. $400,000. Beuttler & Arnold, 407 Grain Exch. Bldg., archts. Noted Oct. 25.

Kan., Wichita—Temple—Dec. 15, by Commandery of Council Chapter of Eastern Star, c/o Eberson & Weaver, archts., 504 Orpheum Bldg., 7 story and basement, 75 x 134 ft., rein.-con., brick and stone, for York Rite Temple Assn. $400,000.

Mo., St. Louis—High School—Dec. 5, by Bd. Educ., 911 Locust St., William Beaumont High School, 3 story, 307 x 375 ft., rein.-con., brick and stone, plain foundation, Natural Bridge Rd. and Vandeventer Ave. $1,500,000. R. M. Milligan, c/o owner, archt. and engr.

Wash., Tacoma—Hotel—Dec. 11, by Citizens Hotel Corp., Inc., 610 Tacoma Bldg., 12 story, rein.-con., brick, steel and terra cotta, 9th St. and Bway. $1,500,000. W. L. Stoddart, 50 East 41st St., New York City, archt. Noted Nov. 1.

Calif., Los Angeles—Synagogue—Russell & Alpaugh, archts., Story Bldg., receiving bids 1 story, brick, Manhattan Pl., for Temple Emanu-El, 631 South Manhattan Pl. $150,000. Noted June 7.

Calif., San Francisco—Nurses Home, etc.—S. Schnaittacher, archt., 233 Post St., and S. L. Hyman, associated archt., 68 Post St., receiving bids 6 story and basement, nurses home and auditorium, Sutter St., for Mt. Zion Hospital, Post and Scott Sts. To exceed $150,000. Noted June 7.

Calif., Stockton—College—Davis-Hellar-Pearce Co., (construction managers), Weber and California Sts., taking bids, science building, Losekann & Clowdsley, Elks Bldg., archts., dining hall and gymnasium, Stoner & Warner, Belding Bldg., archts.; auditorium, Mayo, Cowell & Bissell, 24 South San Joaquin St., archts.; boys dormitory and girls dormitory, power house and stadium, Davis-Heller-Pearce Co., Weber and California Sts., archts., all 2 story. $600,000. Noted Aug. 23.

BIDS RECEIVED

Pa., Palmerton—High School—L. J. Kemmerer, secy. Bd. Educ., 3 story and basement, 139 x 165 ft. rein.-con., brick and steel, 3rd and Lafayette Sts., general contract from Ochs Constr. Co., Allentown, $286,051; heating from E. Keeler Co., Williamsport, $49,997. Noted Oct. 25.

Minn., St. Paul—School—Dept. Educ., Nov. 6, general contract, 2 story and basement, rein.-con. and brick, Thomas, Arundel and Edmund Sts., from E. Bjorklund, 485 Endicott Bldg., $126,927. Archts. est. $160,000.

Mo., St. Louis—Primate House—Bd. Pub. Serv., 305 City Hall, Nov. 1, general contract 100 x 129 ft., brick and rein.-con., for Zoological Bd., Forest Park, from J. Hill Constr. Co., Syndicate Trust Bldg., $146,380. Noted Oct. 18.

Calif., Santa Rosa—High School—Trustees High School Dist., rein.-con. and brick, (1) all work, except electric, plumbing and heating (2) excavation, concrete, carpentry, steel, grading, glass and glazing (3) excavation, carpentry, concrete, grading, steel, glass, glazing, sheet metal, from Hannah Bros., 142 Sansome St., San Francisco, (1) $345,946; Campbell Constr. Co., Nicolaus Bldg., Sacramento, (2) $256,666; R. Trost, 26th and Howard Sts., San Francisco, (3) $240,260. Noted Sept. 27.

Calif., Stockton—Church—First Christian Church, masonry construction church, from O. H. Chain, Farmers and Mechanics Bank Bldg., $155,000.

CONTRACTS AWARDED

Conn., Hartford—Apartment—J. Howard, Lancaster Rd., West Hartford, will build 3 story, 50 x 110 ft., brick, plain foundation, Capitol Ave., by day labor. Berenson & Moses, 30 Allyn St., archts.

N. Y., Brooklyn—Apartments—Bedford Properties Co., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build two 4 story, brick, steel and stone, plain foundations, Ocean Parkway, by day labor. $150,000 each.

N. Y., Brooklyn—Apartment—Lipthal Building Corp., c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., will build 4 story, brick, steel and stone, plain foundation, President St., by day labor. $200,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 210, Rochester Ave. from Park Pl. to Prospect Pl., here, to G. Colon & Co., 81 East 125th St., New York, $1,030,000. Noted Oct. 25.

N. Y., New York—Apartment—Six Thirty-Four West 170th St. Corp., c/o G. G. Miller, archt. and engr., 1482 Bway., will build 6 story, brick, steel and stone, plain foundation, West 170th St., by day labor. $300,000.

N. Y., New York—Apartment—J. J. Summers, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, University Ave., by day labor. $250,000.

N. Y., New York—Apartment—H. Weingarten, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, 171st St. and Wythe Pl., by day labor. $300,000.

N. Y., New York—Dormitory—Barnard College and Columbia University, Morningside Heights, 8 story, brick, steel and stone, plain foundation, 116th St. and Claremont Ave., to T. O. Reilly, 15 East 49th St. Archts. est. $600,000. Noted Oct. 18.

N. Y., New York—High School—Bd. Educ., 500 Park Ave., James Monroe High School, Boynton Ave. from East 172nd to East 173rd Sts., to T. A. Clarke Co., 122 Livingston St., Brooklyn, $2,145,000. Noted Nov. 8.

N. Y., New York—Office—Professional Office Building, c/o Ewing & Allen, archts. and engrs., 101 Park Ave., 11 story, 60 x 100 ft., brick, steel and stone, plain foundation, 60th St. and Park Ave., to Starrett Bros., 101 Park Ave. Archts. est. $500,000.

Pa., Drexel Hill—Bank—Bunting & Shrigley, archts., 603 Chestnut St., Phila., 2 story and basement, 63 x 108 ft. rein.-con., steel, limestone and granite, Garret Rd. and Runnymeade St., to Bowden Constr. Co., 1935 Chestnut St., for Landsdowne Trust Co. Noted Oct. 18.

Pa., Flourtown—High School—Springfield Twp. School Bd., Springfield Twp. Bldg., Bethlehem Pike, Erdenheim, 2 story and basement, concrete, brick and steel, to Chester Constr. & Contg. Co., Crozier Bldg., Chester, $149,728. Noted Oct. 25.

Pa., Lancaster—School—Bd. Educ., Prince and Chestnut Sts., 3 story and basement, 148 x 210 ft., West Walnut and Nevin Sts., to Sinclair & Griggs, Medical Arts Bldg., Phila., $440,170. Noted Oct. 25.

Pa., Swarthmore—Dormitory—F. Aydelotte, pres. Swarthmore College, c/o Karcher & Smith, archts., 34 South 17th St., Phila., 3 story and basement, 30 x 240 ft. steel, stone, terra cotta and cement, here, to McNeil Constr. Co., 15th and Race Sts., Phila., $175,000. Noted Oct. 18.

Pa., Tamaqua—Theatre and Hotel—Higgins Hotel Corp., 4 story and basement, 54 x 150 ft. rein.-con., brick and steel, Broad and Pine Sts., to Shamokin Lumber & Constr. Co., Shamokin, $307,257. Noted Oct. 18.

W. Va., Wheeling—Church—St. Josephs Church, 85 x 125 ft., cut stone, to R. R. Kitchen & Co., Natl. Bank of West Virginia Bldg. Archts. est. $400,000.

N. C., Wilmington—Hotel—Cape Fear Hotel Co., 10 story and basement, 2nd and Chestnut Sts., to W. Clark, Wilmington, $800,000. Noted Oct. 25.

O., Cleveland—Bank and Office—Knox & Elliott, archts., 906 Engineers Bldg., 22 story, 132 x 168 ft., rein.-con., brick and steel, Ontario St. and St. Clair Ave., to Fuller Constr. Co., 175 5th Ave., New York City, for Brotherhood of Locomotive Engineers of America, Engineers Bldg. Archts. est. $5,000,000. Noted Sept. 20.

O., Lorain—Y. M. C. A. 6 story building, to Kratt & Sons, Lorain, $225,000.

Mich., Pontiac—Church—First Presbyterian Church, Wayne and West Huron Sts., 2 story, 70 x 118 ft. brick, steel and stone, plain foundation, West Huron St., to W. H. Isgrigg & Son, Strand Theatre Bldg., $150,000.

Mich., Springwells—School—Bd. Educ., 2 story and basement, 86 x 160 ft. brick, concrete and steel, plain foundation, Warren and Blesser Sts., to Culbertson & Kelly, 872 West Milwaukee Ave., Detroit, Archts. est. $170,000. Noted Oct. 4.

Ill., Chicago—Apartment-Hotel—H. T. Petersen, c/o Olsen & Urbain, archts., 155 North Clark St., 3 story, fireproof, 3727-29 Pine Grove Ave., to Kurt-Rosenthal & Co., 11 South La Salle St. Archts. est. $250,000.

Ill., Waukegan—Bank and Office—Waukegan National Bank, general contract 8 story, 150 x 150 ft., rein.-con., brick and stone, here, to St. Louis Bank Equipment and Fixture Co., 811 Walnut St., St. Louis, Mo. Archts. est. $500,000.

Buildings (Continued)

Wis., Milwaukee—Store—P. Voland Furniture Co., 3202 North Ave., 2 story and basement, 82 x 120 ft., brick and concrete, plain foundation, to R. Hartman. 4001 Highland Blvd. Archts. est. $150,000.

Minn., Waseca—High School—Bd. Educ., general contract 2 story and basement, rein.-con., brick and stone, to Carlsted Bros., 700 Builders Exch., Minneapolis, $243,968. Archts. est. $350,000. Noted Oct. 11.

Kan., Pittsburg—Temple—Mirza Temple Shriners, general contract 3 story, brick, stone and rein.-con., to A. E. Todd & Sons, Independence. Archt. est. $500,000.

Wash., Seattle—Bank—Bank of California, 801 2nd St., 2 story, 60 x 108 ft., concrete and steel, 2nd and Columbia Sts., to J. A. McEachern Co., Colman Bldg. Archts. est. $250,000.

Okla., Chickasha—Industrial Arts—State Bd. of Officers, Oklahoma City, 3 story and basement, 70 x 160 ft., rein.-con., brick and stone, here, general contract to Kreipe-Schafer Constr. Co., Herskowitz Bldg., Oklahoma City. Est. cost $150,000. Noted June 14.

Calif., Long Beach—Apartment—A. W. Ellis, et al., 244 East 1st St., 3 story and basement, brick, Hermosa Ave., to C. A. Willis, 5029 East Ocean Ave., $150,000.

Calif., Long Beach — Hotel, Store and Apartment—Bolivar Holding Co., c/o Curlett & Beelman, archts., Union Bank Bldg., Los Angeles, 12 and 14 story, rein.-con., East Ocean Ave., to Hennessy Bros., Bank of Italy Bldg., Los Angeles. To exceed $1,250,000.

Calif., Los Angeles—Nurses Home—Good Samaritan Hospital, 1243 Orange Ave., 5 story and basement, rein. con., Lucas St., to Stewart Constr. Co., Bank of Italy Bldg., $215,000. Noted Oct. 25.

Calif., Los Angeles—Store and Hotel—E. Olcovich Co., 337 South Bway., 3 story and basement, brick, Flower and 9th Sts., to Lange & Bergstrom, Washington Bldg., $150,000.

Calif., Oakland—Store, Hall and Loft—M. F. Smith, c/o Schirmer-Bugbee, archts., Thayer Bldg., 3 story and basement, rein.-con., 12th and Oak Sts., to W. Murch, Federal Bldg., $149,000. Noted Oct. 25.

Calif., Oakland — Store, Theatre and Apartment—Rivoli Investment Co., c/o Hutchinson & Mills, archts., 1214 Webster St., 2 story and basement, concrete, Grove and 55th Sts., to M. F. Hamilton, 825 Santa Fe Ave. $150,000.

Calif., San Francisco—Apartment—N. Muriale, St. Helena, 5 story and basement, rein.-con., Polk St. near Union St. to Amoroso & Danico, 1336 Kearney St., $155,000.

Ont., Hamilton—School—Bd. Educ., 3 story and basement, 20 rooms, concrete, brick and steel, general contract to W. H. Cooper, Clyde Blk., $192,127. Noted Sept. 13.

B. C., Point Grey—Library—University of British Columbia, 10th Ave. and Willow St., Vancouver, 3 story, rein.-con., brick, stone and tile, to E. J. Ryan Contg. Co., Ltd., 445 Granville St., Vancouver, $400,000. Noted Oct. 11.

Federal Government Work

BIDS DESIRED

Mass., Hingham—Repairs to Seawall—Spec. 4908—Nov. 21, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to seawall of slip, here. Noted Sept. 20.

N. Y., New York—Dredging, etc.—Dec. 14, at office U. S. Engineer, Army Bldg., 39 Whitehall St., dredging and rock removal in East River; adv. E. N.-R. Nov. 15.

Pa., Allentown—Remodeling—Dec. 10 by Treas. Dept., Wash., D. C., remodeling U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Nov. 15.

Pa., Phila.—Dredging—Dec. 4 at office U. S. Engineer, 1505 Race St., dredging 290 cu.yd. ledge rock and 2,200 cu.yd. other material in Schuylkill River.

W. Va., Huntington—Maneuver Boat, etc.—Dec. 10, at office U. S. Engineer, steel hull maneuver boat, etc., for Dam 32, Ohio River; adv. E. N.-R. Nov. 15.

Ill., Great Lakes—Ward—Jan. 30, by Bureau Yards & Docks, Navy Dept., Wash., D. C., psychopathic ward at Naval Training Station, here.

Calif., Mare Island—Fuel Oil Storage—Spec. 4717—Dec. 2 (extended date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., two 50,000 bbl. fuel oil tanks, motor driven centrifugal oil pumps, 3 brick pump houses and 1 heater house, at Navy Yard, here. Noted Oct. 25.

BIDS RECEIVED

N. Y., Hoosick Falls—Post Office—Treas. Dept., Wash., D. C., constructing U. S. Post Office, here, from Sarles Constr. Co., 527 5th Ave., New York, $49,750. Noted Oct. 11.

Md., Baltimore—Quarters—Treas. Dept., Wash., D. C., 2 story concrete and timber, doctors and pharmacists quarter at U. S. Marine Hospital, here, from Pamfilis Constr. Co., 415 Equitable Bldg., $14,978. Noted Oct. 18.

Ga., Brunswick—Dredging—U. S. Engineer, Savannah, dredging in Harbor, here, from John Emile Dredging Co., Duval Bldg., Jacksonville, Fla., $0.50 per cu.yd. To exceed $25,000.

H. T., Pearl Harbor—Extension—Spec. 4910—Bureau Yards & Docks, Navy Dept., Wash., D. C., extensions for battery storage and overhaul, at Submarine Base, here, (1) work complete, from A Pope, 4722 15th St., N. W., Wash., D. C., (1) $44,000 (2) $4,000 (3) $25 (4) $3 (5) $0.10. Noted Sept. 20.

CONTRACTS AWARDED

Ga., Dawson—Post Office—Treas. Dept., Wash., D. C., constructing U. S. Post Office, here, to A. M. Lundberg, Times Bldg., St. Louis, Mo., $49,500. Noted Oct. 25.

La., Carville—Buildings—Treas. Dept., Wash., D. C., construction, except mechanical equipment, additional buildings, incl. patients cottages, infirmary, recreation building, kitchen and mess hall, all terra cotta and stucco, storehouse and officers quarters, timber construction, at National Home for Lepers, here, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $382,905. Noted Oct. 25.

La., Carville—Mechanical Equipment—Treas. Dept., Wash., D. C., mechanical equipment for additional buildings incl. patients cottages, recreation building, kitchen, mess hall, storehouse, and officers quarters; extension and remodeling outside services, incl. heating, electric, water supply, sewage disposal, refrigeration system, etc., and constructing power house, complete incl. mechanical equipment, at National Home for Lepers, here, to Noland-Clifford Co., 330 28th St., Newport News, Va., $209,700; engine and generator, to R. Morton, Equitable Bldg., Baltimore, Md., $11,578. Noted Oct. 25.

Ky., Louisville—Derricks—U. S. Engineer, P. O. Box 72, 6 steel derricks complete, exclusive of wire rope, to Lakeside Bridge and Steel Co., North Milwaukee, Wis., $33,700. Noted Nov. 1.

Ind., Newburg—Dwellings—U. S. Engineer, P. O. Box 72, Louisville, Ky., 2 lock-keepers dwellings at Dam 47, here, to C. Kanzler & Son, Furniture Bldg., Evansville, $22,450. Noted Oct. 25.

Ill., Rock Island—Pontoons—U. S. Engineer, Rock Island, furnishing twenty 3 x 14 x 38 ft. steel discharge pontoons, to Dubuque Boat and Boiler Wks., Dubuque, Ia., $44,840. Noted Nov. 8.

Montana—Road—U. S. Bureau Pub. Rds., Dept. Agriculture, Smead-Simons Bldg., Missoula, grading and gravel surfacing 7 mi. Clarks Fork-Weeksville Sect., Cabinet National Forest Rd. Project, Sanders Co., 23,000 cu.yd. rock and 41,300 cu.yd. earth excav., 6,100 cu.yd. gravel, etc., to Gates & Solberg, Wolf Point, $73,763. Noted Oct. 11.

H. T., Hilo—Breakwater—U. S. Engineer, Honolulu, breakwater in Harbor, here, to Hawaiian Dredging Co., 854 Kuhuhuana St., Honolulu, $340,000. Noted Aug. 23.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Application

443—A. Damgaard, Forest Glen, Calif.—Wants license for dam, water conduits, powerhouse and transmission line in Forest Glen Creek, Trinity Co.

444—Great Western Power Co., 530 Bush St., San Francisco, Calif.—Wants license for 44 kv. transmission pole line from point near Belden to Canyon Dam, in canyon of Feather River, Plumas Co.

445—Colorado Power Co., Symes Bldg., Denver, Colo.—Wants license for transmission line in vicinity of Breckenridge, Summit Co.

446—Southern Appalachian Power Co., Asheville, N. C.—Wants license for dam 170 ft. high, in Hiawassee River, about 1 mi. above Murphy, Cherokee and Clay Counties. Project includes powerhouse and appurtenant structures.

447—Southwest Metals Co., Humboldt, Ariz.—Wants license for transmission line from Humboldt to Blue Bell Mine, Yavapai Co.

Unclassified

PROPOSED WORK

Playground—Glastonbury, Conn.—School Comn. plans playground, incl. baseball diamond, basket ball courts, tennis courts, etc. $25,000. F. S. Knox, supt. of schools.

Underground Conduit — New Britain, Conn.—Bd. Pub. Wks. plans underground conduit system on South Main St., incl. 12 fire ducts. $25,000. J. D. Williams, city engr.

Boardwalk—Spring Lake, N. J.—Mayor and Boro Council rejected bids Nov. 7, constructing boardwalk. Noted Oct. 11.

Swimming Pool and Skating Rink—Dormont, Pa.—City plans to build and equip swimming pool and skating rink. $40,000.

Broadcasting Stations and Police Signal System—Phila., Pa.—Voted $440,000 bonds for radio broadcasting stations and police signal systems.

Park and Port Improvements—Phila., Pa.—Voted $750,000 bonds for park improvements and $2,000,000 for port improvements.

Piers, etc.—Phila., Pa.—Phila. & Reading Ry., Reading Terminal, plans additional ore handling facilities incl. enlarging Pier 14 and installation of ore handling equipment $915,000, also plan new pier south of Pier A to relieve Pier 14 $600,000, extensive work in boiler house incl. new 1,000 hp. boiler $915,000. All at Port Richmond. S. T. Wagner, ch. engr.

Subways—Phila., Pa.—Voted $15,000,000 bonds for high speed subway and $10,000,000 for surface car subway.

Park, etc.—Greensboro, N. C.—City plans 40 acre park, incl. lake, 2 mi. paved driveways, near Westerwood and West Market terrace section. P. C. Painter, city mgr. $50,000.

Levees, etc. — Greenwood, Miss. — Tallahatchie D. D. 1 making surveys system of levees and drainage canals for flood control of Tallahatchie and Yocona Rivers, district embraces 166,421 acres. Elliott & Harman Eng. Co., Bank of Commerce & Trust Bldg., Memphis, Tenn., engrs.

Swimming Pool—New Orleans, La.—Comn. Council granted Garden Plunge, Inc., Whitney Bank Bldg., authority to construct 100 x 300 ft. swimming pool together with restaurant at West End Park.

Elimination of Grade Crossings—Tennessee—Southern R.R. Co., 4th and Market Sts., and State Dept. Hys. & Pub. Wks., Nashville, plans to eliminate grade crossings in Knox Co., near Knoxville, and in Blount Co., near Maryville, probably concrete structures. Will exceed $40,000. J. G. Creveling, highway comr.

Extension, etc.—Knoxville, Tenn.—Cumberland Telegraph and Telephone Co. plans improvements and extension to system, here. $25,000. E. F. Garret, Knoxville, dist. mgr.

Electric Power Extensions—Chattanooga, Tenn.—Tennessee Electric Power Co., Hamilton Natl. Bank Bldg., authorized to issue $1,000,000 bonds for construction, extension and improvements.

Parks, etc. — Cincinnati, O. — Defeated $1,750,000 bonds parks, boulevard and playgrounds. Noted Nov. 1.

Subway—Elyria, O.—See "Buildings."

Elimination of Grade Crossings—Toledo, O.—Defeated $3,000,000 bonds elimination of grade crossings. Noted Sept. 20.

Terminal—Zanesville, O.—Amer. Rolling Mill Co., Ashland, Ky., plans river and rail freight terminal along Muskingum River, here. To exceed $25,000.

Grade Separation—Kalamazoo, Mich.—City and Michigan Central R.R., 542 East Main St., having plans prepared grade separation, depressing 500 ft. steel and trolley tracks and carrying 7 Michigan Central R.R. tracks on viaduct over street. $150,000 to $200,000.

Park Improvements—Chicago, Ill.—Voted $2,000,000 bonds for establishing, enlarging and improving parks and boulevards under control of West Chicago Park Comrs.

Transmission Line—Moweaqua, Ill.—See "Industrial Works."

Ornamental Street Lighting System—Two Rivers, Wis.—Making preliminary plans ornamental street lighting system, probably concrete posts, underground cables. $25,000. D. H. Ames, City Hall, engr.

Unclassified (Continued)

Electrical Improvements—Kansas City, Kan.—Voted $2,000,000 bonds general electrical improvements. R. L. McAlpine, 1721 Orville Ave., Kansas City, Kan., engrs.

Levee—Merrillton, Ark.—See "Excavation Drainage Irrigation."

Elimination of Grade Crossing—Texas—State and Missouri, Kansas & Texas Ry., Bruceville, plan to eliminate railway grade crossing near Bruceville. $75,000. M. Hannah, Bruceville, engr.

Street Lights and Conduits—Lubbock, Tex.—Nov. 21, to vote on $50,000 bonds for street lights and conduits. J. R. Germany, city secy.

Pipe Line—San Angelo, Tex.—San Angelo Gas Co. plans pipe line from Coleman and Brown Counties, minimum 45 mi. $100,000.

Flood Control—San Antonio, Tex.—Dec. 4, to vote on $2,800,000 bonds for flood control, to involve construction of dams, altering courses and removing obstructions from San Antonio River, San Pedro and Alazan Creeks. Address J. W. Tobin, mayor.

Parks—Tulsa, Okla.—Election Nov. 20, to vote on $150,000 bonds for parks. C. Schultz, city engr.

Shipping Terminal—Seattle, Wash.—Pacific Steamship Co., L. C. Smith Bldg., having plans prepared by H. Bittman, archt. and engr., Securities Bldg., first unit of ocean shipping terminal, main building 1,000 ft. long, 160 ft. wide, $500,000. Total $3,000,000-$4,000,000. See "Materials and Equipment" under "Contracts Awarded." Noted Feb. 8.

Harbor Improvements—Oshawa, Ont.—Dept. Pub. Wks., Ottawa, having surveys made improving harbor incl. new wharves and docks. $150,000. K. M. Cameron, Parliament Bldg., Ottawa, acting ch. engr.

Monument—Ottawa, Ont.—E. Brown, dir. Natl. Art Gallery of Canada, Victoria Museum, will take designs until April 2, for monument in memory of Sir Wilfred Laurier, on Parliament Grounds. $25,000. L. H. Colman, Hunter Bldg., secy. Dept. Pub. Wks.

Drilling Wells—Wheatley, Ont.—Southern Ontario Gas & Oil Co., Tilbury, plans to drill deep wells for oil and gas. $50,000. A. Winter, c/o owner, engr.

Subway—Windsor, Ont.—Having plans prepared subway under tracks Canadian Pacific Ry. to join Tecumseh Rd. with Giles Blvd. $100,000. M. E. Brian, city engr.

Dry Dock—Vera Cruz, Mexico—Mexican Government plans 6,000 ton floating dry dock, here. $250,000.

BIDS DESIRED

Coal Pocket—Kearny, N. J.—Smith Coal Co. taking bids and opens same week of Nov. 12, rein.-con. coal pocket. $40,000. Private plans.

BIDS RECEIVED

Fire Alarm System—Brooklyn, N. Y.—T. J. Drennan, comr. Fire Dept., Municipal Bldg., New York, Nov. 5, underground fire alarm system, here, from W. F. Kenney Co., 44 East 23rd St., New York, (1) $26,530; J. Sugden Co., 100 5th Ave., New York, (2) $16,731.

Heating and Ventilating Apparatus—Kew Gardens (Forest Hills P. O.), N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 99, here, from Federal Heating Co., 300 Madison Ave., New York, $46,950.

Signal Tower—New York, N. Y.—Transit Comn., 49 Lafayette St., Nov. 9, signal tower in 239th St. Yard of White Plains Rd. Rapid Transit R.R., Route 18, Sect. 2, Bronx Boro, Agreement "CU," from J. B. Roberts & Co., 1170 Bway., $12,757. Noted Nov. 8.

Heating and Ventilating Apparatus—St. Albans (Jamaica P. O.), N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 36, here, from Federal Heating Co., 300 Madison Ave., New York, $46,950.

Electrolier System—Los Angeles, Calif.—Electrolier system in portion of Sunset Blvd., from Paulson Constr. Co., Detwiler Bldg., $38,874.

CONTRACTS AWARDED

Column Foundations, etc.—Long Island City, N. Y.—Transit Comn., 49 Lafayette St., New York, column foundations for part of Rapid Transit R.R. Flushing Route, to Gotham Constr. Co., 220 Bway., New York, $149,830; structural steel for Route 52, Sect. 2, to Jobson-Gifford Co., 30 East 42nd St., New York, $443,239. Noted Nov. 8.

TUNNEL—CLEVELAND, OHIO

Following are lowest three bids opened Nov. 2, by Dept. of Pub. Utilities, Div. of Water, for constructing Fairmount Rd. Tunnel, Contr. No. 43, Baldwin-Fairmount Project, (A) P. F. Connolly Co., 2029 East 102nd St.; (B) Winterbottom-Connelly Co., 2997 Meadowbrook Blvd.; (C) Graham-Henderson Co., 1274 West 108th St. The unit bids were as follows:

	A	B	C
1,200 cu.yd. excavation and backfill, in open cut	$2.50	$5.00	$5.00
2,300 cu.yd. excavation in shafts and tunnel	16.40	18.75	26.55
1,550 cu.yd. concrete in shafts and tunnel	17.00	20.00	20.00
160 cu.yd. miscellaneous concrete	20.00	22.00	20.00
200 cu.yd. excess concrete in shafts and tunnel	5.00	5.00	5.00
150 ton furnishing and laying cast iron, straight, bell and spigot pipe, in open cut	80.00	75.00	69.50
260 ton furnishing and laying cast iron, straight, bell and spigot pipe, in tunnel	82.50	95.00	79.50
40 ton furnishing and laying cast iron, straight, bell and spigot standard fittings, in open cut	200.00	180.00	189.00
4 ton furnishing and laying cast iron, bell and spigot standard fittings, in tunnel	200.00	200.00	200.00
85 ton furnishing and laying cast iron, flanged, and flanged and spigot pipe	140.00	180.00	127.00
60 ton furnishing and laying cast iron flanged fittings	210.00	200.00	231.00
9,500 lb. steel reinforcement and miscellaneous wrought iron and cast iron	.10	07	06
100 linear ft. furnishing and laying 12-in. vitrified pipe drains	3.00	3.00	3.00
100 linear ft. furnishing and laying 6-in. vitrified pipe drains	1.50	2.00	2.00
100 linear ft. furnishing and laying 4-in. vitrified pipe drains	1.00	1.00	2.00
100 linear ft. furnishing and placing 10-in. piles	2.50	3.00	8.00
10 ton furnishing and delivering surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals	$140,270	$157,960	$168,945

Coaling Station—Newburgh, N. Y.—New York Central R.R., Grand Central Terminal, New York City, coaling station, here, to Wilbur G. Hudson Corp., 50 Church St., New York City, $30,000.

Relocating Entrances, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., relocating entrances to 157th St. station of Manhattan-Bronx Rapid Transit R.R., Agreement "CR," to J. Ritchie, 23 Willow Pl., Brooklyn, $51,912; frogs, switches and tracks at 180th St. Yard, Route 18, to McElroy & Kerwin, 316 Flatbush Ave., Brooklyn, $15,285. Noted Nov. 8.

Foundation and Coal and Ash Bunkers, etc.—Phila., Pa.—Phila. & Reading Ry., Reading Terminal, driving piles and constructing rein.-con. foundations for coal thawing house at Pier 18, Port Richmond, to McLean Constr. Co., Pier 5, North Wharves, $52,000; furnishing and erecting coal and ash bunkers in connection with power house at Pier 14, Port Richmond, to Guarantee Constr. Co., 140 Cedar St., New York City, $35,000.

Transmission Lines—Andrews, N. C.—See "Industrial Works."

Campanile—Baton Rouge, La.—R. L. Hines, secy. Louisiana State University, concrete and brick campanile at State Agricultural College, to Caldwell Bros., 816 Howard Ave., New Orleans, $85,000.

Levee—New Orleans, La.—F. C. Hymel, pres. Orleans Levee Dist., New Court Bldg., completing Couret-Stanton Levee, 151,000 cu.yd. excav., to Lewis Constr. Co., Godchaux Bldg., $73,365.

Light, Power and Telephone Systems, etc.—Cleveland, O.—Electric light, power and telephone systems for Baldwin-Fairmount Project, Contr. 48, to Enterprise Electric Constr. & Fixture Co., 6507 Euclid Ave., $31,000; heating and ventilating, to T. M. Shand, 3155 East 93rd St., $31,942; plumbing, to Warden & Leese, 2450 Prospect Ave., $26,850.

Foundation—Duluth, Minn.—W. Schroeder & Sons, 86 Michigan St., Milwaukee, Wis., foundation for 16 story and basement, 125 x 140 ft. hotel, rein.-con., stone and brick, Superior St. and 3rd Ave. E., here, to Jacobson Bros., 410 Columbia Bldg. Total $1,500,000. Noted Sept. 13 under "Buildings."

Electrolier System—Fresno, Calif.—Installing 350 electroliers in portions of J, North Bway. Sts., etc., to Valley Electric Co., 1817 Tulare St., $43,000. Noted Oct. 25.

Subway—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., subway under Ferry Loop at foot of Market St., here, to Tibbitts-Pacific Co., 16 California St., $238,700.

Transmission Line, etc.—Turlock, Calif.—See "Excavation, Drainage, Irrigation" under "Bids Received."

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Materials and Equipment

PROPOSED WORK

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th St. and Bway., plans to purchase 1,600 tons steel for bridge work. $100,000. W. H. Courtney, ch. engr.

Street Sweeper—La Crosse, Wis.—Preparing specifications power street sweeper. Council appropriated $7,000. C. C. Congdon, City Hall, engr.

Pipe — Tacoma, Wash. — See "Waterworks," under Contract Awarded.

Cast Iron Pipe—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., soon takes bids furnishing 24,000 ft. or 2,000 lengths 4 in. and 6,000 ft. or 300 lengths of 6 in. c.i. pipe.

BIDS DESIRED

Limestone, etc.—Brooklyn, N. Y.—Nov. 21, by E. Riegelmann, boro pres., Boro Hall, 1,200 net tons limestone or other suitable inorganic dust, 6,000 cu.yd. asphalt sand, 3,000 bbl. Portland cement and 2,500 cu.yd. 1½ in. gravel or 2,500 cu.yd. 1½ in. broken stone.

Concrete Mixer—New York, N. Y.—Logan Constr. Co., 15 Park Row, in market for 1 portable concrete mixer, one 150 ft. belt driven compressor and 4 air stone drills.

Cranes—Pittsburgh, Pa.—Carnegie Steel Co., Carnegie Bldg., in market for two 75 ton and three 10 ton cranes.

Plumbing, etc.—Greensboro, N. C.—See "Buildings."

Pipe, etc.—Cordelia, Fla.—C. D. Terrell, city purch. agt. taking bids 100 tons 6 in. c.i. B & S pipe, 20 standard fire hydrants, six 10 in. valves.

Street Sweeper—Sanford, Fla.—W. B. Williams, city mgr. receiving bids street sweeper.

Crane—Warren, O.—East Ohio Mfg. Co. in market for one 25 ton 3 motor industrial crane. B. Shaver, Oliver Bldg., Pittsburgh, Pa., engr.

Hoist—Ft. Wayne, Ind.—City taking bids 100-ton hoist for movable dam on Maumee River. C. Brossman, 1503 Merchants Bank Bldg., Indianapolis, and A. W. Grosvenor, 122 East Washington St., Ft. Wayne, engrs.

Road Roller and Scarifier—Logansport, Ind.—Nov. 17, by Cass Co., 10-ton gas or oil road roller and scarifier. Successful bidder will be required to accept as part of purchase price 10-ton roller now owned by County. H. M. Gardner, aud.

BIDS RECEIVED

Valve Equipment — New York, N. Y. — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Nov. 9, electric valve operating equipment, Manhattan Boro, from Fox Reynolds Co., 81 East 125th St., $25,500. Noted Nov. 1.

CONTRACT AWARDED

Road Surfacing Material — New York, N. Y.—See "Streets and Roads."

Gravel—Kountze, Tex.—Hardin Co., 20,000 yd. road gravel, to J. H. Sullivan, Nacogdoches, flint gravel $2.35, iron ore gravel $1.61. Noted Sept. 27.

Steel—Seattle, Wash.—Pacific Steamship Co., L. C. Smith Bldg., 5,000 tons steel for first unit of ocean shipping terminals (to cost $3,000,000-$4,000,000), to U. S. Steel Corp., 71 Bway., New York City. Noted Feb. 8.

Steel Oil Tanks—Avon, Calif.—Associated Oil Co., Associated Oil Bldg., San Francisco, six 80,000 bbl. steel oil tanks, to Western Pipe & Steel Co., 444 Market St., San Francisco, about $205,900.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Dec. 21.

General Construction and Mechanical Equipment

OFFICE BUILDING FOR THE STATE OF WEST VIRGINIA

Charleston, W. Va.

Sealed proposals will be received by the Capitol Building Commission for the general construction and mechanical equipment of an office building for the State of West Virginia, Charleston, West Virginia, which proposals are to be in accordance with drawings and specifications prepared by Cass Gilbert, Architect, 244 Madison Avenue, New York City.

Two copies of the drawings and specifications will be on file in the office of the Capitol Building Commission after November 12, 1923, for examination and use of all bidders.

If bidders wish individual sets of drawings and specifications for their own use in preparing their bid, they may obtain such individual sets upon application in writing to Cass Gilbert, Architect, upon payment of the actual cost of blueprinting same. A certified check for $200.00 is to accompany request for individual sets, which check will be returned upon return of said drawings and specifications. Another check for $20.00, representing cost of duplicating of each set of drawings and specifications, must also accompany request.

Such individual sets are for estimating purposes only and are to remain the property of the Architect and are to be returned to him immediately after bids have been submitted.

A certified check for $20,000.00 must accompany proposal for General Construction and certified checks for $2,000.00 must accompany proposals for Heating and Ventilating, Plumbing and Gas Fitting, and Electrical Work. Said checks to be drawn on some solvent banking institution and made payable to the Capitol Building Commission of the State of West Virginia, Charleston, West Virginia.

In lieu of said certified checks, bonds of equal amounts of the United States or State of West Virginia, or any political subdivision thereof, may accompany proposals. The checks or bonds of all bidders will be returned to them after award of contract.

All bids to be delivered at the office of the Governor of the State of West Virginia, Charleston, West Virginia, on or before 12 o'clock noon, December 21, 1923. No proposals received after the time stated above will be considered. The Capitol Building Commission reserves the right to reject any and all bids and to waive any defect or informality in any bid.

For the Capitol Building Commission.
E. F. MORGAN, Governor.
Ex-Officio, Chairman.

Bids: Dec. 14.

Lake Youngs Development

Seattle, Wash.

Sealed bids will be received by the Board of Public Works until ten o'clock a.m., Friday, December 14th, 1923, for Lake Youngs Development, Seattle Water Supply. Involves construction of inlet, outlet conduit controlling works and pipe lines.

Approximate estimated cost $2,000,000. A deposit of $10.00 is required for the plans.

J. D. BLACKWELL,
City Engineer.

OFFICIAL PROPOSALS

Bids: Dec. 5.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Construction of Bridge No. Hl-48, on the Squankum-Lakewood Road, consisting of one 70′ plate girder span encased in Concrete, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on December 5th, 1923, at 11:00 a.m., Standard Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.
BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., October 17th, 1923.

Bids: Nov. 27.

Earth Dam

Frederick, Md.

Sealed proposals will be received by Emory C. Crum, City Engineer, at his office, City Hall, Frederick, Md., until Tuesday, November 27, 1923, at 11 a.m., at which time they will be publicly opened and read, for furnishing materials, tools, equipment and labor for the construction of an earth dam for the water supply of Frederick on Fishing Creek.

The work includes earth and rock excavation, 575 ft. of concrete cutoff and core wall, 48,000 cu.yd. of rolled embankment, waste canal, conduit tunnel and gate tower.

Plans and specications may be secured from the City Engineer upon payment of $25.00, which will be refunded upon return of said plans and specifications in good condition before date of opening bids.

All proposals must be accompanied by a certified check in the sum of $5,000.00.

The City of Frederick reserves the right to reject any or all bids.

EMORY C. CRUM, City Engineer.
NORTON, BIRD AND WHITMAN,
Advisory Engineers.

OFFICIAL PROPOSALS

Bids: Dec. 5.

Dams, Spillways, etc.

Watertown, N. Y.

Sealed bids or proposals will be received by the Board of the Black River Regulating District, at its offices, Room 530, Light and Power Building, Public Square, Watertown, New York, until 11 a.m. Eastern Standard Time, on Wednesday, December 5, 1923, for the construction of certain dams, spillways and other structures for the enlargement of the Stillwater Reservoir, on the Beaver River, in the Town of Webb, Herkimer County, New York, all as set forth in the plans and specifications.

The work consists of raising the existing dam and spillway by about nineteen feet and the construction of such additional embankments, spillways, structures and appurtenances as may be required. Maps, plans, specifications and proposal and contract forms can be seen at the offices of the Board at the above address and also at the office of the Water Control Commission, Albany, N. Y. Pamphlets containing information for proposers, forms of proposal and contract, specifications and plans can be obtained from the Board at the above address by depositing the sum of five dollars ($5) for each pamphlet, which sum will be refunded on return of the pamphlet in good condition within seven days after the bids are opened.

All proposals will be publicly opened and read at the aforesaid time and place. Every proposal must be accompanied by a certified check upon some national or state bank or trust company within the state in good credit for five per centum (5%) of the amount of the proposal payable to the order of the Board of the Black River Regulating District. The Board reserves the right to reject any or all proposals and to again advertise for further proposals.

Board of the Black River Regulating District.

E. S. CULLINGS,
Secretary.

Bids: Dec. 11.

Warehouse

Tampa, Fla.

Sealed bids will be received by the City Commission of Tampa, Florida, until Tuesday at 2 o'clock p.m., Dec. 11th, 1923, for furnishing all material and labor, and building a warehouse 694 x 75 ft., at the City Docks, in the City of Tampa; all in accordance with the plans and specifications, copies of which may be secured from A. W. D. Hall, Engineer in charge of the work. Post Office address Box 2736.

The erection of the building cannot be started until certain work now under way is completed, which will not be before Feb. 15th.

Each bid shall be accompanied by a certified check for Five per cent of the amount of the bid as a guarantee the successful bidder will enter into contract and furnish bond as required by the specifications. The checks of unsuccessful bidders will be returned within thirty days from the date letting.

The Commission reserves the right to reject any or all bids.

CHAS. H. BROWN,
Mayor Commissioner.

WM. E. DUNCAN,
City Clerk.
A. W. D. HALL,
Engineer.

Business Side of Construction

FACTS AND EVENTS THAT AFFECT COST AND VOLUME

Water-Works Installation This Year and Last

Water-works construction in the United States has followed a remarkably regular curve this year, according to *Engineering News-Record* statistics covering contracts of $15,000 and over. The first two months were normal, though about $2,000,000 per month above 1922. March was abnormally heavy, owing to $10,330,462 worth of Catskill Aqueduct contracts being awarded for a syphon to Brooklyn and conduits in that borough. Since March the slope has been fairly uniform, in August falling below 1922 figures. Contracts in the last two months have continued lighter than those let last year.

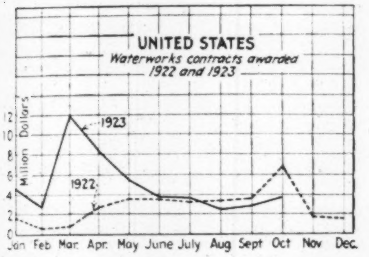
During the first nine months of the two years under consideration, 1922 had 327 awards with a total value of $25,000,000 against 335 for 1923 valued at $51,000,000. The average value of each contract in 1922 was $77,889 compared with $153,074 of this year. The trend of water-works installation for the United States during the last four years (for nine months in each case) may be gathered from the following figures:

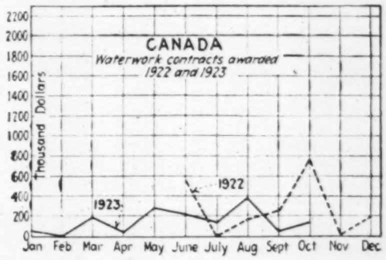
Year	Value	Monthly Average
1920	$16,401,000	$1,822,000
1921	24,252,000	2,695,000
1922	25,470,000	2,830,000
1923	51,280,000	5,698,000

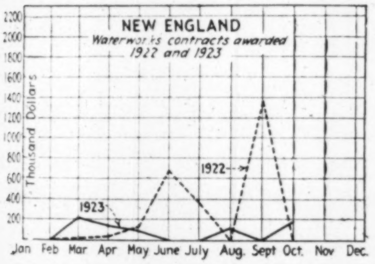
The significant fact is the same as that pointed out in the case of industrial work (p. 784, this section, Nov. 8 issue), that although the year started off with a rush of work, there has been a steady decline in the last half of the year. The Middle Atlantic states and the Mid West have been by far the most active in water-works construction this year, though both these sections are running low at present.

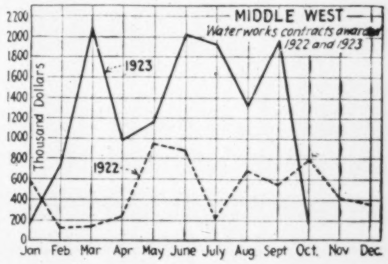
The October, 1923, record was hung up by the Far West, and included a 25-mi. conduit for Portland, Ore., price $2,571,404. A glimpse of the situation in the various sections of the country is given by the following comparison of the number and value of projects in the first nine months of 1922 and 1923:

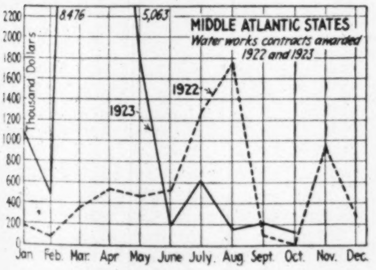
	1922		1923	
	No.	Value	No.	Value
New England	12	$2,754,000	8	$671,000
Middle Atlantic	56	5,972,000	55	20,706,000
Southern	40	2,602,000	25	2,676,000
Middle West	85	4,828,000	111	13,518,000
West of Miss.	103	4,899,000	116	10,320,000
Far West	31	4,414,000	20	3,389,000
Total	327	$25,469,000	335	$51,290,000

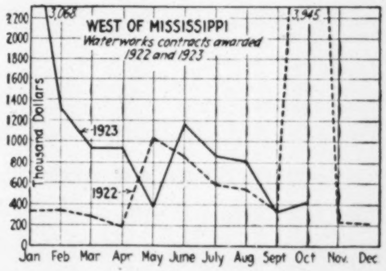


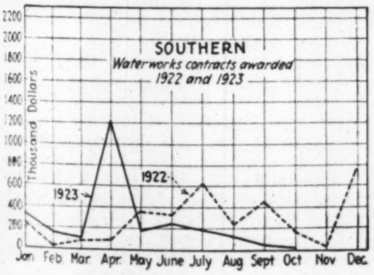


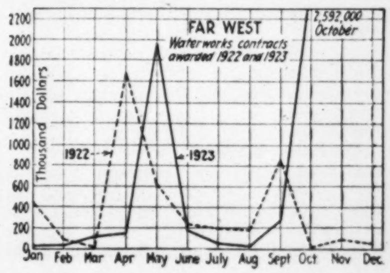












Importation of Foreign Cement Affects Sewer Bids

The importation of foreign cement at Los Angeles Harbor has been steadily increasing during the past year, and is having its effect on the local construction situation. The presence of foreign material at the harbor last summer seems to have resulted in lower bids for the large quantities of material required in the construction of the Los Angeles outfall sewer. At least this was the opinion of engineers connected with that particular job.

During July, August and September of this year, the total receipts of the foreign material amounted to 47,420 tons, while for the corresponding period of 1922, no receipts were recorded.

Segregation by countries from which cement was received during this third quarter of 1923 is indicated by the following table:

England	16,785 tons
Sweden	16,770 tons
Belgium	6,041 tons
Germany	3,761 tons
Norway	3,028 tons
Denmark	1,035 tons
Total	47,420 tons

The value of this cement according to figures of the City Harbor Commission was $503,769. During the busiest part of the 1923 building season in this vicinity, there occurred a shortage of native cement and this was the reason for the bringing in of appreciable quantities of the foreign material.

Whether or not the importing of the foreign cement will be continued, depends upon the ability of dealers in the local materials being able to meet the demands. It is understood that native cement is now being stored by local producers in anticipation of the heavy demands which are expected in the Spring of 1923.

Bids Close		See Eng. News-Record
Nov. 30	Greenville, Miss. Adv. Nov. 15 and 22.	Nov. 15
Nov. 30	Pembina, N. D.	Nov. 22
Dec. 4	Cleburne, Tex.	Nov. 22
Dec 5	**Salem, Mass.**	Nov. 8
Dec. 5	Freehold, N. J. Adv. Nov. 15 and 22.	Nov. 15
Dec. 5	Rochelle Park, N. J. Adv. Nov. 22.	Nov. 22
Dec. 10	New Jersey Adv. Nov. 22.	Nov. 22
Dec. 20	Correctionville, Ia.	Nov. 22
May 1	Tientsen, North China	Oct. 11

DAMS

Nov. 27	Frederick, Md. Adv. Nov. 8 to 22.	Nov. 15

RAILWAYS

Nov. 26	Ontario	Nov. 22
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Nov. 30	New York	Nov. 22
Dec. 6	Manteca, Calif.	Nov. 22

STREETS AND ROADS

Nov. 26	Alexandria, Ky.	Nov. 8
Nov. 26	Alabama	Nov. 1
Nov. 26	Seattle, Wash.	Nov. 15
Nov. 26	California	Nov. 15
Nov. 26	Long Island City, N. Y.	Nov. 22
Nov. 26	Akron, O.	Nov. 22
Nov. 27	New Jersey	Nov. 8
Nov. 27	Vernon, Tex.	Nov. 15
Nov. 27	North Carolina Adv. Nov. 15 and 22.	Nov. 15
Nov. 27	Louisiana	Nov. 15
Nov. 27	Florida	Nov. 15
Nov. 27	Clinton, Ia.	Nov. 22
Nov. 27	Missouri	Nov. 22
Nov. 27	Ft. Worth, Tex.	Nov. 22
Nov. 27	Tampa, Fla.	Nov. 22
Nov. 28	Hampton, S. C.	Nov. 22
Nov. 28	Brooklyn, N. Y.	Nov. 22
Nov. 28	Ebensburg, Pa.	Nov. 22
Nov. 30	Phillipsburg, Kan.	Nov. 22
Nov. 30	New York, N. Y.	Nov. 22
Nov. 30	St. George, N. Y.	Nov. 22
Dec. 3	Jacksonville, Fla.	Nov. 15
Dec. 3	California	Nov. 22
Dec. 3	Los Angeles, Calif.	Nov. 22
Dec. 3	Austin, Tex.	Nov. 22
Dec. 3	Spencer, Ind.	Nov. 22
Dec. 4	Rushville, Ind.	Nov. 15
Dec. 4	Logansport, Ind.	Nov. 15
Dec. 4	Little Rock, Ark.	Nov. 22
Dec. 4	Cleburne, Tex.	Nov. 22
Dec. 4	Washington	Nov. 22
Dec. 4	Sioux City, Ia.	Nov. 22
Dec. 4	Bartow, Fla.	Nov. 22
Dec. 5	**Aiken, S. C.**	Nov. 22
Dec. 5	Raleigh, N. C.	Nov. 15
Dec. 5	New Jersey Adv. Nov. 22.	Nov. 22
Dec. 6	Palo Pinto, Tex.	Nov. 22
Dec. 6	Duluth, Minn.	Nov. 22
Dec. 10	Bonner Springs, Kan.	Nov. 22
Dec. 10	Buckhannon, W. Va.	Nov. 22
Dec. 10	Palestine, Tex.	Nov. 22
Dec. 11	West Virginia Adv. Nov. 22.	Nov. 22
Dec. 11	Michigan	Nov. 22
Dec. 11	Pennsylvania Adv. Nov. 22.	Nov. 22
Dec. 12	Webster City, Ia.	Nov. 22
Dec. 13	West Virginia Adv. Nov. 22.	Nov. 22

INDUSTRIAL WORK

Nov. 23	Waterbury, Conn.	Nov. 22
Nov. 24	Charlotte, N. C.	Nov. 22
Nov. 24	Phila., Pa.	Nov. 22
Nov. 27	New Britain, Conn.	Nov. 22
Nov. 28	Crystal Falls, Mich.	Nov. 22
Nov. 28	Baltimore, Md.	Nov. 22
Dec. 11	Tampa, Fla. Adv. Nov. 15 and 22.	Nov. 15
Dec. 12	Pulaski, Tenn.	Nov. 22
Dec. 18	Palmyra, N. Y. Adv. Nov. 22.	Nov. 22

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 24	Lakewood (Cleveland P. O.), O.	Nov. 8
Nov. 26	Galveston, Tex.	Nov. 1
Nov. 26	Huntington, W. Va.	Nov. 8
Nov. 26	Tucson, Ariz.	Nov. 8
Nov. 26	New York, N. Y.	Nov. 15
Nov. 26	Brooklyn, N. Y.	Nov. 15
Nov. 26	Huntington, W. Va.	Nov. 22
Nov. 26	Baltimore, Md.	Nov. 22
Nov. 26	Minneapolis, Minn.	Nov. 22
Nov. 26	Lebanon, Tenn.	Nov. 22
Nov. 27	Clearwater, Fla.	Nov. 22
Nov. 27	Dallas, Tex.	Nov. 22
Nov. 27	Peoria, Ill.	Nov. 22
Nov. 27	Grand Rapids, Mich.	Nov. 22
Nov. 28	Middletown, N. Y.	Nov. 1
Nov. 28	Newark, Del.	Nov. 8
Nov. 28	Bethlehem, Pa.	Nov. 22
Nov. 30	Maggie, W. Va.	Oct. 4
Nov. 30	Louisville, Ky.	Nov. 15
Nov. 30	St. Paul, Minn.	Nov. 22
Dec. 1	Oklahoma City, Okla.	Nov. 22
Dec. 1	Commerce, Tex.	Nov. 22
Dec. 1	Tacoma, Wash.	Nov. 22
Dec. 3	Los Angeles, Calif.	Nov. 22
Dec. 4	Hartford, Conn.	Nov. 22
Dec. 4	Brooklyn, N. Y. Adv. Nov. 8 to 22.	Nov. 8
Dec. 4	Louisville, Ky.	Nov. 8
Dec. 4	Greensboro, N. C.	Nov. 15
Dec. 4	Hyde Park (Boston P. O.), Mass.	Nov. 22
Dec. 4	Slayton, Minn.	Nov. 22
Dec. 5	St. Louis, Mo.	Nov. 15
Dec. 5	Little Rock, Ark.	Nov. 22
Dec. 5	Baltimore, Md.	Nov. 22
Dec. 7	Tacoma, Wash.	Nov. 22
Dec. 10	Indianapolis, Ind.	Nov. 15
Dec. 10	Ft. Worth, Tex.	Nov. 22
Dec. 10	New York, N. Y.	Nov. 22
Dec. 10	Richmond Hill (Jamaica P. O.), N. Y.	Nov. 22
Dec. 10	Brooklyn, N. Y.	Nov. 22
Dec. 11	Cedar Falls, Ia.	Nov. 22
Dec. 12	Grand Rapids, Mich.	Nov. 15
Dec. 15	Wichita, Kan.	Nov. 15
Dec. 18	Ironwood, Mich.	Nov. 15
Dec. 18	Belzoni, Miss.	Nov. 22
Dec. 19	Falls City, Neb.	Nov. 22
Dec. 20	Sioux City, Ia.	Nov. 15
Dec. 21	Charleston, W. Va.	Nov. 15
Dec. 28	Morgantown, W. Va. Adv. Nov. 8 to 22.	Nov. 15
Jan. 1	Williamson, W. Va.	Nov. 22
Jan. 2	Bloomington, Ind.	Nov. 15

FEDERAL GOVERNMENT WORK

Nov. 24	Dredging—New York, N. Y.	Oct. 25
Nov. 26	Post Office—Mystic, Conn.	Nov. 1
Nov. 27	Barge—New Orleans, La.	Nov. 1
Nov. 27	Water Supply System—American Falls, Idaho	Nov. 1
Nov. 27	Post Office—Gallipolis, O.	Nov. 1
Nov. 28	Quarters—San Juan, Porto Rico	Nov. 8
Nov. 28	Catamarans—Jacksonville, Fla. Adv. Nov. 8 to 22.	Nov. 8
Nov. 28	Coal Bunkers, etc. — Great Lakes, Ill.	Nov. 22
Nov. 28	Shore Protection—Annapolis, Md.	Nov. 22
Nov. 30	Dam—Quebradillas, P. R.	Sept. 27
Nov. 30	Dredging, etc.—New York, N. Y. Adv. Nov. 1 to 22.	Nov. 1
Nov. 30	Post Office—Harrisonville, Mo.	Nov. 8
Nov. 30	Deep Well—Camp Knox, Ky.	Nov. 22
Dec. 1	Steel Barges—Mobile, Ala. Adv. Nov. 8 to 22.	Oct. 25
Dec. 2	Fuel Oil Storage—Mare Island, Calif.	Nov. 15
Dec. 3	Barge and Hull—New Orleans, La. Adv. Nov. 8 to 22.	Nov. 8
Dec. 4	Dredging—Phila., Pa.	Nov. 15
Dec. 5	Post Office — Marianna, Ark.	Nov. 8
Dec. 7	Well—Oklahoma City, Okla.	Nov. 22
Dec. 7	Post Office—Ripon, Wis. Adv. Nov. 22.	Nov. 22
Dec. 7	Post Office—South Bend, Ind. Adv. Nov. 22.	Nov. 22
Dec. 10	Towboat—Montgomery, Ala. Adv. Nov. 1 to 22.	Nov. 8
Dec. 10	Maneuver Boat, etc.—Huntington, W. Va. Adv. Nov. 15 and 22.	Nov. 15
Dec. 10	Remodeling — Allentown, Pa. Adv. Nov. 15 and 22.	Nov.15
Dec. 14	Dredging, etc.—New York, N. Y Adv. Nov. 15 and 22.	Nov. 15
Dec. 15	Operating Machinery—Louisville, Ky. Adv. Nov. 22.	Nov. 22
Dec. 19	Dredging — Wilmington, N. C. Adv. Nov. 2.2	Nov. 22
Dec. 19	Towboat—Memphis, Tenn. Adv. Nov. 22.	Nov. 22
Dec. 19	Bungalows—Wash., D. C.	Nov. 22
Dec. 22	Hospital—Livermore, Calif. Adv. Nov. 22.	Nov. 22
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15

UNCLASSIFIED

Bids Close		See Eng. News-Record
Nov. 26	Portland Cement—Los Angeles, Calif.	Oct. 18
Nov. 27	Electric Light and Power Line—Erath, La.	Nov. 22
Nov. 30	Special Work—New York, N. Y.	Nov. 22
Nov. 30	Transit Shed—Los Angeles, Calif.	Nov. 22
Dec. 4	Dragline Machines—Greenville, Miss.	Nov. 1
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

MATERIAL AND EQUIPMENT

Nov. 26	Street Sweeper—Sanford, Fla.	Nov. 22
Nov. 27	Reinforcing Bars, etc.—St. Paul, Minn.	Nov. 22
Nov. 28	Steel Bars, etc.—Oroville, Calif.	Nov. 22
Dec. 3	Lumber—Atlantic, Ia.	Nov. 22
Dec. 13	Pipe—Baton Rouge, La.	Nov. 22

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

New York—Cities of Ontario and Ontario Center plan water system, filtration plant, etc. $100,000. H. C. Kittridge, Union Trust Bldg., Rochester, engr.

N. Y., Fredonia — Voted $200,000 bonds new reservoir and water supply system. W. H. Shelton, city engr. Noted Oct. 25.

N. Y., Herkimer—Plans artesian well for additional water supply. $16,000. Will mature in fall.

W. Va., Fairmont—City plans 5,900 ft. mains in East Side. $25,000. J. C. Morris, City Bldg., dir.

W. Va., Matoaka—Matoaka Water & Improvement Co. plans general construction of water supply system. Engineer not announced.

N. C., Greensboro—City plans extension to mains and sewers. $100,000. M. M. Boyles, Greensboro, engr. Noted Oct. 25.

S. C., Arcadia—See "Sewers."

Tenn., Bluff City—Voted $20,000 bonds for waterworks system.

Ky., Marion — Voted $50,000 bonds for waterworks system.

O., Lima—Plans enlarging present water plant, will add 3-4 m.g. capacity, etc. $100,000. W. H. F. Dittoe, Columbus, engr.

Kan., Brookfield—Voted $20,000 bonds locating and digging deep well, erecting pump station and mains. Private plans.

Kan., Russell—Dec. 3, to vote on $95,000 bond issue for waterworks plant, equipment and distribution system.

Neb., University Place (Lincoln P. O.)—Election soon to vote on $100,000 bonds for waterworks improvements. Grant, Fulton & Letton, Bankers Life Bldg., Lincoln, engrs.

Mo., Greenfield—Soon takes bids waterworks improvements. Voted $17,000 bonds. Engineer not announced.

Mo., Kansas City — Bd. Fire & Water Comrs. takes bids about Dec. 15, 3 mi. pressure tunnel, 7 ft. 6 in. diam., under Missouri River Valley, 280 ft. below ground surface, Contr. 1; 11,000 ft. and 14,000 ft. pressure tunnels 6 ft. diam., 170 ft. and 130 ft. below ground surface, Contr. 2. G. W. Fuller, 170 Bway., New York City, and A. Maitland, 600 Walnut St., Kansas City, engrs. Noted Sept. 6.

Mo., Salem — Defeated $69,000 bonds waterworks and distribution system. E. T. Archer & Co., 612 New England Bldg., Kansas City, engrs. Noted Oct. 18.

Tex., San Antonio — San Antonio Water Supply Co., 106 Market St., making plans 20 m.g. covered concrete reservoir, sinking 3 new artesian wells and laying 42 in. main from main pumping plant to Northern portion of city, $800,000, also laying additional mains in new and suburban additions to city, $150,000. Private plans.

Okla., Nowata—Election soon to vote on $125,000 bonds for waterworks improvements and extensions. Benham Eng. Co., 512 Gumble Bldg., Kansas City, Mo., engrs.

Colo., Denver—See "Contracts Awarded."

Wash., Centralia — City Council plans pumping and filtration plant on Skookumchuck River to furnish auxiliary water supply, first unit 1,500,000 g.p.d. capacity. Ul-

Waterworks (Continued)

timately 6 m.g. per day. R. A. Welsh, city engr.

Ore., La Grande—Making plans 15 mi. pipe line approximately $270,000; twin reservoirs $35,000; pumping plant. $25,000. F. B. Hayes, La Grande, engr.

N. S., Sydney—Plans to extend water system. $80,000. R. McKinnon, engr.

Ont., Islington—Etobicoke Twp. plans 5 mi. waterworks system to supply area of 1,110 acres, pipe 6 in. up, $131,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Kenora—Plans to install 350,000 imp. gal. steel water tank. F. H. Cooper, town clk.

Ont., Oshawa—Town plans to purchase 1,000 imp. gal. per minute, 3 stage centrifugal pump, to work against head of 340 ft. direct connected to 60 cycle, 550 volt squirrel cage induction motor. W. C. Smith, town engr.

BIDS DESIRED

R. I., Scituate (North Scituate P. O.)—Dec. 19, at office of Water Supply Bd., City Hall, Providence, clearing, grubbing, and other preparation of Scituate Reservoir, here. F. E. Winsor, 661 Westminster St., Providence, ch. engr.; adv. E. N.-R. Nov. 22.

N. Y., Hamburg—Village Bd. in market for motors, machinery, deep well pumps, pumping equipment, etc. $8,000.

N. Y., Long Island City—Nov. 26, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., reconstructing pumping station at Camp Rd. and Beach 25th St., also constructing force main from pumping station to Beach 25th St. to Deerfield Rd., etc.

N. J., Kearny (Arlington, P. O.)—Dec. 12, by Town Council, Town Hall, constructing part ot Meadows Water System known as steel main in Jacobus Ave. W. B. Ross, town clk.; adv. E. N.-R. Nov. 22.

Md., Baltimore—Nov. 28, by Bd. Awards, 19½ tons c.i. pipe and c.i. special fittings for Highways Engineers Dept. $5,000. B. L. Crozier, highways engr.

N. C., Laurinburg—Dec. 18, by H. W. Malloy, mayor, and Bd. Town Comrs. at office of C. M. Fetter, town clk., waterworks improvements. Gilbert C. White Co., Durham, engrs.; adv. E. N.-R. Nov. 22.

O., Toledo—Dec. 4, Director Pub. Serv. synchronous motor driven centrifugal pump, 35 m.g. daily capacity. $18,600. W. G. Clark, 1046 Spitzer Bldg., consult. engr.

Mich., River Rouge—Taking bids furnishing and installing 2,800 ft. 16 in. c.i. mains in Pleasant Ave. $15,000. M. L. Brown & Son, 403 Capitol Bldg., Detroit, engrs.

Ill., Windsor (New Windsor P. O.)—Dec. 17, drilling deep rock well. Caldwell Eng. Co., Jacksonville, engrs.; adv. E. N.-R. Nov. 22.

Ia., Washington—Dec. 6 for waterworks improvements, incl. brick building, electric driven pumps, piping, equipment and 200,000 gal. elevated tank. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engrs. Noted Oct. 11.

N. M. Albuquerque—Dec. 12, at office I. V. Malone, city clk., 10 m.g. reservoir. F. Kimball, city engr.; adv. E. N.-R. Nov. 22.

Calif., Porterville — Dec. 6, furnishing 5,000 ft. 4 in. Class B c.i. bell and spigot pipe, etc., f.o.b. factory or Porterville.

BIDS RECEIVED

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in (1) Oak Point Ave. etc. (2) Bolton and Bronx River Aves., etc. (3) Brinsmade and Calhoun Aves., etc. (4) Barkley and Lafayette Aves., etc., from Paladino Contg. Co., 437 East 120th St., (1) $10,901; C. DeBlasio, 339 7th Ave., Mt. Vernon, (2) $23,000 (3) $13,697 (4) $15,500; Knight & DeMicco, 448 East Tremont Ave., (3) $13,697. Noted Nov. 8.

Wis., New Holstein — Drilling artesian well, 800 ft. deep, 130 ft. 12 in., 390 ft. 10 in. pipe, balance 8 in., from M. T. Peterson, Madison, $6,210. Noted Oct. 11.

Colo., Denver—See "Contracts Awarded."

CONTRACTS AWARDED

Ill., McLeansboro—To Nixon & Keeley, Murphy Bldg., East St. Louis, 3,609 ft. 4 in. pipe, 1,054 lb. 4 in. special castings, 400,000 g.p.d. filter plant; to Gould Pump Co., Syndicate Trust Bldg., St. Louis, Mo., pumping equipment. Total est. cost $31,500. Noted Oct. 18.

Ia., Morning Sun—Sinking 12 in. well, 1,200 ft. deep, to McCarthy Well Co., Wabash and Eustis Sts., St. Paul, Minn. Noted Aug. 2.

Kan., Kansas City—City, rein.-con. reservoir, 259 x 433 ft. 24 ft. high, to Arkansas Bridge Co., 1503 Waldheim Bldg., Kansas City, Mo., $274,600; two 600 hp. boilers, and one 12,500 kva. turbine generator to Babcock & Wilcox Co., 140 South Dearborn St., Chicago, $40,320.

Okla., Sulphur — F. Gofford, city clk., motor driven pump units, concrete reservoir, tower, 4,400 ft. 6 and 8 in. c.i. pipe, etc., to W. B. Scott, Sulphur, cost plus 10%, not to exceed $43,500. Noted Sept. 27.

Colo., Denver—Improvements to Ashland Ave. Reservoir, east and west basins, to R. L. Hanes, 617 East 1st Ave., $85,477, extra work Item 1 excav. and grading $1.60 per cu.yd., Item 2 removing condemned soil and replacing with new soil $2.50 per cu.yd., Item 3 concrete and form work $18 per cu.yd. Noted Nov. 1.

Colo., Denver—Large c.i. pipe (alternate proposition accepted), to United States Cast Iron Pipe & Fdry. Co., Tarrant City, Birmingham, Ala., $175,067; small pipe, to Colorado Fuel & Iron Co., 6-24 in. pipe, $60, total $74,627; vertical valves, to Resselaer Valve Co., 50 Church St., New York, twenty five 4 in. hub end $15.43 each, two hundred and fifty 6 in. $28.18, thirty 8 in. $44.28, fifteen 10 in. $67.10, seventy-five 12 in. $84.55, two 24 in. $495.01, ten 24 in. $496.23, fifteen 36 in. $1,491.45, three 42 in. $2,199.66, four 48 in. $3,013.40, three 48 in. flange $2,270.45, total $69,895; low bid received on meters from Badger Meter Mfg. Co., iron body $2,550. Rejected bids for special castings. Noted Oct. 18.

Calif., Stockton—Bd. Supervs., San Joaquin Co., furnishing and erecting 1 standard 4 panel hemispherical bottom steel tank, 50,000 gal. capacity, secured at top of steel frame tower, 100 ft. high, at County Hospital, here, to Chicago Bridge and Iron Wks., Rialto Bldg., San Francisco, $9,335. Noted Oct. 25.

Sewers

PROPOSED WORK

Conn., Darien—See "Industrial Works."

N. C., Greensboro—See "Waterworks."

S. C., Arcadia—Having plans prepared complete sewerage and waterworks systems. Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., designing and supervising engrs.

Mich., Adrian—Dec. 11 to vote on $595,000 bonds for storm and sanitary sewers in various streets, sewage treatment plant, sanitary sewer in Raison Rd., pumping stations and mains.

Mo., Greenfield—Soon takes bids sewers. Voted $43,000 bonds. Engineer not announced.

Mo., Salem—Defeated $56,000 bonds storm and sanitary sewers. E. T. Archer & Co., 612 New England Bldg., Kansas City, engrs. Noted Oct. 11.

Tex., San Antonio—Dec. 4, to vote on $100,000 bonds constructing and extending sanitary sewers, also $250,000 bonds storm sewers. J. W. Tobin, mayor.

Okla., Tulsa—Election Nov. 20, to vote on $800,000 bonds for 10 mi. large storm and sanitary sewer outlets with smaller mains. Work will be divided into 12 different projects and voted upon separately. C. Schultz, city engr.

Utah, Salt Lake City—Plans 4 mi. 2-6 ft. storm sewers in 4th St. S. from 11th St. E. to Jordan River. $250,000. Q. Cannon, city engr.

Ont., Bridgeburg—Plans sewers in Lewis, Janet and Gilmour Sts. $27,000. M. C. Williams, mayor and chn. of com.

Ont., North Bay—Soon takes bids 9,500 ft. 6-12 in. vitr. tile sanitary and storm sewers. $40,000. W. Mackie, town engr.

Ont., Oshawa—Plans 12,000 ft. of 8-12 in. vitr. storm and sanitary sewers in Simcoe, Mary and King Sts., Eulalie and Masson Aves. $30,000. W. C. Smith, town engr.

Ont., Toronto—Plans 13,000 ft. vitr. tile storm and sanitary sewers, 8 in. up, in Beaufort and Winthorpe Rds., Glen Manor Dr., Maragaret Ave., Main, Weller and Cavendish Sts. $48,550. R. C. Harris, city engr.

Ont., Toronto—York Twp. plans 8,000 lin.ft. 12 in. vitr. tile sewers in Governors Rd., Nesbitt Dr. and Douglas Crescent to disposal plant at Pottery Rd. $36,000. F. B. Goldike, 40 Jarvis St., engr.

Ont., Toronto—York Twp. plans 6,000 ft. of 12 in. vitr. sanitary sewrs. $25,000. F. B. Goldike, 40 Jarvis St., engr.

BIDS DESIRED

N. Y., Long Island City—Nov. 26, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., receiving basins in Junction and Railroad Aves., etc.; sewer in 118th St.

Pa., Lewistown — Dec. 6, by Boro. Council, 1,000 ft. 6 in., 2,595 ft. 8 in., 674 ft. 10 in. terra cotta pipe, 450 ft. 8 in. and 90 ft. 10 in. c.i. pipe Class A in South Main St. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

W. Va., Bluefield—Dec. 11, at office of C. E. Ridley, city mgr., 8 mi. 6-10 in. sanitary sewer, 6 mi. 12-48 in. storm sewers, 2 mi. concrete conduit, etc.; adv. E. N.-R. Nov. 22.

O., Akron—Dec. 5, by W. F. Peters, dir. Pub. Serv., 4,500 ft. 48 in. brick sewer in Hawkins Ave. $415,000. J. E. Root, Delaware Bldg., engr.

O., East Youngstown—Nov. 28, by J. E. McGarry, dir. Pub. Serv., City Bldg., 10,000 ft. sewers in Gordon Ave., Robinson and Coitsville Rds., Oxford, Regent, Picadilla, Princess, 6th, Reed, Tenney and Penhale Aves.; grading, Gordon Ave. To exceed $30,000. A. R. Haenny, East Youngstown, engr. Noted Nov. 15.

Ark., Forrest City—Nov. 26, by Comrs. Special Impvt. Dist., c/o O. B. Rollwage, secy., disposal plant incl. disposal tank, sludge bed and appurtenances, 1,000 cu.yd. excav. and 240 cu.yd. concrete. F. J. Herring, Forrest City, engr.

Tex., Dallas—Nov. 30, by City Com., 12 new Imhoff tanks, new sewer line from South Dallas to Trinity River bottom, (site of plant, etc.). $500,000. E. A. Kingsbury, city engr. Noted Nov. 1.

Calif., Corning—City Trustees taking bids 16,311 lin.ft. 12 in. vitr. or concrete sewer pipe, concrete catchbasins, etc. W. F. Lunning, c/o Courthouse, Red Bluff, engr.

BIDS RECEIVED

N. Y., Albany—See "Streets and Roads."

CONTRACT AWARD

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sanitary sewer in Owens St., etc., to D. Bonnacci, $81,487. Noted Nov. 8.

O., Zanesville—Lateral sewers for Southwest Sewerage System, to Adams Bros. Contg. Co., Muskingum Ave., $303,150. Engrs. est. $300,000.

Kan., Cherryvale—City, sewage disposal plant and outfall sewer, to Amerman & Snyder, Wichita, $51,366.

Wash., Seattle — Bd. Pub. Wks., clay sewers in Brandon St. et al. and in 32nd Ave. S. et al., to Romano & Co., 123 23rd St. S., $75,493 and $35,484 respectively. Engrs. est. $58,255 and $29,184 respectively. Noted Nov. 1.

Ont., Toronto—Storm and sanitary sewers in Milwood Rd., Henning and Tilson Aves., also Phinn Ave., to W. E. Taylor, 22 Falcon St., $10,766 and $1,453 respectively; Leslie St. and Chatham Ave., to Natl. Contg. Co., 9 Garnock Ave., $1,480 and $11,988 respectively.

Waste Disposal

PROPOSED WORK

Ia., Ft. Dodge—Plans incinerator. $23,000. C. W. Wakeman, clk.

BIDS DESIRED

Tex., San Antonio—Nov. 26, by F. Fries, city clk., erection of 1 or more 40 tongarbage incinerator plants. $35,000. O. D. Harrigan, city engr.

Bridges

PROPOSED WORK

Mass., Springfield—Having plans prepared and takes bids about Jan. 1, 1,135 ft. rein.-con. and steel bridge, 66 ft. wide. J. A. L. Waddell, 35 Nassau St., New York City, engr.

Conn., Hartford—Underwood Typewriter Co. plans 50 ft. span overhead bridge, truss encased by concrete, $25,000. Private plans.

La., La Fayette—See "Streets and Roads."

O., Cincinnati — City and Baltimore & Ohio R.R., Central Union Depot, plan grade elimination by construction concrete viaduct, 56 ft. wide, 8th St., $1,400,000. City to pay $825,000 and railroad $575,000. Noted Sept. 6.

O., Steubenville — Pennsylvania R.R., Broad St. Sta., Pittsburgh, Pa., plans replacing 1,903 ft. steel truss bridge, 9 or 10 spans, over Ohio River, here. $1,000,000. R. Trimble, c/o owner, asst. ch. engr.

Mich., Port Huron—City Comn. having plans prepared new jack knife steel bridge over Black River on 7th St. to replace present 100 ft. bridge. Osborn Eng. Co., 2848 Prospect Ave., Cleveland, O., engrs.

Ill., Chicago—Lincoln Park Comrs., Clark and Center Sts., plan concrete bridge at foot of Diversey Parkway, across Island in Lincoln Park. $300,000. Work will be done by day labor.

Wisconsin—State Hy. Comn., Madison, asked Columbia, Calumet, Kewaunee, Manitowoc, Marinette, Oconto, Outagamie, Shawno, Juneau, Chippewa, Eau Claire,

Bridges (Continued)

Pepin, St. Crois, Taylor and Oneida Counties to construct bridges. **Total est. $46,000.**

Okla., Sayre — Backham Co. preparing plans 20 rein.-con. bridges to replace those destroyed by recent flood. Election soon to vote on $600,000 bonds. R. N. Higgins, Sayre, engr.

Okla., Tecumseh—Pottawatomie Co. election Dec. 11, to vote on $200,000 bonds to repair and extend 7 bridges over North Canadian River, destroyed by recent flood. F. D. Brown, Shawnee, engr.

Okla., Wanette—Pottawatomie Co. (Tecumseh), election Dec. 11, to vote on $100,000 bonds for 1,800 ft. steel bridge, 6 spans, here. F. D. Brown, Shawnee, engr.

Ore., Portland—Multnomah Co. voted $350,000 bonds for 750 ft. five span steel bridge, concrete piers over Williamette River in Sellwood, here. City and County share cost. Will use old steel from Burnside Bridge. Noted Sept. 27.

Wash., Aberdeen—Plans bascule bridge. $200,000. M. M. Caldwell, Central Bldg., Seattle, engr.

BIDS DESIRED

New Jersey—Dec. 10, by State Hy. Dept., Trenton, 80 ft. single leaf overhead counterweight bascule span for 30 ft. roadway over 50 ft. channel, also temporary bridge, etc., over Cedar Bonnet, Manahawken Bay, in municipality of Stafford, Ocean Co. Former bids rejected. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Nov. 22. Noted Nov. 15.

N. J., Rochelle Park—Dec. 5, by State Hy. Dept., Trenton, concrete encased I-beam bridge, incl. removing existing bridge over Saddle River, Route 10, M. P. 2.9, Bergen Co., here. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Nov. 22.

West Virginia—See "Streets and Roads."

S. C., Aiken—See "Streets and Roads."

S. C., Georgetown—Nov. 28, by Comrs. Georgetown Co., 440 ft. rein.-con. and steel bridge over Black River on State Route 40, Federal Aid Project 223, 1,936 ft. earth approaches with sand clay surfacing.

S. C., Hampton—See "Streets and Roads."

Miss., Belzoni—See "Streets and Roads."

Wis., Milwaukee—Nov. 24, by F. H. Schumacher, secy. Park Bd., City Hall, wood or concrete piling for Mason St. viaduct. Total cost $400,000. Clas, Shepherd & Clas, 445 Milwaukee St., engrs. Noted Nov. 8.

Wis., Rhinelander—Nov. 26, A. O. Rendel, city engr., 230 ft. timber trestle, 18 ft. roadway. $25,000.

Ia., Correctionville—Dec. 20 by Auditor Woodbury Co., (Sioux City), 350 ft. steel and concrete bridge over Little Sioux River, here. $35,000. J. C. McLean, Sioux City, co. engr.

Kan., Phillipsburg — Nov. 30, by Clerk Phillips Co., 140 ft. bridge on Federal Aid Project 166, Sect. B, one 80 ft. span and two 30 ft. approach spans, 148.7 cu.yd. rein.-con., 141.6 cu.yd. concrete, 25,100 lb. reinforcing steel, and 90,513 lb. structural steel, etc. C. E. Freeman, Phillipsburg, engr. Noted Nov. 15.

N. D., Pembina—Nov. 30, by State Hy. Comn. of North Dakota, at Pembina, two 344 ft. steel spans and one center pier over Red River, for States of North Dakota and Minnesota, Pembina Co., N. D., and Kittson Co., Minn. $125,000.

Tex., Cleburne—Dec. 4, by O. B. McPherson, judge Johnson Co., 360 ft. concrete girder bridge over Buffalo Creek, near here, twelve 30 ft. spans. $34,000. R. E. Keller, co. engr.

BIDS RECEIVED

Ohio—See "Streets and Roads."

O., Youngstown—P. J. Carney, dir. Pub. Serv., Nov. 16, foundation for 500 ft. concrete and steel bridge, Belmont Ave., from Parish Bros., Commerce and Decker Sts., $128,740 alternate $131,740. Noted Nov. 8.

Tex., Marlin—See "Streets and Roads."

CONTRACTS AWARDED

Pa., Phila.—Fairmount Park Comrs., 127 City Hall, skew arch stone and concrete bridge under Chestnut Hill branch Phila. & Reading R.R., east of Germantown Ave., to Brown King Co., Commercial Trust Bldg., $66,405.

S. C., Lancaster—Lancaster Co., 5 rein.-con. bridges on Federal Aid Project 230, between here and North Carolina state line, to N. C. Hughes, Jr., Laurens, $43,515.

Ga., Macon—Central of Georgia R.R. Co., Savannah, superstructure of 8 girder steel span bridge over Okmulgee River, here, to Virginia Bridge & Iron Co., Roanoke, Va. Est. cost to exceed $75,000.

O., Cleveland—Cleveland Union Terminal Co., 323 Lakeside Ave., 330 ft. concrete bridge over West 25th St. near Columbus Rd., to Richley Constr. Co., Hanna Bldg. **Engrs. est. $400,000.**

O., Cleveland—Cuyahoga Co., steel superstructure, wood block floor, for bridge on Hillside Rd., 310,000 lb. steel and 640 sq. yd. wood block, to Standard Eng. Co., Toledo, $30,987. Noted Nov. 15.

Minnesota—State Hy. Dept., St. Paul, Bridge 3583 at Split Rock, 80 ft. deck truss span, to Adams Constr. Co., 928 Andrus Bldg., Minneapolis, $19,954, Bridge 3584 at Crow Creek, four 100 ft. deck spans, to Minneapolis Bridge Co., 924 Metropolitan Life Bldg., Minneapolis, $53,600, and Bridge 3585 at Gooseberry, one 150 ft. arch and two 60 ft. approach spans, to Illinois Steel Co., 836 Security Bldg., Minneapolis $34,984, all foregoing bridges on State Project 1-01, Federal Aid Project 282; Bridge 3795, one 80 ft. truss span, to Guaranty Constr. Co., 301 Essex Bldg., Minneapolis $16,460, Bridge 3796, one 100 ft. truss span, to Independent Bridge Co., 1101 Metropolitan Life Bldg., Minneapolis, $11,000, and Bridge 3797, one 100 ft. truss span, to Iowa Bridge Co., 317 McKnight Bldg., Minneapolis $11,888, all foregoing on State Project 16-21, Federal Aid Project 314, Cottonwood Co.; Bridge 3891, one 120 ft. truss span, to Widell Co., Mankato, $18,974, Bridge 4007, three 50 ft. skew deck girders, to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $13,800, both foregoing on State Project 1-39, Div. B, Federal Aid Project 296, Steele Co. Noted Oct. 18.

Dams

BIDS DESIRED

Mich., Cadillac — Consumers Power Co., Jackson, taking bids earth dam and concrete power house for 62 ft. head on Manistee River near here. E. M. Burd, hydraulic and civil engr.

BIDS RECEIVED

Calif., Merced—Merced Irrigation Dist., constructing Exchequer Dam, from L. S. Atkinson, Jr., Chapman Bldg., Los Angeles Form (1) $1,719,550, Form (2) 1,192,550; Bent Bros., Inc., 1714 Eagle St., Los Angeles, Form (1) $1,840,100 Form (2) $1,189,100. Noted Oct. 25.

Railways

PROPOSED WORK

West Virginia—Coal River & Eastern Ry. Co., Huntington, c/o A. E. Barner, Cleveland, plans lines from Ashford to Lick Creek, and from Seth to Griffith, Boone Co.

Texas—Louisville Railway & Navigation Co., 709 Title Guaranty Bldg., New Orleans, La., had plans prepared regrading, new ties and steel on 30 mi. line from McKinney to Greenville, to exceed $100,000. W. C. Borchert, Greenville, ch. engr.

Texas — Rio Grande R.R., Brownsville, making plans converting to standard gauge approximately 17 mi. between Brownsville and Point Isabel. $200,000. C. S. Hobbs, ch. engr.

Texas—Texas-Midland R.R. plans extension from Paris to Tyler. Address Superintendent at Tyler.

Ontario — Temiskaming & Northern Ontario Ry., North Bay, plans 50-60 mi. steam railway from Swastika to Westree, 80 lb. rails. $2,000,000. S. B. Clement, ch. engr.

BIDS DESIRED

Ontario—Nov. 26, by E. W. Oliver, mgr. Toronto Eastern Ry., 1 Toronto St., Toronto, rebuilding three wooden trestles, total length, 1,500 ft., one at Whitby, one at Oshawa and other at Bowmanville. $50,000.

CONTRACTS AWARDED

Ontario—Temiskaming & Northern Ontario Ry., North Bay, will complete railway extension from Cochrane to Oil Can Rapids, incl. 30 mi. tracklaying, ballasting, telegraph and telephone lines, with concrete culverts and bridges, by day labor. $800,000. S. B. Clement, ch. engr.

Excavation, Drainage and Irrigation

PROPOSED WORK

Ont., St. Catharines—Dept. Rys. & Canals, Parliament Bldgs., Ottawa, takes bids about Nov. 26, constructing Sect. 8 Welland Canal near here, incl. earth and rock excav., mass concrete, canal locks, etc. $5,000,000. W. A. Bowden, Parliament Bldg., Ottawa, engr.

BIDS DESIRED

New York—Nov. 30, by J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York, dredging channels, constructing dikes, placing fill on West Island in connection with improvement of Jamaica Bay.

Calif., Manteca — Dec. 6, by Directors South San Joaquin Irrigation Dist., concrete and asphalt lining 8 mi. ditches, 542,000 sq.ft. concrete, 50,000 sq.ft. asphalt, etc., constructing bridges, checks and service gates. District furnishes cement, sand and gravel for concrete lining. Noted July 19.

CONTRACTS AWARDED

Ala., Fayette—Drainage Comrs. Fayette Co., digging 2 mi. ditch, 10 ft. wide, to D. W. Dobbins, Tupelo, Miss., $147,000.

Wis., Milwaukee—J. Hunholz, 2310 Vliet St., excavation for two 8 story and basement, 50 x 100 ft., brick and concrete apartment houses, plain foundations, Mason St., to Froemming & Radtke, 1405 Louis Ave. See item under "Buildings," Proposed Work.

Calif., Bishop—Owens Valley Irrigation Dist., canal lining, new structures, etc., by day labor. Engrs. est. $150,000. W. R. McCarthy, Bishop, engr. Noted Aug. 23.

Streets and Roads

PROPOSED WORK

Connecticut—State Hy. Comn., Hartford, plans to expend $8,000,000 for road work in 1924. J. A. MacDonald, state highway comr.

Connecticut—State Hy. Dept., Hartford, plans 1 mi. concrete highway, 30 ft. $100,000. J. A. MacDonald, state highway comr.

N. Y., Utica—Plans new street from Whitesboro to Park Aves. $175,000. Will mature in spring. R. S. Cookinham, City Bldg., engr.

N. Y., Waterloo—Nov. 27 to vote on $28,000 bonds paving 10,283 ft. Elisha, Center, North, Church, Clark, Williams, Mill, Washington, Fayette, Stark and Inslee Sts., 16 ft., bituminous macadam. A. R. Moore, village clk. Noted May 10.

N. J., Trenton—Plans ½ mi. extension to Bryn Mawr Ave under tracks of Philadelphia & Reading R.R., $75,000; extending street along Delaware and Raritan Canal, at Cadwalader Park, $50,000. J. E. English, City Hall, engr.

Pa., Midland—Plans to improve 3 mi. Midland-East Liverpool Rd. between here and East Liverpool, O., brick. $100,000. H. B. Baich, East Liverpool, engr.

W. Va., Moundsville—Webster Co. takes bids about Jan. 1, grading 6 mi. roads in Webster Dist. $100,000. A. Purdy, co. road engr. Noted Nov. 1.

Fla., Lakeland—City making plans paving 23 mi. C. C. Brown, Lakeland, engr.

Fla., Plant City—Voted $40,000 bonds grading and paving streets. H. B. Andrews, Plant City, engr.

Ala., Greensboro—Hale Co. plans grading 20 mi. Greensboro-Uniontown Rd., 18 ft. surfacing, 26 ft. roadway, Federal Aid Project 141. $142,862. W. S. Keller, Montgomery, state highway engr.

La., La Fayette—Lafayette Parish voted $300,000 bonds for new roads and bridges.

Tennessee — State Hy. Dept., Nashville, rescinded contract awarded to W. C. Anderson Constr. Co., Harriman, due to failure of county to put up funds, for 3.3 mi. highway between Knox Co. line to Straw Plains, State Aid Project 133, Jefferson Co. $60,000.

Tenn., Chattanooga—Plans widening East 9th St. and McCallie Ave. $25,000. H. Bartholomew, Compton Bldg., St. Louis, Mo., city planner.

Kentucky—State Hy. Dept., Frankfort, plans surfacing 1.96 mi. Hardyville-Buffalo Rd., 18 ft., Hart Co. J. S. Boggs, state highway engrs.

Ky., Louisville—Hieatt Bros., 231 South 5th St., having plans prepared by W. Pitkin, Jr., and S. H. Mott, 4500 Euclid Ave., Cleveland, O., developing Riviera subdivision of Louisville, incl. roads, sidewalks, concrete bridge, etc. $25,000.

Ky., Pineville—Plans paving 3,730 ft. Park and Tennessee Aves., 8,289 sq.yd. rock asphalt, concrete or bituminous concrete, 7,033 lin.ft. 6 in. concrete curbing, 7,033 lin. ft. 2½ in. concrete gutter, etc. J. S. Boggs, c/o State Highway Dept., Frankfort, engr.

O., Akron—W. F. Peters, dir. Pub. Serv. takes bids after Jan. 1, grading, laying sidewalks, curbing and guttering, paving 3,400 ft. East Market St., 14,000 sq.yd. vitr. brick or 11,200 sq.yd asphalt, 35,150 sq.ft. concrete sidewalks, etc. $95,000, 3,100 ft. West Market St., 10,020 sq.yd. vitr. brick or 8,445 sq.yd. asphalt, 12,700 sq. ft. cement sidewalks, etc., $80,000; grading and paving 2,000 ft. Aqueduct St., 800

Streets and Roads (Continued)

sq.yd. vitr. brick, 5,000 sq.yd. asphalt, etc., $32,000. E. A. Kemmler, Delaware Bldg., engr.

O., Marysville—Union Co. plans improving 3 mi. Richwood Rd. from Pharisburg to Adam Rider Farm, 20 ft. $100,000.

Michigan—State Hy. Dept., Lansing, rejected bids Oct. 29, grading and surfacing 2.901 mi. State Trunk Line Rd. 23-10, Branch Co. Will readvertise soon. F. F. Rogers, comr. Noted Oct. 18.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and gravel surfacing 8 mi. Assessment Dist. Rd. 280, Tuscola and Lapeer Counties. F. F. Rogers, comr.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and concrete surfacing 4¼ mi. Federal Aid Project 63, Sect. B, Bay Co., 2½ mi. Federal Aid Project 101, Sect. C, Van Buren Co., and 1 mi. Federal Aid Project 123, Sects. A and B, Cheboygan Co. F. F. Rogers, state comr.

Wis., Antigo—Having preliminary plans prepared paving Clermont, Superior, 6th and 5th Aves., bids on several types incl. concrete. J. Donohue, North 8th St., Sheboygan, engr.

Wis., La Crosse — Plans paving Main, Pearl, Liberty and Redfield Sts., also State St. from Front St. to Riverside Park and from Losey Blvd. to 18th St., various types; grading East Ave., Ferry, 22nd, Pine, Vine, 24th, 23rd, King and Madison Sts. C. C. Congdon, City Hall, engr.

Kan., Fort Scott—Having plans prepared paving 19 blocks 6th St., 35 ft., concrete, brick, asphalt, macadam, etc. Bids soon.

Kan., Hutchinson — Plans grading, asphaltic concrete surfacing, curbing, guttering, etc., 25 blocks Pershing, Plum, Ford and Washington Sts., average width 24 ft. $85,000. R. B. Lee, city engr.

Kan., Independence — Montgomery Co. having plans prepared surfacing 2.03 mi. Federal Aid Project 121, Sect. H, bituminous macadam. H. K. Hibbard, co. engr.

Kan., Iola — Plans resurfacing with asphaltic concrete or sheet asphalt, Campbell, Colburn, Oak, and 1st Sts., 10 blocks, various widths. $31,000 to $35,000.

Kan., Topeka—Shawnee Co. soon takes bids grading and concrete surfacing 3.986 mi. Golden Belt Rd., Federal Aid Project 177 Sect. A, 18 ft. A. C. Lagerwall, co. engr.

Kan., Troy—Doniphan Co. had plans prepared earthwork preparatory to hard surfacing 7.292 mi. Project 169, Sect. C, 18 ft. H. L. Parker, Troy, engr.

Montana—State Hy. Dept., Helena, plans gravel surfacing 11.5 mi. Federal Aid Project 211, Cascade Co., $69,927.

Mont., Livingston—Plans paving, curbing and building sewers in various streets. $200,000. H. M. Shelver, clk.

Mo., Moberly — Retained Benham Eng. Co., consult. engrs., 512 Gumbel Bldg., Kansas City, to prepare plans resurfacing various streets. Will mature in spring.

Mo., New Franklin—Voted $30,000 bonds grading and macadamizing Bway., Missouri, Howard, Pearl and Union Sts. Noted March 8.

Tex., Anson—Plans permanent paving 25 blocks. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Bryan—Brazos Co. election soon to vote on $1,500,000 bonds, highway improvements. H. C. Ferguson, co. judge.

Tex., Corpus Christi—Nueces Co. making plans grading, surfacing with gravel base and 1 in. bituminous top 5.23 mi. Robstown-Alice Rd., 18 ft. C. E. Cocke, co. engr.

Tex., Crosbyton — Voted $28,000 bonds street paving Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs. Noted Oct. 11.

Tex., Falfurrias—Brooks Co. election soon to vote on $250,000 bonds, grading, surfacing, etc., various highways. $250,000 to be appropriated by State and Federal Government. J. A. Brooks, co. judge.

Tex., Ft. Worth—Had plans prepared graveling 2 mi. boulevard in Cobb Park. $25,000. D. L. Lewis, city engr.

Tex., Jasper—Jasper Co. soon takes bids gravel surfacing 6 mi. State Highway 45, 16 ft. $60,000. C. R. Hunter, co. engr. Noted Nov. 1.

Tex., Memphis—Hall Co. voted $200,000 bonds, (additional $200,000 to be appropriated by State and Federal Government) hard surfacing etc., in Estelline Rd. Dist. 3, State Highway 5, 18 ft. A. C. Hoffman, co. judge.

Tex., San Antonio—Bexar Co. making plans grading, graveling and surfacing with bituminous topping 12 mi. Castroville Rd., 16 ft. $148,000. A. C. Pancoast, co. engr.

Tex., Victoria—Victoria Co. election soon to vote on $500,000 bonds highway improvements. $300,000 will be appropriated by State and Federal Government. P. P. Putney, co. judge.

Okla., Cherokee—Plans grading and paving 6 blocks Main, 3rd and 4th Sts., 26 and 40 ft. $28,000. Peckham, Sutton & James, 227 West Grand St., Oklahoma City, engrs.

Okla., Oklahoma City — Plans grading and paving 14 blocks South 28th and North 18th Sts., 7,950 sq.yd. asphalt, 3,800 lin.ft. curbing, 3,800 lin.ft. guttering and 2,600 cu.yd. excav. $37,000. B. M. Hart, City Hall, engr.

Okla., Weleetka—Voted $26,000 bonds grading and paving 6 blocks Seminole and Creek Aves., 6,600 sq.yd. concrete, etc. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 15.

Okla., Wewoka—Voted $149,357 bonds grading and paving 18 blocks Okfuskey, Plum and Mekosukey Sts., 27,450 sq.yd. vertical fibre brick, etc. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Utah—State Road Comn., Salt Lake City, plans to expend $1,900,000 for roads during coming season. H. C. Means, state road engr.

Nevada — State Hy. Dept., Carson City, plans concrete and gravel surfacing 7 mi. Federal Aid Project 65, Washoe Co., $302,940, and 1.3 mi. Federal Aid Project 86, Humboldt Co., $27,306.

Oregon — State Hy. Dept., Salem, plans grading 13.68 mi. Federal Aid Project 101, Wasco Co., $113,894.

Ore., Eugene—Linn Co. plans permanent roads. $50,000.

Ore., Klamath Falls—Klamath Co. sold $233,000 bonds for road work.

Ont., Arnprior—Renfrew Co. soon takes bids 4½ mi. macadam on Provincial Highway. $80,000. A. Moore, co. engr.

Ont., North Bay—Soon takes bids 36,000 sq.yd. asphalt or bitulitic concrete pavement on 5 in. concrete. $150,000. W. Mackie, town engr.

Ont., Toronto—Plans grading Weller St. and Beaufort Rd. from Main St. to Glenmanor Rd., 50,000 cu.yd. excav., $10,030 and $15,768 respectively. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Nov. 28, by E. Riegelmann, boro pres., Boro Hall, repaving Throop Ave. and Empire Blvd., permanent asphalt on 6 in. concrete.

N. Y., Long Island City—Nov. 26, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on Radcliffe St., Alstyne, Pierce, Atlantic and 90th Aves.; grading, curbing, laying sidewalks and sheet asphalt paving Prospect Ave., etc.; sheet asphalt paving 90th Ave., 76th and 84th Sts.; grading, curbing and laying sidewalks where necessary between 89th Ave. and 90th Rd.

N. Y., New York — Nov. 30, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., reconstructing pavement, curb and sidewalk on Manhattan approach of 3rd Ave. bridge.

N. Y., St. George — Nov. 28, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving roadway of Fisher Ave., bituminous concrete.

New Jersey—Dec. 5, by State Hy. Dept., Trenton, constructing Route 5, Sect. 12, Netcong-Canal Culvert, Morris Co. ,also Route 16, Sect. 6A, Bernardsville-Passaic River, Morris and Somerset Counties. A. L. Grover, ch. clk.; adv. E. N.-R. Nov. 22.

Pa., Ebensburg—Nov. 28, by Comrs. Cambria Co., reconstructing 21,800 lin.ft. Loretto-Chest Springs Rd., Allegheny Twp., 16 ft., brick or concrete. $80,000. C. C. Hauth, Trust Bldg., engr. Noted Oct. 4.

Pennsylvania—Dec. 11, by State Hy. Dept., Harrisburg, 21 mi. road work in Beaver, Delaware, Greene, Indiana, Jefferon, Somerset and Westmoreland Counties; adv. E. N.-R. Nov. 22.

West Virginia—Dec. 3, by State Rd. Comn., Charleston, grading 10 mi. Project 3304-A, Monroe Co., 6 mi. Project 3200, Logan Co., 7 mi. Project 3229, Taylor Co., 6.5 mi. Project 3278-A, Lewis Co., 5 mi. Project 3186, Preston Co., and 5 mi. Project 134, Hampshire Co.; bituminous macadam paving 2.1 mi. Project 131, and 4.2 mi. Project 132, Pocahontas Co., 5.6 mi. Project 3272, Preston Co., and 8 mi. Project 3274, Monongalia Co.; concrete paving 8.14 mi. Project 3160, Doddridge Co. E. B. Carskadon, secy.; adv. E. N.-R. Nov. 22.

West Virginia—Dec. 11, by State Rd. Comn., Charleston, paving with bituminous macadam 8.15 mi. Project 130 and 0.4 mi. Project 128, Fayette Co., 5 mi. Project 127-B, Greenbrier Co., 1.5 mi. Project 3276 and 7.4 mi. Project 3184, Barbour Co., grading 7.4 mi. Project 3190, and 2.4 mi. Project 3202-B, Wayne Co., 1 mi. Project 3165, Calhoun Co., 10.8 mi. Project 3279-A, Webster Co., 6 mi. Project 3203-D and 5 mi. Project 3203-E, Preston Co.; concrete paving 4 mi. Project 3116-C, Wood Co., and 3 mi. Project 3260, Ritchie Co., 0.2 mi. Project 3082-A-1, Wetzel Co.; bridges Project 3188, Wayne Co., Project 3162, Wetzel Co., Project 3167-B, Marshall Co., Project 3279, Webster Co., Project 3111, Gilmer Co., Project 2135, Marion Co., Projects 117 and 3033, Randolph Co., Projects 122-B and 3146, Grant Co. E. B. Carskadon, secy.; adv. E. N.-R. Nov. 22.

W. Va., Buckhannon—Dec. 10, by Upshur Co. and State Rd. Comn., at Court of Upshur Co., grading and concrete paving 7.05 mi. Buckhannon and Clarksburg Rd., Warren Dist, Project 3238-B. E. Philips, co. clk. E. B. Carskadon, secy. state road comn.

S. C., Aiken—Dec. 5, by Comrs. Aiken Co. grading, surfacing and bridging, etc., 11.4 mi. State Route 28, Federal Aid Project 212, 68,700 cu.yd. common excav., 28,027 cu.yd. sand clay, rein.-con. bridge with four 22 ft. spans, etc.

S. C., Hampton—Nov. 28, by Hampton Co. at office Goethe Twp. Hy. Comn., Estill, grading, surfacing and bridging 13.1 mi. State Route 33, Federal Aid Project 51, 113,000 cu.yd. common excav., 32,200 cu.yd. sand clay, creosoted timber bridge with nine 14 ft. spans. W. C. Cathey, 8 Scovil Bldg., Orangeburg, engr.

Fla., Bartow—Dec. 4, by Comrs. Polk Co., asphaltic paving 7 mi. Ayburndale Florencevilla Rd., alternate proposals, $120,000, 4 mi. Haskell Lakeland Rd., $60,000. Engineer not announced.

Fla., Tampa — Nov. 27, by City Comn., grading and paving with 2½ in. asphalt blocks, 10,650 sq.yd. Ida, Plymouth, Old, Stowell and Giddens Sts. $30,000. R. D. Martin, City Hall, engr.

Miss., Ashland—Nov. 24, by Benton Co. placing gravel on Federal Aid Project 90. $25,102.

Miss., Belzoni — Dec. 18, by Humphreys Co., grading, surfacing and bridging 9.779 mi. Federal Aid Project 58, 18 ft., concrete or equivalent. $327,032.

O., Akron—Nov. 26, by W. F. Peters, dir. Pub. Serv., grading, curbing, guttering, laying concrete sidewalks and paving 5,100 ft. North Main St., 20,200 sq.yd. vitr. brick or 16,800 sq.yd. asphalt 53,600 sq.ft. concrete sidewalks, etc. $175,000. E. A. Kemmler, Delaware Bldg., engr.

Ind., Spencer — Dec. 3, by Owen Co., grading and paving with crushed stone, etc., 22,414 ft. John Knox Rd., Lafayette Twp. $44,482. J. S. Green, aud.

Michigan—Dec. 11, by State Hy. Dept., Lansing, grading and surfacing 6.012 mi. Assessment Dist. Rd. 280, Tuscola and Lapeer Counties, 41,879 cu.yd. excav., 42,310 sq.yd. gravel. F. F. Rogers, state comr.

Ia., Clinton—Nov. 27 by Auditor Clinton Co., grading and concrete paving 14.53 mi. Lyons-Charlotte Primary Rd., 38,370 cu.yd. excav., 159,738 sq.yd. concrete, etc. Iowa Hy. Comn., Ames, engrs.

Ia., Clinton—Nov. 27, by Auditor Clinton Co., grading and concrete paving 1.301 mi. Clinton-Camanche Rd., 13,733 sq.yd. concrete, etc. Iowa Hy. Comn., Ames, engrs.

Ia., Sioux City — Dec. 4, by Auditor Woodbury Co., paving and incidental work on Moville-Correctionville Rd. Iowa Hy. Comn., Ames, engrs.

Ia., Webster City—Dec. 12, by Auditor Hamilton Co., grading 6.165 mi. primary road, 90,932 cu.yd. excav. Iowa Hy. Comn., Ames, engrs.

Minn., Duluth—Dec. 6, by R. W. Borgen, aud. St. Louis Co., grading 3.17 mi. road from Duluth to Miller Trunk Highway, 24 ft. $78,000. R. W. Acton, co. engr.

Kan., Bonner Springs—Dec. 10, by Clerk Wyandotte Co., (Kansas City) grading and surfacing 0.484 mi. Oak St. Nettleton and Kump Aves., Federal Aid Project 174, 24, 44 and 52 ft. respectively. O. K. Williamson, Kansas City, engr.

Kan., Phillipsburg—Nov. 30, at office County Clerk, constructing Pikes Peak Ocean to Ocean Highway; Project 166 Sect. A involves 0.946 mi. grading; Sect. B, steel and concrete bridge having one 80 ft. main span and two 30 ft. I beam approaches, and one 20 ft. rein.-con. slab bridge; Project 176, Sect. A, 2.981 mi. grading; Sect. B, I beam bridge with concrete floor having one 37 ft. center span and two 30 ft. end spans; also one 20 ft. rein.-con. slab bridge. C. E. Freeman co. engr.

Streets and Roads (Continued)

Missouri—Nov. 27, by State Hy. Dept., Jefferson City, 26 road projects and 17 bridges in various counties. $1,000,000. B. H. Piepmeier, state highway engr.

Ark., Little Rock—Dec. 4, by W. T. Field, engr., Gazette Bldg., paving 25,750 sq.yd. State St. from West 10th to West 20th Sts., also cross streets, rein.-con., plain concrete, Warrenite, sheet asphalt or asphaltic concrete on 5 in. concrete. $90,000.

Tex., Austin—Dec. 3, by G. S. Mathews, judge Travis Co. grading 5.57 mi. State Highway 2, Federal Aid Project 409, 24 ft. shoulder to shoulder. $27,977. O. Leonard, co. engr.

Tex., Cleburne—Dec. 4, by O. B. McPherson, judge Johnson Co. grading 302.65 stas., and reshaping roadbed, and hauling and placing 14,173 cu.yd. gravel on State Highway 10 A, State Aid Project 443. $39,106. R. E. Keller, co. engr.

Tex., Ft. Worth—Nov. 27, by City Com. improving Bunting St. and Ave. J, 11,275 sq.yd. Uvalde rock asphalt, warrenite bitulithic or 3 in. brick, 7,390 ft. curb and gutter, 2,850 cu.yd. excav., $45,000; Ave. I and Essex St., 11,900 cu.yd. brick, amiesite, warrenite bitulithic or Uvalde rock asphalt, 7,420 ft. curb and gutter, 3,000 cu.yd. excav., $50,000. D. L. Lewis, city engr. Noted Nov. 22.

Tex., Palestine—Dec. 10, by W. C. Quick, judge Anderson Co., grading and surfacing with rein.-con. 9.7 mi. State Highway 19, Federal Aid Project 403 A, 16 and 18 ft. $358,900. E. W. Davis, co. engr.

Tex., Palo Pinto—Dec. 6. by E. L. Pitts, judge Palo Pinto Co. paving with vitr. brick 35,149 sq.yd. State Highway 1, from Mineral Wells to Parker Co. line, involves 42,180 lin.ft. concrete curbing. $92,500. G. W. Courter, co. engr.

Washington—Dec. 4, by State Hy. Comn., Olympia, grading and gravel surfacing 2.5 mi. State Rd. 4, from Wilbur to Clark, Lincoln Co. J. Allen, state highway engr.

California—Dec. 3 by State Hy. Comn., Sacramento, concrete paving 9.9 mi. Redding-Bayha Rd., Shasta Co., 69,000 cu.yd. embankment, 33,000 cu.yd. overhaul, 52,150 lin.ft. subgrade, 22,220 cu.yd. Class A concrete pavement, etc. R. M. Morton, state highway engr.

Calif., Los Angeles—Dec. 3, by Supervs. Los Angeles Co., grading, removing old macadam and repaving with concrete 2.65 mi. Compton-Clearwater Rd., 13,655 cu.yd. excav., removing 4,667 cu.yd. old macadam base, 37,966 sq.yd. concrete, etc. County will furnish 10,000 bbl. cement.

Calif., Watts—Receiving bids 6 in. concrete paving 108,085 sq.ft. Ruolff St., and 99.598 sq.ft. Randolph St.; 5 in. concrete paving 71,651 sq.ft. Hickory St. L. D. House, city engr. Noted Nov. 15.

BIDS RECEIVED

New York — L. Grossman, comr. Highways, and W. A. Patton, secy. Bureau Highways, Albany, Nov. 16, constructing and reconstructing 2.83 mi. Repair Contr. 3074, Highway 99, Rochester-Webster, Part 2, Monroe Co., from O. Costich Co., Inc., Exchange Pl. Bldg., Rochester, $126,392; 7.18 mi. Repair Contr. 1393-3070, Highway 5481, Wellsville-Andover, Allegany Co., from H. W. Patterson, Hornell, $229,548; 3.85 mi. Highway 1674, Castleton-Stuyvesant, Part 1, Rensselaer Co., from E. J. Bailey, Brocton, $213,731; 2.56 mi. Highway 8161 Cincinnatus-Taylor-Pitcher Part 2, and Pitcher-South Otselic, Cortland and Chenango Counties, from Johnson Constr. Co., Buffalo, $275,551; 8.58 mi. Highway 8163, Stephentown-Center Berlin, Rensselaer Co., from A. G. Horn, Albany, $157,496; 0.36 mi. Highway 1682, Barge Canal, Lock 9, Connection, Schenectady Co., from J. C. Conners, Inc., 424 State St., Schenectady, $21,159; 8.79 mi. Highway 8156, Woodville-Bristol Springs and Bristol Springs-Cheshire, Part 1, Ontario Co., from F. H. Wells, Savannah, $269,655; 2.56 mi. Repair Contr. 3072, Highway 716-1010, Livonia-Lakeville, Livonia Village, Livingston Co., from T. F. Murray, LeRoy, $97,809; 5.12 mi. Highway 1678, Bennettsburg-Perry City, Part 1, Schuyler Co., also 1.85 mi. Repair Contr. 1392-3071, Highway 358, Horseheads-Corning, Chemung Co., from W. L. and F. A. Frost, Watkins, $206,188 and $70,493 respectively. Noted Nov. 1.

N. Y., Albany—Bd. Contr. & Supply, grading and laying sewers in Pinewood Ave., from S. Easton, 113 Homestead Ave., $19,459; Hollywood Ave., from F. Sheehan, 446 Yates St., $15,264.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., paving Buckley St., granite block. from Welsh Bros. Contg. Co., 32 Queens St., Astoria, $13,974, 102nd St., sheet asphalt, from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $54,760; grading sidewalk space and gutters in Caffrey Ave., from R. A. Hess, Inc., 14 Queens St., Astoria, $2,660; grading, curbing, recurbing, flagging, reflagging, etc. 102nd St., from J. J. O'Brien, Jr., William St., Jamaica, $18,124. Noted Nov. 8.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Nov. 16, grading, curbing, flagging, reflagging and granite block paving West 155th St., from Casper Helbock, Inc., Harlem River and 150th St., $100,555. Noted Nov. 8.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, Nov. 16, paving Gifford Lane, bituminous macadam, from J. Johnson Sons, 455 Bway., West New Brighton, $33,774. Noted Nov. 8.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, concrete repaving Center and Moore Sts., from J. Johnson Sons, 455 Bway., West New Brighton, $20,960. Noted Nov. 8.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Westervelt Ave., granite block, from C. Vanderbilt, 24 Elizabeth St., West New Brighton, $27,630. Noted Nov. 8.

N. J., Millville—State Hy. Dept., Trenton, Nov. 14, improving 19,427 sq.yd. Route 15, Sect. 4, Main St., here, also reconstructing 5,247 lin.ft. trolley track on same, from Newark Paving Co., 133 1st St., Newark, 91% engrs. est. ($143,252). Noted Nov. 1.

Maryland — State Hy. Dept., Baltimore, paving 2.37 mi. Park Heights Ave., 60,000 sq.yd. bituminous macadam on concrete, Contr. BC-41, Baltimore City, from Hudson Paving Co., 2875 Bway., New York City, $263,635; 1.04 mi. Crystal Springs Ave., 9,450 sq.yd. gravel surface, Prince Georges Co., Contr. P-46, from E. R. P. Smith, Hyattsville, $8,980. Noted Nov. 1.

Louisiana—State Hy. Dept., Baton Rouge, 4.47 mi. State Aid Project 337, Vernon Parish, from J. J. Besson, Fullerton, $26,362.

Ohio—Dept. Highways and Pub. Wks., Columbus, Nov. 14, grading, bridging and paving with **(a)** rein.-con. **(b)** asphaltic macadam **(c)** tar macadam **(d)** brick and bituminous macadam, asphalt **(e)** rein.-con. and brick **(f)** bituminous macadam, asphalt **(g)** brick **(h)** bituminous concrete **(i)** Kentucky rock asphalt **(j)** concrete following roads: **(1)** 2.554 mi. Sect. "B" Marietta-Athens Rd., Athens Co. **(2)** 1.047 mi. Sect. "P" Ohio-River Rd., Columbia Co. **(3)** 3.463 mi. Sect. "J-1" Twinsburg-Elyria Rd., Cuyahoga Co. **(4)** 1.827 mi. Sect. "J-2" Twinsburg-Elyria Rd., Cuyahoga Co. **(5)** 3.02 mi. Sect. "C" Archbold-Defiance Rd., Defiance Co. **(6)** 3.396 mi. Sect. "C" Bryant-Ft. Wayne Rd., Defiance Co. **(7)** 2.112 mi. Sect. "A" Hicksville-Auburn Rd., Defiance Co. **(8)** 0.166 mi. Sect. "Leesburg North" Hillsboro-Washington Rd., Highland Co. **(9)** 0.208 mi. Sect. "Leesburg South" Hillsboro-Washington Rd., Highland Co. **(10)** 0.173 mi. Sect. "Hillsboro" Hillsboro-Chillicothe Rd., Highland Co. **(11)** 1.628 mi. Sect. "F" Ironton-Miller Rd., Lawrence Co. **(12)** 2.939 mi. Sect. "S" New Lexington-Athens Rd., Perry Co. **(13)** 2.821 mi. Sect. "B" Van Wert-Rockford Rd., Van Wert Co. **(14)** 2.825 mi. Sect. "E" Van Wert-Rockford Rd., Van Wert Co. **(15)** 0.521 mi. Sect. "Ohio City" Van Wert-Rockford Rd., Van Wert Co.; grading **(16)** 4.867 mi. Sect. "Y" Glendale-Milford Rd., Hamilton Co. **(17)** 2.78 mi. Sect. "M" Pomeroy-Marietta Rd., Meigs Co. **(18)** 3.538 mi. Sect. "A-1" Dennison-National Rd., Tuscarawas Co. **(19)** 5.869 mi. Sect. "H" Marietta-Athens Rd., Washington Co. **(20)** Sect. "B" Bryan-Eldon Rd., Williams Co. **(21)** 0.336 mi. Sect. "Blakeslee" Bryan-Eldon Rd., Williams Co.; paving **(22)** 4.867 mi. Sect. "Y" Glendale-Milford Rd., Hamilton Co.; bridge on **(23)** Sect. "A" Jackson-Gallipolis Rd., Jackson Co., from F. H. Beckler, Athens, **(a1)** $88,171; Mariner & Co., Athens, **(b1)** $74,223 **(c1)** $74,223; Tatgenhorst & McLaughlin, East Liverpool, **(d2)** $79,233; D. Aller, Findlay, **(e3)** $168,848 **(e4)** $93,305; R. Doaust, Defiance, **(a5)** $85,701 **(a6)** $90,901 **(a7)** $51,599; A. C. Schmenk, Ottawa, **(b5)** $68,955 **(c5)** $70,664; Harris & Lindenmuth, Hicksville, **(f6)** $77,633; J. A. Elder, Bryan, **(c6)** $79,508; P. B. Putnam, Van Wert, **(c7)** $47,978 **(f7)** $47,978; A. K. Grandle, Leesburg, **(g8)** $7,432 **(g9)** $10,532 **(g10)** $8,453; G. B. Walther, 425 Amer. Bank Bldg., Lima, **(h8)** $7,099 **(h9)** $10,102 **(h10)** $8,027; M. J. Cooney, Springfield, **(i8)** $6,855 **(i9)** $9,812 **(g10)** $8,453 **(i10)** $7,774; Jenkins Bros., Kitts Hill, **(c11)** $55,868; C. Mahl, Ironton, **(f11)** $55,335; Ebersbach Constr. Co., Pomeroy, **(a12)** $121,056; Ada Constr. Co., Ada, **(b12)** $103,469 **(c12)** $103,759 **(19)** $78,103; Hinton & Smalley, Celina, **(a13)** $68,357 **(a14)** $64,716 **(a15)** $11,293; Putnam & Shindeldecker, Van Wert, **(b13)** $60,933 **(c13)** $61,461 **(i13)** $67,409 **(b14)** $57,147 **(c14)** $57,678 **(i14)** $63,614 **(b15)** $9,978 **(c15)** $10,074 **(i15)** $11,178; Scott-Kash Constr. Co., Cincinnati, **(J16)** $55,677; Forrest Constr. Co., Forrest, **(h16)** $61,927; Fox-Nixon Constr. Co., Columbus, **(17)** $35,557; G. F. Druschel, Kenton, **(18)** $46,124; F. F. Walton, Upper Sandusky, **(20)** $19,934; L. C. Bell, West Mansfield, **(21)** $1,298; W. Huber, Eaton, **(J22)** $163,884; Andrews Asphalt Paving Co., Hamilton, **(k22)** $188,157; I. J. Kuhner, Jackson, **(23)** $3,813. Noted Nov. 8.

Michigan — State Hy. Dept., Lansing, grading 9.939 mi. Federal Aid Project 82, Sect. B, Washtenaw Co., from F. Carpenter and W. B. Orr, Jackson, $69,811.

Tex., Clarksville—Red River Co. grading and clay surfacing 5.95 mi. State Highway 37, Federal Aid Project 406, 257.77 cu.yd. concrete, 43,886 cu.yd. roadway and 20,677 cu.yd. borrow excav., 21,718 lb. reinforcing, 6,132 cu. yd. clay, etc., from McGuire & Cavender, Sherman, $25,447. Noted Oct. 25.

Tex., Ft. Worth—Paving with 2 in. bitulithic Wabash, Tennessee, Lilac and Chambers Sts., from West Texas Constr. Co., Cotton Exch. Bldg., $3.18; Uvalde rock asphalt on 5 in. base on North Houston and Terrell Sts., from General Constr. Co., Cotton Exch. Bldg., 2 in. $3.10, 1½ in. $2.80. Noted Nov. 8.

Tex., Marlin—Falls Co., grading, gravel surfacing and bridging 5.68 mi. State Highway 44, Rd. Dist. 3, State Aid Project 410 B, 230 cu.yd. concrete, 19,547 cu.yd. roadway and 44,320 cu.yd. borrow excav., etc., from Brown & Root, Georgetown, $59,764, 14,154 cu.yd. gravel furnished by county $25,200, engrs. est. $101,146; 7.65 mi. State Highway 44, Federal Aid Project 331 B, 524 cu.yd. concrete, 24,150 cu.yd. roadway, 30,866 cu.yd. borrow excav., 72,895 lb. reinforcing steel, from Huse Popejoy & Bro., Marlin, $42,680, 19,949 cu.yd. gravel to be furnished by county $34,900, engrs. est. $92,854. Noted Nov. 1.

Okla., Marlow—Grading and paving 11 blocks Bway., 13,900 sq.yd. asphalt, 5,000 cu.yd. excav., from Tibbets & Pleasant, Daniels Bldg., Tulsa, $71,807. Noted Nov. 8.

Nevada—State Hy. Comn., Carson City, grading and gravel surfacing 11.81 mi. road between Eastgate and east county line (Carroll Summit), Churchill Co., from F. Coolidge, Laramie, Wyo., $173,147; grading 3.35 mi. from Lawtons to point 2 mi. east of Verdi, from C. Miles, 2500 L St., Sacramento, $74,695. Noted Oct. 25.

Ore., Astoria — Improving streets in burned area, 62,000 cu.yd. filling, 340,000 ft. new plank laid, relaying 200,000 ft. plank, 8,100 lin.ft. 2 in. plank 12 ft. wide, from Gilpin Constr. Co., Worcester Bldg., Portland, cost plus 10%; A. J. Webster, $102,968.

California—State Hy. Comn., Sacramento, grading and surfacing with crushed gravel 8.9 mi. road between point 2 mi. south of Hornbrook and Oregon State Line, Siskiyou Co., from Dunn & Baker, Klamath Falls, Ore., $205,000 (150 days), $196,940 (200 days). Noted Nov. 1.

Calif., Bakersfield—Kern Co., grading and paving Arvin and Weed Patch and Di Girogia Farms Rds., Impvt. Dist. 26, 38,400 cu.yd. excav., 890,724 sq.ft. 2 in. asphaltic concrete on 4 in. bituminous base, etc., from Griffith Co., Railway Bldg., Los Angeles $238,000. Noted Nov. 1.

Calif., Riverside—Riverside Co., grading, curbing and paving Route 8, Beaumont to foot of Moreno grade, Jack Rabbit Trail, 19,300 lin.ft. shaping, 19.300 lin.ft. (1) 6 in. asphaltic concrete (2) 6 in. macadam (3) 5 in. National, (4) 5 in. Willite, from G. R. Curtis, 2440 East 26th St., Los Angeles, (1) $73.890 (2) $80,066; G. M. Pearson, Riverside (2) $58,171; G. H. Oswald, 366 East 58th St., Los Angeles, (4) $81,132. Noted Oct. 25.

Calif., Visalia—Improving Hall Ave., West Center and North Giddings Sts., 4,631 cu.yd. grading, 212,757 sq.ft. 1½ in. warrenite bitulithic on 4 in. base, etc., from Valley Paving and Constr. Co., Visalia, $58,997. Noted Nov. 1.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, flagging and reflagging West 165th St., to Fleming Shepard, Inc., 116 Broad St., $11,046; repaving Riverside Dr., stone filled sheet asphalt, to Asphalt Constr. Co., 208 Bway., $137,657. Noted Nov. 8.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Ave. and St. Marks Pl., bituminous macadam, to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $40,874 and $7,810 respectively. Noted Nov. 15.

N. C., Mt. Gilead—Asphaltic concrete paving 17,500 sq.yd. various streets, to R. G. Lassiter Co., Citizens Bank Bldg., Raleigh, $46.375. Noted Sept. 13.

N. C., Salisbury — Sheet asphalt paving 40,000 sq.yd. various streets, to Ely Constr. Co., Augusta, Ga. $166,000.

Streets and Roads (Continued)

N. C., Troy—Sheet asphalt paving 20,000 sq.yd. various streets, to W. F. Bowe, Jr., Augusta, Ga., $53,800.

Fla., Tampa—Improving Adalee St., Du Boise and Campbell Aves., to W. L. Harwell, 721 South Orleans Ave., $30,725; Genesee St., to Cone Bros., Tampa, $4,039. Work involves 10,790 lin.ft. granite curbing and 12,520 sq.yd. 2½ in. asphalt blocks.

Alabama—State Hy. Dept., Montgomery, paving with asphalt 0.75 mi. Anniston-Camp McClellan Rd., Calhoun Co., 20 ft., to Morgan-Hall Paving Co., Woodward Bldg., Birmingham, $30,386. Noted Oct. 25.

Miss., New Albany—Surfacing 20 mi. in Rd. Dists. 1, 2 and 3, to Nixon & Phillips, Water Valley, $35,000. Noted Oct. 25.

Kentucky—State Hy. Dept., Frankfort, improving roads, (F.A.P. means Federal Aid Project, S.P., State Project) grading 7.32 mi. Jackson-Compton Rd., 24 and 28 ft. F.A.P. 102, Breathitt Co., to North Fork Constr. Co., North Fork, $204,819, 2.6 mi. Louisville-Paducah Rd., 24 and 28 ft., F.A.P. 105, Sect. A, Daviess Co., to Costello Bros., Henson Bldg., Knoxville, Tenn., $25,052; gravel surfacing 9.2 mi. Hortons Gap-Christian Co. line Rd., 18 ft., F.A.P. 41, Sect. G Hopkins Co. and 29.2 mi. Henderson-Hopkins Co. line Rd., 18 ft., F.A.P. 34, Sect. F, Webster Co., to Peacock Constr. Co., Yale, Mich., $95,003 and $209,803 respectively, 5.795 mi. Calhoun-Owensboro Rd., 18 ft., S.P. 10, Sect. A, McLean Co. and 8.4 mi. Henderson-Dixon Rd., 18 ft., F.A.P. 42, Sect. A, Henderson Co., to Corum Bros., Madisonville, $60,497 and $155,948 respectively, 7.5 mi. road from Webster Co. line to Madisonville, 18 ft., F.A.P. 41, Sect. F. Hopkins Co., to N. E. Stone & Co., Madisonville, $136,604; with waterbound macadam 7 mi. Lexington-Mayesville Rd., 18 ft. S.P. 20, Sect. J, Nicholas Co., to J. S. Walton, Princeton, $39,446. Noted Nov. 1.

O., Lakewood (Cleveland, P. O.)—Paving 4 streets, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $34,951.

Michigan — State Hy. Dept., Lansing, grading and surfacing 6.38 mi. Federal Aid Project 66, Sect. C, St. Joseph Co., to A. E. Campbell, Kalamazoo, 34,946 cu.yd. excav. $0.55, 74,760 sq.yd. 8 in. rein.-con. pavement $1.60, etc., total $144,780. Noted Oct. 18.

Michigan—State Hy. Dept., Lansing, grading and surfacing 5.714 mi. State Trunk Line Rd. 32-6, Sect. A, Montmorency Co., to Lorch & Cadwell, Boyne City, 29,742 cu.yd. excav. $0.38, 54,393 sq.yd. gravel surface $0.625, etc., total $52,945.

Minnesota—State Hy. Dept., St. Paul, 7 mi. State Project 1-39, Div. B, Federal Aid Project 296, Steele Co., 116,000 cu.yd. excav., to Cameron & Joyce, Keokuk, Ia., $46,662, culverts to Guaranty Constr. Co., 301 Essex Bldg., Minneapolis, $4,623; 15 mi. State Project 3-34, Federal Aid Project 303, Houston Co., 300,000 cu.yd. excav. to Winston Bros., 81 Globe Bldg., Minneapolis, and G. J. Grant Constr. Co., 902 Exchange Bank Bldg., St. Paul, $179,383, culverts to D Graham, Hibbing, $24,852; State Project 5-34, Federal Aid Project 92, Anoka Co., 126,000 sq.yd. concrete paving to Universal Eng. Co., Ingram Bldg., Eau Claire, Wis., $307,871, 11,700 cu.yd. gravel surfacing to Central Road Constr. Co., Minneapolis, $25,770; 17 mi. State Project 16-21, Federal Aid Project 314, Cottonwood Co., grading to Spencer & Chambers, Marshall, and Stevens Bros., Piedmont Bldg., St. Paul, $61,885 and $68,004 respectively; State Project 16-22, Federal Aid Project 315, Murray Co., 76,000 cu.yd. excav., to Lobnitz Grading Co., Olivia, $24,990, culverts to C H. Hanson, Atwater, $4,711. Noted Oct. 18.

Minn., Mendota — Hennepin Co. (Minneapolis) 3½ mi. approach to south end of proposed bridge over Minnesota River, here, grading to Erickson-Johnson Constr. Co., 1811 East Lake St., Minneapolis, $47,220; culverts to E. E. Talbert, Crystal Bay, $10,324. Noted Nov. 1.

Kan., Anthony—Harper Co. grading and sand clay surfacing 9.521 mi. Project 155, Sect. A and 9.987 mi. Federal Aid Project 154, Sect. A, both 18 ft., to Shultz & Shultz, Wichita, $93,715 and $69,139 respectively. Noted Sept. 13.

Kan., Norton—Norton Co., grading 7.528 mi. Pikes Peak Ocean to Ocean Highway, 29½ ft., Federal Aid Project 143, Sect. A, to A. L. Cook, Ottawa, Kan. $38,587. Noted Sept. 27.

Ark., Little Rock—J. Mathews, Southern Trust Bldg., principal owner of subdivision, will buy materials and construct 4 mi. Little Rock-Westwood Rd., Dist. 50, 24 ft., by day labor. Dickinson & Watkins, Boyle Bldg., engrs.

Tex., Cameron—For 50,000 sq.yd. Uvalde rock asphalt, to W. E. Dozier, Austin Natl. Bank, Austin, $83,000. Noted Nov. 1.

Tex., Center—Concrete paving 22,290 sq. yd. various streets, to Brammer & Wilder, Stewart Bldg., Houston, $2.65 per sq.yd., total $40,132. Noted Oct. 25.

Tex., Kountze—Hardin Co. gravel surfacing various roads to Brammer & Wilder, Houston, 1.31 mi. State Highway 8, 16 ft., $52,800, 4.43 mi. State Highway 8, 16 ft., $49,000, 11.5 mi. State Highway 40, 16 ft., $101,800, 9.45 mi. Federal Aid Project 354 A, $89,000; to J. H. Sullivan, Nacogdoches, improving Kountze-Beaumont Rd., 16 ft., incl. 20,000 sq.yd. iron ore gravel $1.16. Noted Oct. 25.

Okla., Blackwell—Paving 1,130 sq.yd. 2½ in. brick and 13,700 sq.yd. 6 in. concrete, to O. T. Tyler, Blackwell, $53,051. Noted Oct. 25.

Okla., Guymon—Constructing and paving various streets, 12,434 sq.yd. vertical fibre brick, 4,050 lin.ft. curbing and guttering, 4,350 cu.yd. excav., 1,969 ft. 12 and 18 in. storm sewer, 4,800 sq.ft. sidewalks and 4,480 lin.ft. cable for "White Way," to J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., $70,877. Noted Nov. 1.

Okla., Oklahoma City—Grading and paving 10 blocks B, 44th and 45th Sts., 5,200 sq.yd. asphalt, 2,600 lin.ft. curbing, 1,840 cu.yd. excav., to Western Paving Co., Tradesmerr Bldg., $24,979.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 11.7 mi. State Rd. 13, Inland Empire Highway from Wallula to Burbank, Walla Walla Co., to C. L. Creelman, 1,079 25th St. N., Seattle, 47,380 cu.yd. earth excav. $0.245, 4,760 cu.yd. gravel surface base $1.57, 13,830 cu.yd. gravel surface top $1.62, etc., total $47,246; 2.9 mi. Permanent Highway 9, from Anacortes east, Skagit Co., to Bressaloff & Brice, Mt. Vernon, 18,280 cu.yd. earth excav. $0.62, 2,920 cu.yd. loose rock excav. $0.80, 2,180 cu.yd. solid rock excav. $1.60, 1,060 cu.yd. gravel surfacing $1.60, etc., total $29,514; 5.7 mi. Pend O'Reille Highway from Jared to Blue Slide, Pend O'Reille Co., to N. A. Dagerstrom, Spokane, 63,040 cu.yd. earth excav. $0.43, 3,490 cu.yd. loose rock excav. $0.65, 10,480 cu.yd. solid rock $1.50, 5,000 cu.yd. loose rock borrow $1, 5,910 cu.yd. solid rock borrow $1, 9,280 cu.yd. crushed gravel surface $1.50, total $83,375; 12.2 mi. State Rd. 7, North Central Highway from Odessa west, Lincoln Co., to Woodruff & Wilson, Prosser, 40,680 cu.yd. earth excav. $0.30, 7,900 cu.yd. loose rock excav. $0.70, 17,390 cu.yd. solid rock excav. $1.95, 7,100 cu.yd. rock surface $1.95, 12,440 cu.yd. gravel $1.70, total $94,379; 4 mi. extension from State Highway, Anatone to Asotin, Asotin Co., to Rumsey & Jordan, Spokane, 42,750 cu.yd. earth excav. $0.28, 37,100 cu.yd. loose rock $0.58, 3,560 cu.yd. solid rock excav. $1.25, total $48,150. Noted Oct. 4.

Wash., Seattle—Bd. Pub. Wks., paving and grading Avalon Way, 41,144 sq.yd. 7 in. concrete, 15,550 sq.yd. 6 in. concrete, 4,532 lin.ft. asphaltic concrete and 21,850 lin.ft. concrete curbing, etc., to Goetz & Brennan, Seaboard Bldg., $294,808. Engrs. est. $290,735. Noted Nov. 15.

Ore., Baker—Baker Co., grading and macadam surfacing 12,900 ft. Mason-Salisbury Sect., Lockhart Market Rd., 24 ft., to T. Knudson, Portland, $36,145. Noted Nov. 8.

Calif., Bakersfield—Grading, curbing, paving, etc., portions 21st and R Sts., etc., 220,375 ft. grading, 220,375 ft. 3½ in. asphaltic concrete base and 1½ in. warrenite surface, 11,829 ft. concrete gutter, etc., to Union Paving Co., 620 Call Bldg., San Francisco, $73,003. Noted Nov. 15.

Calif., Newport Beach—Improving Ocean Blvd., etc., 147,644 sq.ft. 6 in. clay and gravel surfacing, 16,680 sq.ft. 5 in., 152,080 sq.ft. 6 in., and 212,354 sq.ft. 8 in. concrete pavement, 20,200 lin.ft. concrete curb and 101,760 sq.ft. concrete walks, etc., to California Constr. Co., Union Bldg., San Diego, $276,506. Noted Oct. 18.

Calif., Stockton—San Joaquin Co., improving 2.5 mi. Kettleman Rd., to Irey & Holden, Lodi, 2,900 cu.yd. grading $0.50, 5,390 tons gravel $2.25, 1,830 tons crushed rock top $3,850 ton dressing for oil $3.10, 700 bbl. asphalt oil $4, etc., total $24,423. Noted Oct. 25.

Ont., Richmond Hill—Paving 1 mi. Yonge St., 16,000 sq.yd. bitulithic on concrete with concrete curbs and gutters, to Warren Bituminous Paving Co., 54 University Ave., Toronto, $70,000. Noted Oct. 11.

Industrial Works

PROPOSED WORK

Conn., Darien—Cherry Lawn School plans central heating plant, sewage disposal plant, etc. $200,000. W. R. Steinmetz, Greely Bldg., Stamford, archt.

Conn., Waterbury — Waterbury Farrel Fdry. Co. had plans prepared by Westcott & Mapes, 207 Orange St., New Haven, 2 story, 48 x 52 ft. factory, brick and steel, plain foundation, Bank St. $40,000.

Conn., Putnam—Putnam Fdry. & Machine Co., Mechanics St., plans 1 story, 100 x 160 ft. foundry, brick and steel, plain foundation. $40,000. Private plans.

N. Y., Newburgh—Crawshaw Carpet Co., 635 Bway., soon takes bids 2 story, 50 x 106 ft., storage and manufacturing plant, Bway. $50,000. Lockwood-Greene & Co., 101 Park Ave., New York City, archts. and engrs. Noted Oct. 25.

N. Y., New York—Reo Motor Car Co., 1709 Bway., soon takes bids 4 story, 100 x 175 ft., rein.-con., brick, and steel service station, plain foundation, West 55th St. $200,000. Parker & Shaffer, 280 Madison Ave., archts. and engrs.

N. Y., Niagara Falls—Carborundum Co., Buffalo Ave. and 18th St., plans concrete and tile factory, Buffalo Ave. $60,000. Private plans.

N. Y., Rochester—Verwey Printing Co., 15 Euclid St., plans 2 story printery, 52 James St. $50,000. Will mature in summer. Engineer and architect not announced.

N. Y., Rome — Rome Mfg. Co. having plans prepared by Lockwood-Greene & Co., archts. and engrs., 101 Park Ave., New York City, 1 story rein.-con. and steel factory, also 2 story, brick and steel warehouse. $210,000.

N. Y., Watertown—Northern New York Utilities, Inc., 58 Public Sq., plans electric plant and generating station, etc. $150,000.

Pa., Carlisle—C. H. Masland & Sons, Carlisle, soon take bids 3 story, 250 x 600 ft. rein.-con., brick and steel plant, plain foundation. Lockwood-Greene & Co., 101 Park Ave., New York City, archts. and engrs. Noted May 3.

Pa., Frankford (Phila. P. O.)—Frankford Grocery Co., Inc., Penn and Unity Sts., plans 1 story, 45 x 100 ft. garage and 4 story, 64 x 89 ft. concrete warehouse. W. E. S. Dyer, Land Title Bldg., Phila., archt. and engr.

W. Va., Morgantown—Preston County Light & Power Co., plans light and power plant. $100,000. Takes bids azout Jan. 1. Engineer not announced. H. C. Greer, Dir.

N. C., Greensboro—City plans abattoir. Bond election after Jan. 1. Architect not selected.

Fla., Tampa—Interstate Investment Co., Citizens Bank Bldg., plans 3 story, 120 x 600 ft. warehouse, 1 story, 60 x 500 ft. tobacco warehouse, cold storage plant 250,000 cu.ft. floor space, 2 story, 150 x 200 ft. mercantile building, and 1 story, 150 x 600 ft. wharf shed, rein.-con. and brick. $1,000,000. Lockwood & Green, Healy Bldg., Atlanta, Ga., engrs.

Ala., Birmingham—Harris Transfer Co., 26 North 19th St., takes bids about Jan. 1, first unit, 7 story, 200 x 300 ft., concrete warehouse, 5th Ave. S. $300,000. Architect and engineer not selected.

Miss., Jackson—Enochs Lumber & Mfg. Co. plans to rebuild plant recently destroyed by fire, Pearl St. $250,000.

Miss., Jackson—Morris Ice Co. plans to rebuild factory recently destroyed by fire, Pearl St. $175,000.

La., New Orleans—Woodward, Wight & Co., Howard Ave., purchased 330 sq.ft. site on Constance and St. Joseph Sts. and plans warehouse.

Ky., Louisville—Standard Sanitary Mfg. Co., 6th and A Sts. plans brick and steel foundry and factory, etc., 6th and Shipp Sts. $1,500,000. Engineer and architect not selected.

O., Cleveland—Bourne Fuller Co., c/o A. H. Preston, Hanna Bldg., had plans prepared 1 story, 65 x 300 ft. and 62 x 300 ft. brick and steel warehouse additions, Lakeside Ave. $150,000. Private plans.

O., Cleveland—Echo Dairy Co., 7103 Aetna Rd., had plans prepared by A. F. Janowitz, 811 Prospect Ave., 2 story, 50 x 115 ft., brick, steel and concrete factory and garage, Crane Ave. $60,000.

O., Cleveland—Fixit Body & Repair Co., c/o E. M. Hauserman, secy.-treas., 2075 East 65th St., plans 2 story, brick factory addition, East 65th St. and Carnegie Rd. $50,000. Private plans.

Industrial Works (Continued)

O., Cleveland—P. A. Geier Co., 540 East 105th St., had plans prepared by Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., 4 story and basement, 80 x 240 ft., brick, steel and rein.-con. factory, East 105th St. north of St. Clair Ave. $200,000.

O., Cleveland—J. W. Ladd Co., 758 Woodland Ave., having plans prepared by Walker & Weeks, 1900 Euclid Ave., 3 story and basement, 48 x 102 ft., brick and concrete warehouse and display rooms, 1607 East 21st St. $150,000.

O., Cleveland—Natl. Biscuit Co., c/o H. Zimmerman, constr. mgr., 85 9th Ave., New York City, plans brick, steel and concrete baking plant, East 83rd St. and Woodland Ave., here. $500,000.

O., Elyria—J. Spang Baking Co., c/o J. Spang, 2701 Barber Ave., Cleveland, having plans prepared by E. Huberty, 8017 Whitethorn Ave., Cleveland, 2 story, brick and steel bakery addition. $50,000.

Ill., Chicago — Asbestos Products Co., 2100 Fullerton Ave., plans factory addition, mill construction. $75,000. F. D. Chase, Inc., 645 North Michigan Ave., archt.

Ill., Chicago—H. J. Liedberg, archt., 77 West Washington St., receiving bids 1 story, 75 x 125 ft., garage, fireproof, Western Ave. near Montrose Ave. $50,000. Owner's name withheld.

Wis., Manitowoc—Holy Family Hospital, c/o Sisters of Christian Charity, having preliminary plans prepared by E. Brielmaier & Sons, 432 Bway., Milwaukee, 2 story, 52 x 100 ft. boiler house and service building, brick and concrete, plain foundation. $60,000.

Wis., Prairie du Chien—General Cigar Co., Portage, rejected bids 2 story, 40 x 72 ft., brick and timber warehouse, plain foundation. New bids later. $40,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts. Noted Sept. 27.

Ia., Denison—G. W. Newcomb having preliminary plans prepared by E. L. Barber, Denison, 2 story and basement, 80 x 150 ft. garage, brick and tile. $40,000.

Mo., Moberly — Wabash R.R. Co., Ry. Exch. Bldg., St. Louis, plans rein.-con. and brick addition to shops and 16 new stalls, here A. C. Cunningham, c/o owner, ch. engr.

Mo., Mountain Grove—Nov. 27, to vote on $40,000 bonds light plant.

Mo., St. Louis—Warren Steel Casting Co., 3400 Maury Ave., having revised plans prepared by O. J. Popp, Odd Fellows Bldg., 1 story, 60 x 200 ft., rein.-con. and steel foundry, Kingshighway. $60,000. Former bids rejected. Noted Sept. 6.

Ark., Forrest City—Vaccaro-Drobmeyer Co. had plans prepared by J. L. Gatling, Madison Ave. Bldg., Memphis, Tenn., 2 story, 109 x 150 ft., warehouse and sales office, concrete. $40,000.

Ark., Hot Springs—W. Dodson, 625 Central St., having plans prepared by S. M. Frank, 2 story, garage and display room, brick and stone. $40,000.

Ark., Little Rock—Missouri and North Arkansas Rd. Dist. plans to expend $500,000 for concrete roads. Ford & MacCrea, Gazette Bldg., engrs.

Tex., Breckenridge—Hanlon Gasoline Co. plans casinghead plant, 50,000 gal. daily capacity. $2,000,000. Private plans.

Tex., Dallas—J. B. Dugger, 1924 Main St., had plans prepared by Lang & Witchell, Amer. Exch. Natl. Bank, 2 story, 45 x 100 ft., brick, stone and rein.-con. $75,000.

Tex., Ft. Worth — Roe Nichols Oil Co., Oklahoma City, Okla., making plans new refining plant, here. $100,000 incl. machinery.

Tex., Fort Worth—Trans-Continental Oil Co., W. T. Waggoner Bldg., had plans prepared lubricating oil plant addition. $200,000. Private plans.

Tex., Lufkin—Glenn Hardware Co. plans 2 story brick warehouse, 1st St. $50,000. Architect not announced.

Tex., Ranger—Chestnut & Smith having plans prepared rebuilding gasoline plant destroyed by fire. $50,000. Private plans.

Tex., San Antonio—Galveston, Harrisburg & San Antonio Ry. of Southern Pacific Lines, Southern Pacific Depot, had plans prepared roundhouse, on Austin St., also 3 engine stalls, 3 engine pits, boiler washing plant and extending 6 engine stalls 47 ft. Probably by day labor. $80,000. H. M. Lull, 916 Southern Pacific Bldg., Houston, ch. engr.

Tex., Waco—June Mchy. Co., 1st and Franklin Sts., plans 3 story, concrete and brick warehouse, Franklin St. $75,000. Architect not announced.

Calif., Eureka—A. Frisch, 231 E St., plans 1 story, 50 x 110 ft. garage, brick or concrete, 4th and C Sts.

Calif., San Francisco—J. A. Nelson, Inc., 517 6th St., having plans prepared by H. A. Thomsen, Jr., 613 Sharon Bldg., 1 story plant, rein.-con., 10th and Howard Sts. $40,000.

Ont., Acton—Acton Machine Co. having plans prepared enlarging plant. $40,000. F. S. Blow, mgr.

BIDS DESIRED

Conn., New Britain—Nov. 27, by M. Zucker, 516 Main St., 3 story, 30 x 70 ft. warehouse, brick and steel, plain foundation, Main St. $50,000. G. Zunner, 172 High St., Hartford, archt. Noted Nov. 15.

Conn., Waterbury—Nov. 23, by P. Laskas, 1844 East Main St., 1 story and basement, 60 x 130 ft. garage, Meriden Rd. $40,000. F. L. Lauper, 16 Albion St., archt. Noted Nov. 8.

N. Y., Palmyra—Dec. 18, by R. K. Fuller, comr. Canals & Waterways, Albany, new power station at Lock 29, here, Contr. 193. Former bids rejected; adv. E. N.-R. Nov. 22.

Pa., Phila.—Nov. 24, by L. Rothschild, archt., 215 South Broad St., 6 story and basement, rein.-con. and brick warehouse, plain foundation, 6,000 sq.ft. floor space, 30th and Walnut St., for J. J. Greenberg, Morris Bldg. Noted Nov. 15.

Md., Baltimore—Nov. 28, by J. E. Sperry, archt., Calvert Bldg., 2 story, 139 x 152 ft. powerhouse, rein.-con. and brick, plain foundation, Wolfe St. between Monument and Madison Sts., for Johns Hopkins, Wolfe and Monument Sts. $150,000. H. F. Doeleman, 507 North Charles St., engr.

Tenn., Pulaski—Dec. 12, by Pulaski Development Co., 2 story and basement, brick factory. $50,000.

O., Cleveland—Paul Bros. Co., 601 Fidelity Mortgage Bldg., taking bids 1 story, 110 x 160 ft., brick, steel and concrete garage, 4320 Superior Ave. $150,000. J. F. Steffens, Fidelity Mortgage Bldg. archt.

Mich., Cadillac—See "Dams."

Mich., Crystal Falls—Nov. 28, by F. E. Parmelee & Son, archts., Iron Mountain, 1 story and basement, 50 x 100 ft. concrete and brick garage, plain foundation for Webb Garage Co., Crystal Falls. $40,000.

BIDS RECEIVED

Calif., San Francisco—Wobbers, Inc., 774 Market St., 2 story and basement, 45 x 160 ft., rein.-con. printing plant, Stevenson and 5th Sts., from K. E. Parker, Clunie Bldg., $103,003. Noted Aug. 2.

CONTRACTS AWARDED

Vt., East Arlington—See "Unclassified" under Vermont.

Conn., Middletown—Middletown Silk Co., 2 story, 60 x 230 ft. factory, brick and rein.-con., plain foundation, North St., to S. Mazzotta, 78 Spring St., $100,000. Noted Oct. 18.

Conn., New Britain—Stanley Wks., Grove Hill, 4 story, 80 x 200 ft. steel and brick factory, Whiting St., and 7 story, 40 x 60 ft., rein.-con. and brick factory, plain foundation, Elm St., to Aberthaw Constr. Co., 27 School St., Boston. Est. $70,000 and $150,000 respectively.

Conn., Torrington—Allen Candy & Fruit Co., 33 East Main St., 1 story and basement, 60 x 210 ft., brick and steel garage and salesroom, plain foundation, to F. W. Fuller, 79 Main St. Archts. est. $45,000.

Conn., Wallingford—Backes Sons Mfg. Co., 2 story, 30 x 130 ft. factory, brick and steel, plain foundation, Ward St., to Loucks & Clark Co., Ernest St. Archts. est. $40,000.

N. Y., Green Island (Troy P. O.)—J. A. Manning Paper Co., Inc., 68 George St., will build 2 story, 75 x 175 ft., brick and steel factory, plain foundation, George St., by day labor. $300,000. Private plans. Noted Oct. 25.

N. Y., Vischers Ferry—E. S. Walsh, comr. Canals & Waterways, Albany, superstructure of powerhouse and work incidental thereto, at dam, here, Contr. B-4, to McCann Building Co., 82 State St., Albany, $143,567. Engrs. est. $122,568. Noted Nov. 15.

Pa., Morrisville—D. C. Cook, 25 Fair St., Trenton, N. J., 50 x 75 ft. ice plant, Bridge St., here, to E. D. LaRue, 53 South Hermitage Ave., Trenton, N. J., $100,000.

Pa., Phila. — Moores & Dunford Inc., archts., 342 Madison Ave., New York City, 7 story and basement, 52 x 106 ft. rein.-con. and brick warehouse, plain foundation, 3935-3937 Germantown Ave., to Industrial Eng. Co., 30 Church St., New York City, for Interstate Warehouse & Storage Co., 919 North Front St. Noted Nov. 1.

Pa., Phila. — M. J. Powers, Broad and Cumberland Sts., sales and service garage, 2221-2225 North Broad St., to F. V. Warren Co., 132 South 17th St., $177,500.

N. J., Jersey City—Continental Can Co., 61 Bway., New York, brick, steel and rein.-con. factory addition, 16th St., here, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York. Archts. est. $500,000. Noted Sept. 6.

W. Va., Keyser—Potomac Pottery Co., 1 story, 35 x 126 ft. addition to plant, to T. P. Lilles, Keyser. Est. $40,000. Noted Nov. 13.

Tenn., Nashville—Turner, Day & Woolworth Handle Co., Inc., 1404 Adams St., 2 story factory, warehouse, storage, etc. Adams St., to H. P. Jacobs Constr. Co., Independent Life Bldg., $50,000. Noted Oct. 18.

Ky., Louisville—Standard Sanitary Mfg Co., 6th and A Sts., 2 story, brick and steel addition to shop, to J. F. Russell & Co., M. E. T. Bldg., Louisville. Est. cost $50,000. Noted Oct. 25.

O., Cleveland—R. C. Patton and R. T. Hisey, 536 Engineers Bldg., 1 story, 45 x 280 ft., brick, steel and concrete garage, 1833 East 82nd St., to Mitzel-Shields Co., Rose Bldg. Archts. est. $80,000. Noted Oct. 4.

O., Elyria—Amer. Lace Co., 2 story, 40 x 120 ft., brick and steel factory, to J. Kaiser & Bro., Elyria, Archts. est. $60,000.

Mich., River Rouge — Ford Motor Co., Highland Park (Detroit P. O.), 1 story, 600 x 1,223 ft. and 2 story, 98 x 132 ft., rein.-con., brick and steel addition to foundry and motors building, plain foundation, to Bryant & Detwiler Co., 2336 Dime Bank Bldg., Detroit.

Wis., Ashland—J. M. Chapple & Co., 321 West 3rd St., 2 story, 64 x 100 ft., rein.-con., brick and steel newspaper plant, plain foundation, to C. Bloss, 901 4th St. Archts. est. $50,000.

Wis., Hurley—Norman Auto Co., will build 1 story, 95 x 100 ft. rein.-con., brick and steel garage, plain foundation, by day labor. B. E. Norman, pres. Est. $40,000. Private plans.

Wis., Kenosha—Central Fuel & Ice Co., 159 South Ridge St., will build 1 story, 57 x 100 ft., brick and concrete garage, plain foundation, South Ridge St., by day labor. $40,000. White & Co., Pub. Serv. Bldg., archts.

Wis., Waukesha—Manitowoc Church Furniture Co., 1214 Lincoln Ave., 1 story, 102 x 160 ft., concrete and tile addition, plain foundation, Lincoln Ave., to C. A. Dailey & Son, Waukesha. $50,000.

Wis., Waukesha—Thompson Malted Food Co., Riverside Dr., general contract 1 story, 52 x 100 ft., brick and concrete garage, plain foundation, to G. Ward, Waukesha, structural steel, to Worden-Allen, Port Washington Rd., Milwaukee, engrs. est. $40,000; 2 story and basement, 50 x 62 ft., brick and concrete addition to factory, plain foundation, to E. Steigerwald & Sons, 2303 Galena St., Milwaukee, engrs. est. $40,000.

Wash., Wenatchee—Puget Sound Power & Light Co., Stuart Bldg., Seattle, transformer station, here, to Stone & Webster Eng. Corp., 7th and Olive Sts., Seattle. $120,000.

Ia., Ft. Dodge—Ft. Dodge, Des Moines and Southern R.R., Boone, general contract car house and yard office, brick and concrete, here, to W. J. Zitterell Constr. Co., Webster City.

Mo., St. Louis — Niedringhaus Metal Wares Co., 5700 Natural Bridge Ave., 2 story, 100 x 200 ft., concrete and brick factory, 5719 Natural Bridge Ave., to C. W. Wilcox Constr. Co., 5302 Queens St. Archts. est. $45,000.

Ark., Fayetteville—Ozark White Lime Co. will build lime plant, 100,000 bbl. daily capacity, incl. crusher for burnt lime stone, separator, 5 ft. fan, two 80 ton storage bins, patent bagging machine, three 40 ft. elevators and 50 ft. dust stack. Work will be done by day labor. Private plans.

Calif., Fresno—E. Bradley, 1 story basement, brick garage, Stanislaus and L Sts., to Trewhitt-Shields Co., Rowell Bldg., $100,000 incl. equipment.

Calif., Los Angeles—C. A. Doody, 4 story, 150 x 150 ft., rein.-con. garage, 6th and Kenmore Sts., to Home Foundation Co., Mer. Natl. Bank Bldg. $280,000. Noted June 7.

Ont., Toronto — Chapmans Ltd., 336 Gerard St. E., general contract ice plant, Brown Ave., to Witchall & Son, 156 St. Helens Ave. Engrs. est. $75,000.

Industrial Works (Continued)

Ont., Toronto—Toronto Electric Comrs., Yonge and Shuter Sts., 1 story, 60 x 80 ft. electric substation, rein.-con., brick and steel, plain foundation, Danforth and Morton Aves., general contract to Jackson-Lewis Constr. Co., Ltd., Ryrie Bldg. Engrs. est. $300,000. Noted Oct. 11.

Buildings

PROPOSED WORK

Mass., Boston—Office—C. T. McFarland and A. W. Laurie, archts., 162 Newbury St., soon take bids 5 story and basement, about 70 x 100 ft., rein.-con., brick and limestone, wood-pile foundation, Marlboro St. and Commonwealth Ave., for Moreland Co., c/o R. M. Dobbins, 209 Washington St. About $200,000.

Conn., Darien—Laboratory—Cherry Lawn School having plans prepared by W. R. Steinmetz, Greely Bldg., Stamford, 2 story, 40 x 75 ft., brick and steel, plain foundation. $200,000.

Conn., Groton—School—First School Dist. plans 2 story, 100 x 150 ft., brick and steel, plain foundation. $150,000. Engineer and architect not selected.

Conn., Hartford—Apartment—S. S. Tulin, 199 Retreat Ave., plans 4 story, brick, plain foundation, Washington St. $200,000. Engineer and architect not selected.

Conn., Hartford—School—Bd. Educ. plans school for mentally deficient children, Hurlburt St. $200,000. R. W. Huntington, chn. of ungraded school. Engineer and architect not selected.

Conn., Waterbury—Parish House, etc.—Second Congregational Church having preliminary plans prepared by R. H. Dana, 350 Madison Ave., New York City, parish house and altering present Sunday School, Holmes Ave. $150,000. W. Valentine, chn. building com.

Conn., Wethersfield—High School—Town plans high school. $200,000. G. R. Wells, 11 Church St., chn. of building com. Engineer and architect not selected.

N. Y., Aurora—Faculty—Wells College, soon takes bids brick, steel and stone, plain foundation. $150,000. E. E. Seelye, 101 Park Ave., New York City, engr. J. W. O'Connor, 162 East 37th St., New York City, archt.

N. Y., Bergen—High School—Bd. Educ. having plans prepared by Gordon & Kaelber, Sibley Bldg., Rochester, high school. $150,000. Will mature in spring. Noted Feb. 22.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York soon takes bids P. S. 63 brick, steel and stone, plain foundation, Williams St. near Liberty Ave., here. $610,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Aug. 16.

N. Y., Hempstead—Theatre—M. Glynne, c/o Patchogue Theatre, Patchogue, plans brick, steel and stone, plain foundation, here, $450,000.

N. Y., Hollis (Jamaica P. O.)—School—St. Gerard Majella Parish, having plans prepared by R. J. Reilley, archt. and engr., 50 East 42nd St., New York, 2 story, brick, steel and stone, plain foundation. $200,000.

N. Y., Jamaica — Apartment — Loshen Bros., c/o Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, having plans prepared 6 story, 90 x 110 ft., brick, steel and stone, plain foundation, Shelton and Clinton Aves. $350,000.

N. Y., Mt. Vernon — Apartment — H. Bailer, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., New York, having plans prepared 4 story, brick, steel and stone, plain foundation, Lorraine Ave. $375,000.

N. Y., New York—Apartments—Goldner & Goldner, archts. and engrs., 47 West 42nd St., preparing plans two 6 story, brick, steel and stone, plain foundations, University Ave. $500,000 each. Owner's name withheld.

N. Y., New York—Apartment—I. Judis, 103 Park Ave., plans 15 story, 50 x 80 ft., brick, steel and stone, plain foundation, Amsterdam Ave. and 102nd St. Engineer and architect not selected.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., preparing plans 5 story, 100 x 100 ft., brick steel and stone, plain foundation, Valentine Ave. $200,000. Owner's name withheld.

N. Y., New York—Apartment—D. S. Lang, archt. and engr., 110 West 34th St., preparing plans 6 story, brick, steel and stone, plain foundation, 164th St. and Ft. Washington Ave. $400,000. Owner's name withheld.

N. Y., New York—Apartment—Ninetieth St. and West End Ave. Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., having plans prepared brick, steel and stone, plain foundation, 617 West End Ave. $350,000.

N. Y., New York — Apartment — N. C. Partos, c/o L. A. Abramson, archt. and engr., 46 West 46th St., having plans prepared 18 story, 100 x 100 ft., brick, steel and stone, plain foundation, 8th Ave. and 45th St. $2,000,000.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, brick, steel and stone, plain foundation, Wadsworth Ave. $200,000. Owner's name withheld.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts., and engrs., 32 Union Sq., preparing plans 175 x 370 ft., brick, steel and stone, plain foundation, 189th St. and Amsterdam Ave. $1,500,000. Owner's name withheld.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, brick, steel and stone, plain foundation, 189th St. $275,000. Owner's name withheld.

N. Y., New York—Hotel—Three Hundred Two West 75th St. Corp., c/o R. T. Lyons, archt. and engr., 342 Madison Ave., soon takes bids 15 story, brick, steel and stone, plain foundation, 302 West 75th St. $750,000.

N. Y., New York — Loft — Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, preparing plans 17 story, 93 x 98 ft., brick, steel and stone, plain foundation, 252 West 37th St., here. $1,000,000. Owner's name withheld.

N. Y., New York—Loft—Two Hundred Fifty-Six West 38th St. Corp., c/o E. Roth, archt., 119 West 40th St., having plans prepared brick, steel and stone, plain foundation, West 38th St. $350,000. G. Aus, 244 Madison Ave., engr.

N. Y., New York—Office—MacMillan & Co., 64 5th Ave., soon takes bids brick, steel and stone, plain foundation, 5th Ave. and 12th St. $800,000. Carrere & Hastings, 52 Vanderbilt Ave., archts. and engrs.

N. Y., Schenectady—Bank and Office—Union Natl. Bank, State St., plans brick, steel and stone addition, plain foundation, State St. $300,000. Engineer and architect not selected.

N. Y., Yonkers — Apartment — C. H. Thompson, c/o DeRosa & Cavaliera, 370 East 149th St., New York City, having plans prepared 6 story, brick, steel and stone, Cary St. $250,000.

N. Y., Yonkers—High School—Bd. Educ., soon lets contract 100 x 250 ft., brick, steel and stone, plain foundation, Tuckahoe Rd. $750,000. G. Aus, 244 Madison Ave., New York, engr. G. H. Chamberlain, 18 South Bway., archt.

New Jersey — Schools — Florence Twp. Com., Florence, plans 12 room addition to school in Florence, also 12 room addition to school in Roebling. $225,000. J. Young, 121 North 6th St., Phila., engr.

N. J., Glen Ridge—School—Bd. Educ. having plans prepared by Goodwillie & Moran, 56 West 45th St., New York City, 2 story, brick, steel and stone, plain foundation, High St. $150,000.

N. J., North Plainfield (Watchung P. O.)—High School—Bd. Educ. having plans prepared by J. T. Simpson, 31 Clinton St., Newark, 3 story, brick, steel and stone, plain foundation, Greenbrook Rd. $225,000.

Md., Baltimore—Apartment and Auto—W. H. Ramsley, pres. of Mount Royal Tire Co., 102 West Mount Royal Ave., having plans prepared by A. F. Amodio, Segal Bldg., Atlantic City, N. J., 8 story, 53 x 87 ft., brick, plain foundation, Mt. Royal and Maryland Aves. $250,000.

D. C., Wash.—Bank and Office—Federal Amer. Natl. Bank, 1315 F St., N. W., having preliminary plans prepared by Alfred C. Bossom, archt. and engr., 680 5th Ave., New York City, for brick, steel and stone. $1,000,000.

D. C., Wash.—High School—Dist. Comrs., 509 Dist. Bldg., plan Armstrong High School, brick and stone, 1st and N Sts., $500,000.

D. C., Wash.—Hospital—Hebrew Hospital for Aged, c/o H. A. Brandt, archt., McGill Bldg., having plans prepared for hospital. $150,000.

D. C., Wash.—Hotel—Harrington Hotel Co., 11th and E Sts., N. W., soon takes bids for addition. $250,000. A. B. Fitzsimons, Colorado Bldg., archt.

W. Va., Charleston — Theatre — Capitol Theatre plans 1 and 4 story and basement, 90 x 140 ft., Summers St. $400,000. Architect and engineer not announced.

W. Va., Charleston—Wholesale—J. E. Cobb Co. plans 7 story, 29 x 110 ft., wholesale building, will also add 2 stories to adjoining Cobb Bldg., Virginia St. $150,000. Engineer and architect not selected.

N. C., Greensboro—City Hall—City having plans prepared by H. Barton, Greensboro, 4 story, 80 x 100 ft. $350,000.

N. C., Wilmington—Court House, etc.—L. M. Boney, archt., Murchison Bldg., takes bids about Dec. 15, 4 story, 60 x 120 ft. addition, to contain offices, court room and jail, brick, tile and steel, wood pile foundation. $160,000. Noted Nov. 15.

Fla., Tampa—Mercantile—See "Industrial works."

Ala., Birmingham—Hospital and Home—Ku Klux Klan, c/o T. J. Shirley, Court House, purchased site and takes bids about Jan. 1, 4 story, 100 x 190 ft., brick, 6th Ave. North. $250,000. Engineer and architect not selected.

Tenn., Memphis—Hotel—Reinshagen Estate had plans prepared by H. J. Kramer, Goodwin Institute, 7 story, rein.-con., Poplar Ave. and Main St. $225,000.

Tenn., Nashville—City Hall and Market—City having plans prepared by Marr & Holman, archts., Stahlman Bldg., 3 story, on Public Sq. $800,000. Noted Nov. 15.

Ky., Louisville—Home—Methodist Episcopal Church Order, South, 812 5th St., plans widows and orphans home. $250,000 to $300,000. Architect and engineer not selected.

Ky., Louisville — Hospital — Evangelical Hospital Assn., c/o Nevin, Wischmeyer & Morgan, archts. Starks Bldg., plans new hospital. $200,000.

Ky., Louisville—Office—Commonwealth Life Insurance Co., 106-110 South 5th St., plans 5 story, 82 x 110 ft., brick and stone, 110 South 5th St. $200,000. D. X. Murphy & Bro., Louisville Trust Bldg., archts.

O., Akron—City Hall—Good & Wagner, archts. 209½ Water St., completing plans and takes bids after Jan. 1, 10 story, 94 x 102 ft., concrete, brick and steel, South High St. $900,000. Noted Dec. 7.

O., Cincinnati—Conservatory—Cincinnati Conservatory of Music, Highland Ave. and Oak, Mt. Auburn St., had plans prepared by W. B. Tuthill, archts. and engrs., 185 Madison Ave., New York City, 6 buildings. $2,000,000.

O., Cleveland—Apartment—Ancaster Co., c/o J. H. Drummond, 7500 Euclid Ave., plans 6 story, brick, 2036 East 77th St. $250,000. Engineer and architect not selected.

O., Cleveland — Apartment — Stotter-Haber Co., Leader News Bldg., plans 3 story, brick, Cedar Rd. $200,000. Engineer and architect not selected.

O., Cleveland—Apartment—I. Weinberg, secy. Weinberg Furniture Co., 942 East 105th St., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, 75 x 104 ft., brick, Lakeview Rd. $150,000.

O., Cleveland—Bank and Office—Washington Savings Bank, 6969 Bway., plans 2 story, 80 x 150 ft., brick, steel and concrete, East 71st St. and Bway. $150,000. W. J. Nowak, chn. Bd. Dirs. Engineer and architect not selected.

O., Cleveland—Nurses Home, Laboratory and Dispensary — Mt. Sinai Hospital of Cleveland, 1800 East 105th St., having plans prepared by C. R. Greco, Guardian Bldg., brick, steel and concrete, East 105th St. and Ansel Rd. $1,000,000. F. E. Champion, dir.

O., Cleveland — Orphanage — Cleveland Christian Home for Children, 11401 Lorain Ave., having plans prepared by J. H. MacDowell, Bulkley Bldg., 2 and 3 story, brick, steel and concrete, Lorain Ave. $250,000.

O., Columbus—Office—Columbian Building & Loan Co., 22 East Gay St., had plans prepared by F. L. Packard, New Hayden Bldg., 4 story and basement (ultimately 8 story), 97 x 187 ft, rein.-con., stone and steel. $300,000.

Ind., Evansville — Housing — Evansville Planing Mill Co. plans 150 houses on 20 acre site, Stringtown Rd. $150,000. G. A. Gore, pres.

Mich., Detroit—Hotel—A. V. Lee, c/o L. Kamper, archt., Kamper Bldg., 7 story and basement, 60 x 100 ft. rein.-con., brick and steel, plain foundation, Sproat and Park Sts. $225,000.

Mich., Marquette—Church—First Presbyterian Congregation plans 2 story, brick and stone, plain foundation. $150,000. Architect not selected.

Mich., Pontiac—Apartment—Varney & Varney, archts., 1422 Washington Blvd., Detroit, preparing plans 3 story and basement, 60 x 160 ft. brick and steel, plain foundation. $225,000. Owner's name withheld.

Ill., Chicago—Apartment—H. Dalsey, archt., 2321 West North St., plans 3 story, 100 x 160 ft., fireproof, Greenview Ave. near Montrose St. $300,000. Owner's name withheld.

Ill., Chicago—Apartment—Lindstrom & Johnson c/o R. C. Ostergren, archt., 155 North Clark St., plan fireproof apartment, Woodlawn Ave. near 47th St. $750,000.

Ill., Chicago—Bank and Office—Kimball Trust and Savings Bank, 3538 Fullerton

Buildings (Continued)

St., plans 2 story, 79 x 135 ft. fireproof, Fullerton St. and North Central Park. $175,000. W. G. Uffendell, 39 South State St., archts.

Ill., Chicago—Bank, Store and Office—Marquette Park State Bank, c/o K. M. Vitzthum & Co., 605 North Michigan Ave., plans 3 story, 75 x 110 ft., fireproof, Western and 63rd Sts. $200,000.

Ill., Pekin—School—Bd. Educ., Arcade Bldg., plans to construct Douglas School, 2 story and basement, brick and rein.-con. $150,000. L. R. Kinsey, pres. Architect not selected.

Wis., Appleton—High Schools—Bd. Educ. rejected bids two 2 story and basement, brick, tile and concrete, plain foundations. Total cost $300,000. Will readvertise. Perkins, Fellows & Hamilton, 814 Tower Court, Chicago, archts. Noted Oct. 25.

Wis., Milwaukee—Apartments—J. Hunholz, 2310 Vliet St., had plans prepared by Dick & Bauer, 811 State St., two 8 story and basement, 50 x 100 ft., brick and concrete, plain foundations, Mason St. Noted Oct. 18.

Wis., Milwaukee—Store—C. Niss & Sons, 697 3rd St., having plans prepared by M. Tullgren & Sons, 425 East Water St., 5 story and basement, 72 x 150 ft., brick and concrete, plain foundation. $200,000.

Wis., Powers Lake—Hotel—Powers Lake Hotel having plans prepared by C. D. Faulkner, 140 South Dearborn St., Chicago, and takes bids in spring, 2 story, brick, plain foundation. $150,000.

Wis., Waukesha—Hotel Silurian, c/o F. J. Strong, rejected bids 3 story and basement, concrete and tile, plain foundation. $300,000. New bids later. M. Tullgren & Sons, 425 East Water St., Milwaukee, archts. Noted Sept. 27.

Ia., Burlington — High School — Voted $275,000 bonds for addition to high school and $75,000 bonds for gymnasium. Address Bd. Educ., c/o D. S. Cooper, secy. Noted Feb. 15.

Ia., Council Bluffs—Office—Park Building Corp., Rogers Blk., plans 5 story and basement, 100 x 200 ft., rein.-con., brick, tile and stone, Pearl St. and Willow Ave. $200,000.

Ia., Davenport — Dormitory — Augustana College, 7th Ave. and 38th St., plans rein.-con., brick tile and stone, probably 3 story and basement on campus. $150,00. Architects not announced.

Kan., Dodge City—Hospital—Sisters of St. Joseph, soon take bids 3 story and basement, rein.-con., brick, steel and hollow tile. $150,000. Lorentz Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, archts. Noted Nov. 8.

Kan., St. Francis—Court House—Cheyenne Co. rejected bids 3 story, 60 x 110 ft., rein.-con., brick and stone. $150,000. Will take new bids in about 2 weeks. T. W. Williamson Co., 312 Central Natl. Bank, Topeka, archts.

Wis., Racine—Hospital—Florence Nightingale Society, 1340 College Ave., receiving competitive sketches 3 story and basement, brick and concrete, plain foundation. $250,000.

Wis., Racine—School—Bd. Educ. plans 2 story and basement, brick, tile and concrete, plain foundation. $150,000. A. H. Schafer, secy. Architect not selected.

Mo., Hannibal—School—Bd. Educ. takes bids about Jan. 1, 2 story, 125 x 140 ft., rein.-con., brick and stone, 6th St. and North Ave. $150,000. M. S. Martin, Holmes Bldg., archt.

Mo., Koch—Administration and Kitchen—City of St. Louis takes bids about Jan. 1, 3 story, rein.-con., brick and stone, for Robert Koch Hospital, here. $225,000. E. E. Christopher, 301 City Hall, St. Louis, archt. H. Updike, 301 City Hall, St. Louis, engr.

Mo., Webster Groves—Seminary—T. P. Barnett Co., archts., Arcade Bldg., St. Louis, takes bids about Dec. 10, 2 story and basement, administration building, dormitories, dining hall, gymnasium, boiler house, etc., rein.-con. and brick, plain foundations, Lockwood St., for Eden Seminary, 6700 Easton Ave. $1,000,000. Will build chapel and library buildings later. Noted Aug. 2.

Ark., Little Rock—Infirmary—St. Vincent Catholic Infirmary, 1000 High St., had plans prepared by Sanders & Ginnochio, Hall Bldg., 2 story and basement, rein.-con., 9th and Bishop Sts. $150,000.

Okla., Muskogee—Hall and Auditorium—Masonic Order plans 4 story rein.-con., Cherokee St. $150,000. F. T. Ward, Masonic Bldg., secy. Will select architect Dec. 1. Noted March 8.

Colo., Ft. Morgan—High School—Election Dec. 4, to vote on $300,000 bonds, 3 story, 120 x 300 ft., rein.-con. and brick. W. N. Bowman, Central Savings Bank Bldg., Denver, archt.

Nev., Reno—Church—Trinity Episcopal Church having preliminary plans prepared by C. Sumner, 57 Post St., San Francisco, church, Rainbow and Court Sts., here, $150,000.

Wash., Spokane—High School—School Bd. plans election in March to vote on $425,000 bonds for new high school.

Ore., Eugene — Hotel — Eugene Hotel Assn., c/o H. Hutton, Eugene, plans 7 story, 100 x 160 ft. rein.-con., 9th and Olive Sts. $225,000.

Ore., Portland—Apartment—L. H. Hoffman, 707 Gasco Bldg., having plans prepared two 4 story, one 85 x 90 ft. and other 85 x 140 ft., frame and stucco, 20th and Lovejoy Sts. $175,000. Private plans.

Calif., Covina — High School — Covina High School Dist. having plans prepared by Train & Williams, Western Mutual Bldg., Los Angeles, rein.-con. additions to auditorium, science hall, cafeteria, etc. $150,000. Noted Nov. 1.

Calif., Los Angeles—Hotel—Metropolitan Hotel Co., c/o L. L. Smith, archt., Byrne Bldg., having plans prepared, approximately 12 story, 95 x 150 ft., rein.-con. South Main St.

Calif., Los Angeles—Lodge Hall—Lodge of Odd Fellows, 2705 North Bway., having plans prepared by Morgan, Walls & Clement, Van Nuys Bldg., 3 story and basement, 100 x 170 ft., brick and steel, Washington and Oak Sts.

Calif., Richmond — Hospital — Defeated $150,000 bonds for hospital, and $50,000 for swimming pool. Noted Oct. 11.

Calif., San Francisco — Church — Beezer Bros., archts., 1915 Steiner St., soon take bids fireproof church, Bush and Steiner Sts., for St. Dominic's Congregation, Bush and Steiner Sts.

Calif., San Francisco — Club — Olympic Club, Olympic Club Bldg., having plans prepared by Bakewell & Brown, 251 Kearney St., 2 story, frame and stucco, Lakeside Golf Links. $200,000.

Calif., San Francisco—School—City and San Francisco Co. having plans prepared by Miller & Pflueger, archts., Lick Bldg., 2 story and basement, rein.-con., 22nd and 23rd Aves., Clement and California Sts. $300,000.

Ont., Hamilton — University — McMaster University, Bloor St. W., Toronto, plans 2 and 3 story and basement, rein.-con., brick and steel, plain foundation. $500,000. Engineer and architect not selected.

Ont., London—School—Bd. Educ. takes bids after Nov. 24, 2 story, brick, Empress Ave. $185,000. L. E. Carrothers, c/o Bd. Educ., archt.

Ont., Port Arthur — Jail — Provincial Government, Parliament Bldgs., Toronto, soon takes bids 2 story and basement, rein.-con., brick and steel, plain foundation. $200,000. F. R. Heakes, provincial archt.

Ont., Toronto—Church—Eglington Ave. Methodist Church, Eglington Ave., plans 1 story and basement, 60 x 100 ft. rein.-con. and brick, plain foundation, Eglington Ave. $160,000. Engineer and architect not selected.

Ont., Toronto—Hospital—Home for Incurable Children, 152 Bloor St. E., plans 3 story and basement, rein.-con., brick and steel, plain foundation, Dunn Ave., $250,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Hyde Park (Boston, P. O.)—Police Station—Dec. 4, by F. J. Kneeland, supt. Pub. Wks., Room 802, City Hall, Boston, 2 story and basement, 79 x 140 ft., brick, granite and Indiana limestone, wood pile foundation, Hyde Park Ave., here. $200,000. Maginnis & Walsh, 100 Boylston St., Boston, archts. Noted Aug. 16.

Conn., Hartford — High School—Dec. 4 (extended date), by Bd. Contract & Supply, 3 story, brick and steel, plain foundation, Maple St. $1,200,000. E. T. Wiley, 75 Pratt St., archt. Noted Nov. 8.

Conn., Meriden — Hotel — Matis Hotel, Pratt St., taking bids and opens same about Nov. 24, 4 story, 50 x 90 ft., brick and steel, plain foundation, Pratt St. $150,000. D. A. Guerriero, 1029 Main St., Hartford, archt. Noted Oct. 4.

N. Y., Brooklyn—High School—Dec. 10, by Superintendent Bd. Educ., 500 Park Ave., New York, James Madison High School, brick, steel and stone, plain foundation, Bedford Ave., from Ave. P to Quentin Rd., here. $3,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Sept. 20.

N. Y., New York—Apartment—Lanzner & Baer, 152 West 42nd St., will build 182 x 189 ft., brick, steel and stone, plain foundation, Wadsworth Terrace. Work will be done by separate contracts under supervision of owners.

N. Y., New York—School—Dec. 10, by Superintendent Bd. Educ., 500 Park Ave., P. S. 71, Roberts and Jarvis Aves. Former contract rescinded. Plans revised for larger building. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted June 21.

N. Y., Richmond Hill (branch of Jamaica)—School—Dec. 10, by Superintendent Bd. Educ., 500 Park Ave., New York, P. S. 121, 109th Ave. between 126th and 127th Sts., here. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Pa., Bethlehem—Schools—Nov. 28, by Secretary School Bd., constructing Edgeboro Elementary School, 2 story and basement, 94 x 167 ft. brick, plain foundation, Jennings and Walters Sts.; 2 story and basement, 62 x 154 ft. rein.-con. and brick, plain foundation, East 4th St.; Rosemont Elementary School, 2 story and basement, 63 x 117 ft. rein.-con. and brick, plain foundation, Penna. Ave., Golpp and Union Sts. Ritter & Shay, North Amer. Bldg., Phila., archts.

Md., Baltimore—School—Nov. 26, by L. H. Fowler, 347 North Charles St., 2 story, 110 x 160 ft., concrete and brick, plain foundation, University Circle and 40th St., for Calvert Primary School, 10 West Chase St. $150,000. Noted July 19.

Md., Baltimore—School of Hygiene—Dec. 5, by Archer & Allen, archts, 1 East Lexington St., 8 story, brick and steel, plain foundation, Monument and Wolfe Sts., for Johns Hopkins Hospital, Wolfe and Monument Sts. $1,000,000. Noted Aug. 9.

W. Va., Huntington—Court House—Nov. 26, by Comrs. Cabell Co., 3 story, 65 x 107 ft., rein.-con. and brick addition. $150,000. S. L. and R. L. Day, Huntington, archts. Noted July 19.

W. Va., Williamson—Bank—Jan. 1, by Bank of Commerce, Bluefield, 5 story, about 60 x 110 ft. brick, limestone and steel, here. $175,000. Warne, Tucker & Patteson, Charleston, archts.

Fla., Clearwater—School—Nov. 27, by Superintendent Pub. Instruction Pinellas Co., for school. $150,000. M. L. Elliot, Citizens Bank Bldg., Tampa, archt.

Tenn., Lebanon—Schools—Nov. 26, by Bd. Educ., 2 brick and concrete school buildings. $150,000. C. K. Colley, 4th and 1st Bldg., Nashville, archt. Noted Sept. 27.

Tenn., Memphis—Hotel—W. W. Ahlschlager, archt., 65 East Huron St., Chicago, taking bids 12 story, 170 x 324 ft., rein.-con., brick and steel, Union Ave., 2nd and 3rd Sts., here. $3,000,000. Owner's name withheld.

O., Cleveland Heights (Warrensville, P. O.)—Apartment—H. Sobul and H. Elder, 438 Guardian Bldg., Cleveland, taking bids 3 story and basement, 51 x 132 ft., brick, Cedar Rd., here. $150,000. M. Weis, Union Bldg., Cleveland, archt.

O., East Cleveland (Cleveland P. O.)—Apartment—H. Shifrin, 1229 East 124th St., Cleveland, taking bids 3 story and basement, 52 x 183 ft., brick, 1835 Noble Rd., here. $200,000. Braverman & Havermaet, Ulmer Bldg., Cleveland, archts.

Mich., Grand Rapids—School—Nov. 27, by G. A. Davis, pres. Bd. Educ., City Hall. 2 story and basement, rein.-con., brick and steel addition to Oakdale School, plain foundation. $150,000. Osgood & Osgood, 2-4 Monroe Ave., archt.

Ill., Chicago—Apartment—B. L. Coyte, 7419 Wentworth St., receiving bids 3 story, 110 x 143 ft., fireproof, 76th and Wentworth Sts. $165,000. E. G. McClellan, 7441 Cottage Grove Ave., archt.

Ill., Chicago — Apartment — H. Dalsey, archt., 2321 West North Ave., receiving bids 3 story and basement, fireproof, Bosworth St. near Howard St., $225,000. Owner's name withheld.

Ill., Chicago—Apartment—J. S. Smith, 7620 Clyde Ave., receiving bids 3 story and basement, 125 x 150 ft., fireproof, 67th and Clyde Sts. $325,000. J. Hocke, 7602 Chappel Ave., archt. Noted Oct. 25.

Ill., Chicago—Bank—K. M. Vitzthum & Co., archts., 605 North Michigan Ave., receiving bids 2 story, 83 x 125 ft., fireproof, Ashland St. near 63rd St., for Ashland-Sixty-Third State Bank, Ashland and 63rd Sts. $250,000.

Ill., Forest Park—Bank—Laurence, Rippel & Ratcliffe, archts., 123 West Madison St., Chicago, receiving bids 2 story, 59 x 150 ft., fireproof, Madison and Hannah Sts., here, for Harlem State Savings Bank c/o architects. $250,000.

Ill., Peoria—Armory—Nov. 27, by E. A. Martin, archt., 304 South Wabash Ave., Chicago, 1 and 2 story, rein.-con., brick and stone, Adams St., here, for Dept. Pub. Wks. and Buildings, Springfield. Noted Oct. 11.

Buildings (Continued)

Ia., Cedar Falls—Dormitory—Dec. 11 by State Bd. Educ., Des Moines 4 story and basement addition, rein-con., brick, tile and stone, at Iowa State Teachers College, College and 23rd Sts., here. $150,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

Minn., Minneapolis—School—Nov. 26, by Bd. Educ., 1st floor and basement of 1 story, 150 x 300 ft., rein.-con., brick and tile, Mississippi River Blvd. $200,000. Bureau of Bldgs., Bd. Educ., 245 9th Ave. N., archts. Noted Sept. 13.

Minn., Slayton—School—Dec. 4, by Bd. Educ., 2 story and basement, rein.con., stone, brick and tile. $150,000. Lang, Raugland & Lewis, 412 Essex Bldg., Minneapolis, archts. Noted May 10.

Minn., St. Paul—Gymnasium—Nov. 30, by Macalester College, Grand and Snelling Aves., 2 story and basement, 92 x 220 ft., rein.-con. and brick. $150,000. W. M. Ingeman, 637 Endicott Bldg., St. Paul, and E. D. Litchfield & Rogers, 477 5th Ave., New York, archts.

Neb., Falls City—Court House—Dec. 19, by W. F. Gernandt, archt., 1408 North 34th St., Omaha, 2 story and basement, 66 x 100 ft. rein.-con., brick and steel, for Richardson Co. $200,000. Noted Nov. 8.

Neb., South Sioux City—High School—Nov. 27, to vote on $175,000 bonds for high school. Beuttler & Arnold, 405 Grain Exch. Bldg., Sioux City, archts.

Ark., Little Rock—Bank—Dec. 5, by St. Louis Federal Reserve Bank, Bway. and Pine St., St. Louis, Mo., 2 story and basement, stone, rein.-con. and steel, 3rd and Louisiana Sts., here. $350,000. Thompson & Harding, Southern Trust Bldg., archts.

Ark., Littte Rock—Church—Nov. 25, by Sanders & Ginnocchio, archts., Hall Bldg., church, Sunday school and auditorium, brick, rein.-con. and stone, for Second Presbyterian Church. $200,000.

Tex., Commerce—Educational—Dec. 1, by M. O. Flowers, chn. Bd. Regents, at Adolphus Hotel, Dallas, 3 story, rein.-con., terra cotta and brick, incl. auditorium, 2,200 seating capacity, class rooms and gymnasium, at East Texas State Teachers College, here. $275,000. R. O. Jameson, Amer. Exch. Bank Bldg., Dallas, engr. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, archts.

Tex., Dallas—High School—Nov. 27, by Bd. Educ., 3 story and basement, concrete, brick and stone, Oak Cliff. $500,000. De Witt & Lemmon, Southwestern Life Bldg., archts.

Tex., Fort Worth—Sanitarium—Dec. 10, by C. H. Harris, 1028 5th Ave., 3 story, brick and concrete, Rosedale St. $250,000. O. H. Atkinson, 806 Taylor Ave., archt. Noted Nov. 8.

Okla., Oklahoma City—Office—Dec. 1, by Layton, Smith & Forsyth, Braniff Bldg., 12 story, 75 x 140 ft., stone, concrete pile foundation, 1st St., for Doctors Building Assn., Oklahoma City. $800,000. Noted Sept. 13.

Wash., Tacoma—Hotel—Dec. 7, by Citizens Hotel Corp., Inc., 610 Tacoma Bldg., 12 story, rein.-con., 9th St. and Bway. $1,500,000. W. L. Stoddart, 50 East 41st St., New York City, archt. This corrects report in Nov. 15 issue.

Wash., Tacoma—School—Dec. 1, by School Bd., 2 story, 260 x 360 ft., rein.-con. and brick, Campus of College of Puget Sound. $425,000. R. E. Borbek, Puget Sound Natl. Bank Bldg., archt. Noted Mar. 8.

Calif., Los Angeles—Psychopathic Ward—Dec. 3, by Supervs. Los Angeles Co., 1 story, 38 x 276 ft. main building, with two 27 x 216 ft. wings, concrete and brick.

Calif., Los Angeles—Store and Loft—Walker & Eisen, archts., Pacific Finance Bldg., receiving bids 12 story and basement, 50 x 150 ft., rein.-con., Bway., for Wurlitzer Co., 605 West 7th St. Noted Oct. 4.

Calif., San Francisco—Orphanage—Bliss & Faville, Balboa Bldg., taking bids 3 story administration building, six 2 story concrete and stucco cottages, and 1 story rein.-con. laundry and power house, on 10 acre site bounded by 28th and 30th Aves., Vicente and Wawona Sts., for San Francisco Protestant Orphan Asylum. $350,000.

BIDS RECEIVED

Calif., Oakland—School—St. Elizabeth's Parish, 1532 34th Ave., 2 story, rein.-con., from Larsen-Siegrist Co., Claus Spreckels Bldg., San Francisco, $251,777. Noted July 26.

CONTRACTS AWARDED

Mass., Boston—School—Schoolhouse Comrs., 2 story and basement, 70 x 150 ft., brick, wood pile foundation, Oakland and Faneuil Sts., to C. & R. Constr. Co., 3 Tremont Row, $204,167.

Conn., Glenbrook—Apartment—C. E. Philips, 3 story, 122 x 122 ft., brick, plain foundation, Holmes St. and Maple Ave., to S. Bennett, Glenbrook. Archts. est. $150,000. Noted Nov. 8.

Conn., Hartford—Apartment—N. Caravillo Co., 210 Farmington Ave.; will build 3 story, 80 x 125 ft., brick and steel, plain foundation, Willard St., by day labor. $150,000. Dunkelberger & Gelman, 721 Main St., archts. Noted Nov. 8.

Conn., Hartford—Apartment—M. F. Morrissey, 26 Dennison St., will build two 3 story, 40 x 100 ft., brick, plain foundations, Vine St., by day labor. $200,000. Noted Nov. 15.

Conn., Hartford—Apartment—J. P. Neilson, 494 New Britain Ave., 3 story, 60 x 120 ft., brick, plain foundation, Buckingham St., to H. Thompson, 120 Richard St., West Hartford (Hartford, P. O.). Archts. est. $150,000. Noted Sept. 27.

Conn., Simsbury—Library—Simsbury Library Assn., 2 story and basement, brick and stone, plain foundation, to W. M. Ketchin, Tariffville. Archts. est. $150,000. Noted Oct. 18.

Conn., Waterbury—Church and Parish House—M. O. Owen, pastor Bunker Hill Congregational Church, 22 Marion St., brick and steel, plain foundation, to Clark Constr. Co., 168 Grand St. Archts. est. $200,000. Noted Oct. 11.

N. Y., Brooklyn—Apartment—A. Caplan, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 4 story brick, steel and stone, plain foundation, Eastern Parkway near Rochester Ave., by day labor. $300,000.

N. Y., Brooklyn—Apartment—S. Kushner, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 2 story, brick, steel and stone, plain foundation, Clinton Ave., by day labor. $300,000.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, addition to Erasmus High School, Bedford Ave., here, to E. Diebitsch, Inc., 383 Madison Ave., New York, $1,070,000. Noted Oct. 25.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 210, 5 story, 170 x 193 ft., brick, limestone and terra cotta Rochester Ave. from Park Pl. to Prospect Pl., here, to Turner Constr. Co., 244 Madison Ave., New York, under direction of W. H. Gompert, archt., Flatbush Ave. extension and Concord St. This corrects report in Nov. 15 issue.

N. Y., Elmira—Store—Iszard Dept. Store, Baldwin and Water Sts., 4 story, brick and concrete, Main St., to F. H. Johnston, West Church St., $310,000. Noted May 24.

N. Y., New York—Apartment—Aurora Constr. Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, brick, steel and stone, plain foundation, 188th St. and Audubon Ave., by day labor. $300,000.

N. Y., New York—Apartment—Shirbar Realty Corp., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, 594 Ft. Washington Ave., by day labor. $250,000.

N. Y., New York—Office—Brooff Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 12 story, brick, steel and stone, plain foundation, 38th St. between 5th and 6th Aves., by day labor. $600,000.

Va., Winchester—High School—Bd. Educ., 3 story, terra cotta and brick plain foundation, to Central States Constr. Co., Huntington, W. Va., $250,000.

W. Va., Athens—Physical Education—Concord State College, 4 story, brick and stone, with concrete swimming pool, to H. A. Lucas, Bluefield. Est. $150,000. Noted Nov. 8.

W. Va., Clarksburg—Hospital—Ku Klux Klan, 3 story, 80 x 110 ft., to Amer. Constr. Co., Clarksburg. Est. $150,000.

W. Va., Welch—High School—Bd. Educ., 4 story, 100 x 136 ft., to Foreman & Putnam, Marietta, O. $170,000.

Fla., Miami Beach—Hotel—A. Iba and D. C. Cochmer, 6 story, 50 x 130 ft., rein.-con., caisson foundation, Ocean Dr., to C. D. Cochran, 725 3rd St., cost plus percentage basis. Archts. est. $200,000.

O., Springfield—School—Bd. Educ., 2 story and basement, 71 x 163 ft., rein.-con. and brick, to T. A. Graham, 1519 Clifton Ave., $142,821. Noted Nov. 8.

O., Toledo—Commercial—Ramson & Randolph Co., 3 story and basement, 80 x 190 ft., rein.-con., brick and steel, plain and concrete pile foundation, Superior and Chestnut Sts., to J. H. Berkebile & Sons, Toledo, $200,000.

Ill., Peoria—Cathedral—Peoria Consistory Scottish Rite Masons, 1005 Central National Bldg., 4 story, 75 x 170 ft., brick, concrete, stone, marble and terra cotta, Jackson St., to V. Jost & Sons, Lehman Bldg. Archts. est. $300,000.

Mo., Kansas City—High School—Bd. Educ., rein.-con., brick and stone addition to high school, Independence and Arlington Aves., to Patti-Moore Constr. Co., 37th and Bellefontaine Sts., $212,000.

Mo., St. Louis—Office—L. E. Anderson & Co., 310 North 8th St., 3 story, 41 x 69 ft., rein.-con., granite, steel and brick, 711 St. Charles St., to J. G. Hercules, Jr., Wainwright Bldg. Archts. est. $150,000.

Mo., St. Louis—Primate House—Bd. Pub. Serv., 305 City Hall, general contract 110 x 129 ft., rein.-con., brick and stone, Forest Park, to J. Hill Constr. Co., Syndicate Trust Bldg., for Zoological Bd. Control, Forest Park. $146,380. Noted Nov. 15.

Mo., St. Louis—Store and Apartment—Dougherty-Sheehan, 721 Chestnut St., 3 story and basement, rein.-con., brick, stone and terra cotta, Clayton St., by day labor. $165,000. W. F. Sheehan, 6192 Westminister St., archt.

Ark., Little Rock—Hospital—Ozark Sanitarium, c/o W. V. Laws, pres., 4 story and basement, 40 x 100 ft., rein.-con. and brick, plain foundation, by day labor under supervision of R. A. Pottinger, 4321 Keystone Ave., Chicago. $200,000.

Wash., Seattle—Apartment—G. S. Hammond, 4 story and basement, 100 x 120 ft., brick, 2nd St. W. and Roy St., to H. Pederson, Alaska Bldg. Archts. est. $200,000.

Calif., Los Angeles—Apartment—G. W. Cowan et al., 14 story and basement, 140 x 200 ft., rein.-con. and brick, North Sycamore Ave. to Hennessy Bros. & Co., 810 South Wabash Ave., Chicago, $1,200,000. Noted Aug. 30.

Calif., San Francisco—Apartment—L. Blum, 180 Jessie St., will build 6 story and basement, concrete, Sutter St. near Hyde St., by day labor. $155,000. C. O. Clausen, Hearst Bldg., archt. Noted Aug. 23.

Calif., Santa Rosa—High School—Trustees High School Dist., rein.-con. and brick, to Hannah Bros., 142 Sansome St., San Francisco, $345,946. Noted Nov. 15.

Federal Government Work

PROPOSED WORK

Me., Bar Harbor—Garage, etc.—Spec. 4900—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids garage and repairs to administration building at Naval Radio Station, Otter Cliffs, here. Noted Oct. 18.

BIDS DESIRED

Md., Annapolis—Shore Protection-Spec. 4917—Nov. 28 by Bureau Yards & Docks, Navy Dept., Wash., D. C., shore protection at Tower 5, here. Noted Oct. 4.

D. C., Wash.—Bungalows—Dec. 19 by Dept. of Interior, construction complete, 7 bungalows at St. Elizabeth's Hospital. F. M. Goodwin, asst. secy.

N. C., Wilmington—Dredging—Dec. 19, at office U. S. Engineer, dredging in Inland Waterway from Beaufort to Jacksonville; adv. E. N.-R. Nov. 22.

Tenn., Memphis—Towboat—Dec. 19 at office First and Second Mississippi River Dists., 1006 McCall Bldg., stern-wheel steel towboat; adv. E. N.-R. Nov. 22.

Ky., Camp Knox—Well—Nov. 30 by Constructing Quartermaster, constructing deep well.

Ky., Louisville—Operating Machinery—Dec. 15 at office U. S. Engineer, P. O. Box 72, operating machinery for Locks and Dams 44 and 45, Ohio River; adv. E. N.-R. Nov. 22.

Ind., South Bend—Post Office—Dec. 7 by Treas. Dept., Wash., D. C., additions to U. S. Post Office, here, J. A. Wetmore, acting superv. archt.; adv. Nov. 22.

Ill., Great Lakes—Rebuilding Laundry—Spec. 4918—Nov. 21 (extended date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding laundry, here. Noted Nov. 1.

Ill., Great Lakes—Coal Bunkers, etc.—Spec. 4929—Nov. 28 by Bureau Yards & Docks, Navy Dept., Wash., D. C., coal bunkers and railroad siding, here.

Wis., Ripon—Post Office—Dec. 7 (extended date) by Treas. Dept., Wash., D. C., construction, complete incl. mechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting superv. archt. Noted Nov. 1. Adv. E. N.-R. Nov. 22.

Okla., Oklahoma City—Well—Dec. 7 by Treas. Dept., Wash., D. C., deep well, here. J. A. Wetmore, acting superv. archt.

Calif., Livermore—Hospital—Dec. 22 at office U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., construction complete of infirmary, administration, mess and kitchen building, recreation building, nurses quarters, attendants quarters, garage,

Federal Government Work (Continued)

storehouse, etc., mechanical equipment and outside service lines except grading and walks, at U. S. Veterans Hospital, here, F. T. Hines, dir.; adv. E. N.-R. Nov. 22. Noted Sept. 20.

BIDS RECEIVED

Ia., Carroll—Post Office—Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile, here, from J. S. Gebuhr, Council Bluffs, $43,600. Noted Oct. 18.

California—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 9 Main St., San Francisco, clearing, grading and crushed rock surfacing 15.5 mi. Murphy-Big Trees National Forest Highway Calaveras Co., 100 acres clearing, 133,400 cu.yd. excav., 18,000 cu.yd. crushed rock surfacing, etc., from C. E. Crowley, Pacific Electric Bldg., Los Angeles, furnishing explosives $153,267, engrs. est. $152,789, Government furnishing explosives $146,740, engrs. est. $139,746. Noted Nov. 1.

H. T., Pearl Harbor—Storehouse—Spec. 4859—Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 120 x 480 ft., steel and concrete storehouse, at Naval Operating Base, here, (1) work complete, from Davison & Nicolsen, 324 West Lafayette St., Stockton, Calif., (1) $170,374 telegraphic modification deduct $3,000 from Item (1), (2) $20, (3) $6,100, (4) $140, (5) $1,350, (6) $50. Noted Sept. 27.

CONTRACTS AWARDED

N. Y., Port Chester—Dredging, etc.—U. S. Engineer, Army Bldg., 39 Whitehall Bldg., New York, dredging and rock removal in Harbor, here, to Bridgeport Dredge and Dock Co., 1024 Main St., Bridgeport, Conn., $123,375. Noted Sept. 27.

Tenn., Nashville—Steel Hull—U. S. Engineer, 1 steel snagboat hull, etc., to Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., $45,400.

Ind., Indiana Harbor—Breakwater—U. S. Engineer, 537 South Dearborn St., Chicago, breakwater, here, to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $184,860. Noted Oct. 18.

Wis., Milwaukee—Steel Barge, etc.—U. S. Engineer, constructing steel barge and installing steel derrick, to Manitowoc Shipbuilding Corp., 16th St. and River, Manitowoc, $103,250. Noted Nov. 8.

Tex., Freeport—Repairing Jetty—U. S. Engineer, Galveston, repairing southwest jetty in Harbor, here, to C. Clarke & Co., 111 Security Bldg., Galveston, $24,413. Noted Oct. 4.

Wash., Puget Sound—Radio Masts—Spec. 4897—Bureau Yards & Docks, Navy Dept., Wash., D. C., three 200 ft. radio masts at Navy Yard, here, to Pole and Tube Wks., Inc., 907 Evans Bldg., Wash., D. C., $8.965 (120 days). Noted Oct. 25.

Calif., Los Angeles — Dredging — U. S. Engineer, 725 Central Bldg., dredging 700,000 cu.yd. in Harbor, here, to United Dredging Co., Central Bldg., $293,790. Noted Nov. 1.

Unclassified

PROPOSED WORK

Swimming Pool—Darien, Conn.—Cherry Lawn School having plans prepared swimming pool, steel and brick. To exceed $25,000. W. R. Steinmetz, Greely Bldg., Stamford, archt.

Conduit System—Erie, Pa.—Plans high tension conduit system in 12th St. $25,000. F. G. Lynch, city engr.

Dump Scows—Phila., Pa.—Plans to purchase six steel hull dump scows. $120,000. Engineer, c/o Dept. of Docks, Wharves & Ferries Dept., City Hall.

Terminal, etc. — Tampa, Fla. — U. S. Chemical Corp., Krause Bldg., plans phosphate terminal and new dock. $400,000. P. S. Gilchrist, Trust Bldg., Charlotte, N. C., engr.

Wharf Shed—Tampa, Fla.—See Industrial Works."

White Way—Chattanooga, Tenn.—Plans "White Way" system on Main St. $25,000. S. H. Boresky, chn., White Way Comn.

Grade Elimination—Cincinnati, O.—See "Bridges."

Coal Bunker—River Rouge, Mich.—Ford Motor Co., Highland Park (Detroit P. O.) had plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 2 story, 53 ft. high, 62 x 103 ft. rein.-con. and brick, plain foundation.

Swimming Pool, etc.—Dallas, Tex.—W. L. Thornton, 1200 Main St., plans 175 x 450 ft. concrete swimming pool, etc., in White Rock Park. $300,000.

Swimming Pool—Richmond, Calif.—See "Buildings."

Tunnel—San Francisco, Calif.—City and San Francisco Co. plan Sunset vehicular and pedestrian tunnel from Danvers and Merritt Sts. to block bounded by Alma, Belvedere, Rivoli and Cole Sts., approximately 46 ft. wide and asphalt paved. $1,400,000. M. M. O'Shaughnessy, city engr.

Culvert—San Luis Obispo, Calif.—making plans rein.-con box culvert on Monterey St. To exceed $30,000. W. B. Roselip, city engr.

Pipe Line and Surge Tank—Flesherton, Ont.—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans to install 36 in. steel pipe line 1,100 ft. long, head up to 550 ft. and 100 ft. steel surge tank. F. A. Gaby, ch. engr.

Telegraph Lines — Ontario — Western Union Telegraph Co., Shelby Ave., Detroit, Mich., plans to overhaul system and string 2,000 miles new wire from Windsor to Bridgeburg, incl. new crossarm insulators. $150,000. H. Yokum, c/o owner, engr.

Grand Stand—Oshawa, Ont.—Town having plans prepared for concrete and steel or wood and steel grand stand, $50,000. Hutton & Souter, Bank of Hamilton Bldg., Hamilton, archts.

Subway—Toronto, Ont.—Plans subway under Canadian Natl. Ry. tracks at Woodfield Rd., concrete abutments, plate girder spans. $39,000. R. C. Harris, city engr.

BIDS DESIRED

Special Work—New York, N. Y.—Nov. 30, by Transit Comn., 49 Lafayette St., supply of special work (Order 23) for use in construction of part of Lenox Ave. and 148th St. Yard. G. McAneny, chn.

Electric Light and Power Line—Erath, La.—Nov. 27, by Mayor and Bd. Aldermen, constructing municipal electric light and power line from Abbeville, distributing system, etc., in town limits, etc.

Transit Shed—Los Angeles, Calif.—Nov. 30, by G. W. Wade, secy., Harbor Comn., 97 x 600 ft., steel transit shed. $90,000.

BIDS RECEIVED

Port Improvements—New Orleans, La.—Bd. Port Comrs., New Court House Bldg., miscellaneous port improvements as follows: furnishing, erecting and painting structural steel, incl. operating machinery, approach span, machinery house, incl. 426,000 lb. steel and 50,000 lb. machinery from Virginia Bridge & Iron Co., Whitney Bank Bldg., $57,853; roofing Poland St. Shed from J. J. Clark, 946 Howard St., $4,660; removing St. Joseph St. Shed and re-erecting at Barracks St. landing, from B. N. Davis, 931 Magazine St., $5,561.

Wharf — New Orleans, La. — Bd. Port Comrs., New Court Bldg., concrete foundation for 400 ft. section Poland St. wharf extension, from Dalgarn Constr. Co., Louisiana Bldg., $55,600.

Retaining Wall — Chicago, Ill. — South Park Comrs., 57th St. and Cottage Grove Ave., retaining wall in connection with 23rd St. viaduct, from B. W. Constr. Co., 729 Cass St., $42,850.

Electrolier System—Los Angeles, Calif.—Electrolier system in Washington St., from Newberry Electric Corp., 724 South Olive St., $42,136.

CONTRACTS AWARDED

Transmission Line — Vermont — Twin State Gas & Electric Co., Bennington, will build 23,000 volt, 3 phase, transmission line from Bennington to Arlington, through East Arlington, 20 mi., transformer station in East Arlington, and 12 mi. distributing system. Work will be done by day labor. $125,000. Private plans.

Fire Alarm System — Coney Island (Brooklyn P. O.), N. Y.—T. J. Drennan, fire comr., Municipal Bldg., New York, portion of underground fire alarm system, here, to W. F. Kenney Co., 44 East 23rd St., New York, Item 1 $26,530; J. Sudgen Co., 17 West 42nd St., New York, Item 2 $16,731.

Heating and Ventilating Apparatus, etc.—Kew Gardens (Forest Hills, P. O.), N. Y.—Bd. Educ., 500 Park Ave., New York, heating, ventilating and temperature regulation apparatus in P. S. 99, here, to Federal Heating Co., 300 Madison Ave., New York, $46,950. Noted Nov. 15.

Heating and Ventilating Apparatus, etc.—New York, N. Y.—Bd. Educ., 500 Park Ave., heating, ventilating and temperature regulation apparatus in P. S. 6, Tremont Ave., to D. J. Rice, 42nd St. and Lexington Ave., $18,100; in P. S. 133, Jerome Ave., to Austin Eng. Co., 121 West 42nd St., $10,872. Noted Nov. 8.

Subway, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., tracks for part of Jerome Ave. Yard of 7th Ave.-Lexington Ave. Line, to Slattery Eng. & Constr. Co., 7 East 42nd St., $59,879; signal tower in 239th St. Yard of White Plains Rd. Rapid Transit R.R., Route 18, Sect. 2, Bronx Boro, Agreement "CU," to J. B. Roberts & Co., 1170 Bway., $12,758. Noted Nov. 1 and 15.

Heating and Ventilating Apparatus—St. Albans (Jamaica, P. O.), N. Y.—Bd. Educ., 500 Park Ave., New York, heating, temperature regulating and ventilating apparatus in P. S. 36, here, to Federal Heating Co., 300 Madison Ave., New York, $46,950. Noted Nov. 15.

White Way — Louisville, Ky. — Consolidated Realty Co., 5th St., installing White Way system along Douglass Blvd., in Cherokee Village (Subdivision of Louisville), to Louisville Gas & Electric Co., 311 West Chestnut St., $25,000.

Bank Protection—Waverly, Mo.—State Hy. Dept., Jefferson City, five 150 ft. and three 200 ft. current retards consisting of trees laid in river bed and anchored to concrete piling driven to rock and to bank, in connection with bridge over Missouri River, here, to Woods Bros. Constr. Co., Lincoln, Neb., $75,600.

Materials and Equipment

PROPOSED WORK

Tractors—Bristol, Conn.—Bd. Pub. Wks. plans to purchase 5-ton tractor for clearing snow; also 2½-ton tractor. G. Anderson, supt.

Floating Derrick—St. Catharines, Ont.—A. F. Fifield plans to purchase 5 ton 30 ft. boom floating derrick.

BIDS DESIRED

Pipe—Baton Rouge, La.—Dec. 13, by Comn. Council, furnishing 75,000 lin.ft. 8 in., 4,80 lin.ft. 10 in., 7,500 lin.ft. 12 in., and 2,200 lin.ft. 18 in. vitr. clay pipe, 253 manholes and 77 flush tanks. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr.

Street Sweeper—Sanford, Fla.—Nov. 26, by city, street sweeper.

Steel—Chicago, Ill.—Junkunc Bros., 1140 West Garfield Blvd., in market for carload 18 gauge 1⅞ x 7⅞ steel cold rolled, also carload lots 1½ x ⅞ bar steel.

Steel, etc.—Eau Claire, Wis.—Dells Paper & Pulp Co., c/o E. O'Brien, mgr., taking bids 13 steel tainter gates and 250 tons structural steel. L. A. De Guere, Wisconsin Rapids, engr.

Lumber—Atlantic, Ia.—Dec. 3 by Auditor Cass Co., furnishing 300,000 ft. bridge lumber and 17,000 ft. red cedar.

Reinforcing Bars, etc.—St. Paul, Minn.—Nov. 27, by H. W. Austin, city purch. agt., 72 tons steel reinforcing bars and 40 tons pig lead in 100-lb. pigs; 6 sluice gates, gate stands and 1 electric motor operating device for Water Dept.; also 1,650 lin.ft. vitr. clay sewer pipe for Dept. Pub. Wks. G. M. Shepard, city engr.

Steel Bars, etc.—Oroville, Calif.—Nov. 28, by R. A. Leonard, secy. Thermalito Irrigation Dist., furnishing 5,000 lb. reinforcing steel and bars, 2,200 bbl. cement, one 30 in. inlet and one 21 in. outlet needle valve, hand-operated, etc. S. J. Norris, Oroville, engr.

CONTRACTS AWARDED

Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., 5,000 bags Portland cement, to C. A. McCarthy, $3,475; 2,000 cu.yd. asphalt wearing surface sand, to Z. Mahoney, 557 46th St., Brooklyn, $2,460. Noted Nov. 8.

Valve Equipment—New York, N. Y.—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., electric valve operating equipment, Manhattan Boro, to Fox Reynolds Co., 81 East 125th St., $20,500. Noted Nov. 15.

Grapple Dredge — Phila., Pa. — G. F. Sproule, dir. Dept. Wharves & Ferries, grapple dredge to Ellicott Machine Co., 1111 Bush St., Baltimore, Md., $211,000. Noted Oct. 11 under "Miscellaneous."

Tractors, etc.—Shorewood (Milwaukee P. O.), **Wis.**—Five ton tractor and snow plow, to Monarch Tractor Co., Watertown, $4,375; one Fordson tractor and plow to Kilbourn Motor Co., 1555 Teutonia Ave., $911. Noted Nov. 1.

Structural Steel—Waukesha, Wis.—See "Industrial Works."

Paving Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., materials for paving Plum St. between Mound Blvd. and Maria Ave., 380 bbl. cement to Corning Donohue Brick Co., 614 Ryan Bldg., $2.80 per bbl., 27 tons asphalt to Minnesota Road Equipment Co., 4536 Dupont Ave. S., Minneapolis, $22.66 per ton; 400 coils ¾ in. extra strong lead pipe to Natl. Lead Co., 451 East 6th St., $8.06 per 100 lb., 5,000 lb. solder to United Lead Co., 102 Fairfield Ave. W., $22.20 per cwt. Noted Nov. 1.

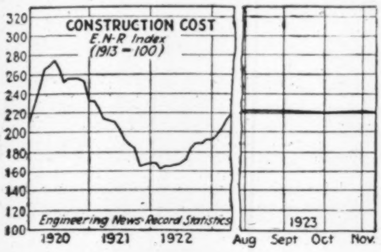
CONSTRUCTION NEWS

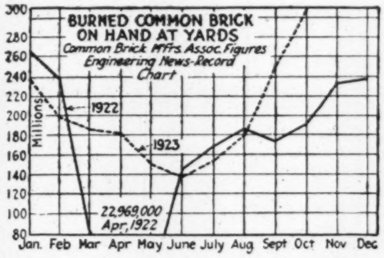
Engineering News-Record, November 29, 1923

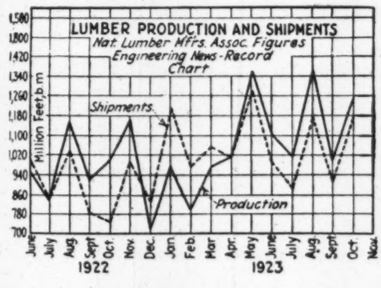
The Construction Barometer

Seasonal Drop in Construction—Gain in Permits—Plenty of Cars and Materials—Scarcity Feared in Spring

WHILE there has been a steady gain in private construction projects during the first half of November, the tendency, during the last week, has been toward a falling off in both private and public work. Autumn building permits, however, show an unusual gain compared with previous years. With a seasonal downward trend in construction cost, plenty of materials and improved transportation facilities, buyers are strongly tempted to enter the market during the off-season, in order to avoid the usual Spring labor and materials' scarcity and traffic congestion.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Nov. 8	$9,434,000	$17,689,000	$27,123,000
Nov. 15	14,223,000	24,496,000	38,719,000
Nov. 22	10,461,000	9,259,000	19,720,000
3 Weeks	$34,118,000	$51,444,000	$85,562,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

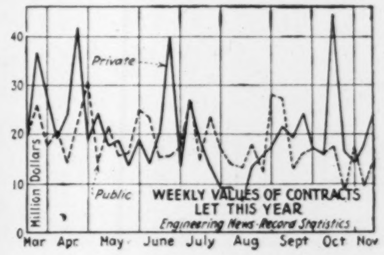
Week Ended	No.	Public Work	No.	Private Work
Nov. 8	12	$3,833,000	27	$12,150,000
Nov. 15	7	4,329,000	28	13,526,000
Nov. 22	10	2,841,000	21	5,830,000

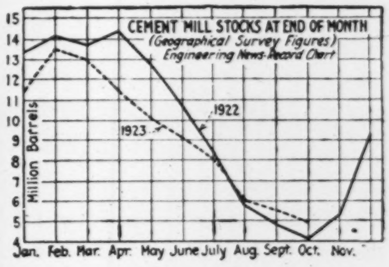
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

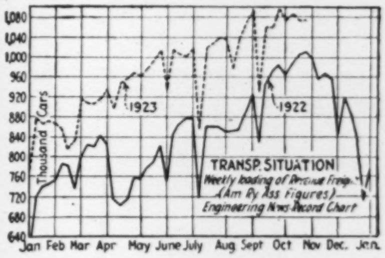
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Nov. 8	30	141	31	27	34
Nov. 15	26	148	35	21	41
Nov. 22	29	185	47	31	61

CEMENT CHEAPER—OTHER BASIC PRICES FIRM

	Quoted on Nov. 29, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N. Y., M. ft.	61.00	62.00	Nov. 1
Fir, San Fran., M. ft.	41.00	42.00	Sept. 27
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 3	Chicago Heights, Ill. Adv. Nov. 29.	Nov. 29
Dec. 4	St. Paul, Minn.	Nov. 29
Dec. 4	Toledo, O.	Nov. 22
Dec. 4	Buffalo, N. Y.	Nov. 29
Dec. 5	Webb, N. Y.	Nov. 8
Dec. 5	Akron, O.	Nov. 22
Dec. 5	Minneapolis, Minn.	Nov. 29
Dec. 5	Fargo, N. D.	Nov. 29
Dec. 6	Porterville, Calif.	Nov. 22

Bids Close		See Eng. News-Record
Dec. 12	Keyser, W. Va.	Nov. 8
Dec. 12	Albuquerque, N. M. Adv. Nov. 22 and 29.	Nov. 22
Dec. 12	Kearny (Arlington P. O.), N. J.	Nov. 22
Dec. 13	Athens, Wis.	Nov. 29
Dec. 14	Seattle, Wash.	Nov. 15
Dec. 14	Washington, Ia.	Nov. 29
Dec. 17	Elizabethtown, Ky. Adv. Nov. 29.	Nov. 29
Dec. 17	Windsor (New Windsor P. O.), Ill.	Nov. 22
Dec. 18	Laurinburg, N. C.	Nov. 22
Dec. 19	Scituate (North Scituate P. O.), R. I. Adv. Nov. 22 and 29.	Nov. 22
Dec. 19	Erie, Pa. Adv. Nov. 29.	Nov. 29
Dec. 22	Carlisle, Ia.	Nov. 29
Dec. 23	New Holstein, Wis.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Dec. 3	Long Island City, N. Y.	Nov. 29
Dec. 5	Brooklyn, N. Y.	Nov. 29
Dec. 5	Holland, Mich.	Nov. 15
Dec. 5	Akron, O.	Nov. 22
Dec. 5	Baltimore, Ia.	Nov. 29
Dec. 6	Lewistown, Pa.	Nov. 22
Dec. 10	New Orleans, La. Adv. Oct. 11 to Nov. 29.	Oct. 11
Dec. 11	Bluefield, W. Va. Adv. Nov. 22 and 29.	Nov. 22
Dec. 18	Laurinburg, N. C. Adv. Nov. 29.	Nov. 29
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Dec. 5	Salem, Mass.	Nov. 8
Dec. 5	Freehold, N. J. Adv. Nov. 15 to 29.	Nov. 15

Bids Close		See Eng. News-Record
Dec. 5	Rochelle Park, N. J. Adv. Nov. 22 and 29.	Nov. 22
Dec. 10	New Jersey Adv. Nov. 22 and 29.	Nov. 22
Dec. 14	Richmond, Tex. Adv. Nov. 29.	Nov. 29
Dec. 19	Indianapolis, Ind.	Nov. 29
Dec. 19	Delaware Adv. Nov. 29.	Nov. 29
Dec. 20	Correctionville, Ia.	Nov. 22
May 1	Tientsen, North China	Oct. 11

DAMS

Jan. 7	Los Angeles, Calif.	Nov. 29

RAILWAYS

Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Nov. 30	New York	Nov. 22
Dec. 6	Manteca, Calif.	Nov. 22

STREETS AND ROADS

Dec. 1	Wilmington, Ill.	Nov. 29
Dec. 1	Troy, N. Y.	Nov. 29
Dec. 3	Little Rock, Ark.	Nov. 29
Dec. 3	Jacksonville, Fla.	Nov. 15
Dec. 3	Spencer, Ind.	Nov. 22
Dec. 3	Long Island City, N. Y.	Nov. 29
Dec. 4	Marion, Ind.	Nov. 29
Dec. 4	New Boston, Tex.	Nov. 29
Dec. 4	Logansport, Ind.	Nov. 15
Dec. 4	Little Rock, Ark.	Nov. 22
Dec. 4	Sioux City, Ia.	Nov. 22
Dec. 4	Bartow, Fla.	Nov. 22
Dec. 4	Wilkes Barre, Pa.	Nov. 29
Dec. 4	Fairfax, Okla.	Nov. 29
Dec. 5	Punta Gorda, Fla.	Nov. 29
Dec. 5	Wewoka, Okla.	Nov. 29
Dec. 5	Aiken, S. C.	Nov. 22
Dec. 5	Raleigh, N. C. Adv. Nov. 15 and 29.	Nov. 15
Dec. 5	New Jersey Adv. Nov. 22 and 29.	Nov. 22
Dec. 5	Ebensburg, Pa.	Nov. 29
Dec. 5	Brooklyn, N. Y.	Nov. 29
Dec. 6	Palo Pinto, Tex.	Nov. 22
Dec. 6	Duluth, Minn.	Nov. 22
Dec. 6	Fresno, Calif.	Nov. 29
Dec. 6	Michigan	Nov. 29
Dec. 7	Michigan	Nov. 29
Dec. 9	Syracuse, N. Y.	Nov. 29
Dec. 10	Kansas City, Kan.	Nov. 89
Dec. 10	Palestine, Tex.	Nov. 29
Dec. 10	Houston, Tex.	Nov. 29
Dec. 10	Indianapolis, Ind.	Nov. 29
Dec. 10	Bonner Springs, Kan.	Nov. 22
Dec. 10	Buckhannon, W. Va.	Nov. 22
Dec. 10	Palestine, Tex.	Nov. 22
Dec. 10	Michigan	Nov. 29
Dec. 11	McKinney, Tex.	Nov. 29
Dec. 11	Ohio	Nov. 29
Dec. 11	West Virginia Adv. Nov. 22 and 29.	Nov. 22
Dec. 11	Michigan	Nov. 22
Dec. 11	Pennsylvania Adv. Nov. 22 and 29.	Nov. 22
Dec. 11	Quebec	Nov. 29
Dec. 12	Webster City, Ia.	Nov. 22
Dec. 12	Michigan	Nov. 29
Dec. 12	Fayetteville, N. C.	Nov. 29
Dec. 13	West Virginia Adv. Nov. 22 and 29.	Nov. 22
Dec. 15	McLeansboro, Ill.	Nov. 29
Dec. 17	East Aurora, N. Y.	Nov. 29
Dec. 17	Grenada, Miss.	Nov. 29
Dec. 18	Rushville, Ind.	Nov. 29
Dec. 18	Angleton, Tex.	Nov. 29
Dec. 18	Michigan	Nov. 29
Dec. 18	Belzoni, Miss.	Nov. 22
Dec. 19	Sierra Blance, Tex	Nov. 29
Dec. 21	Collins, Miss.	Nov. 29
Dec. 26	St. Louis, Mo.	Nov. 29
Dec. 29	Hallettsville, Tex.	Nov. 29

INDUSTRIAL WORK

Dec. 11	Tampa, Fla. Adv. Nov. 15 to 29.	Nov. 15
Dec. 12	Pulaski, Tenn.	Nov. 22
Dec. 18	Palmyra, N. Y. Adv. Nov. 22 and 29.	Nov. 22

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 4	Hartford, Conn.	Nov. 22
Dec. 4	Brooklyn, N. Y. Adv. Nov. 8 to 29.	Nov. 8
Dec. 4	Louisville, Ky.	Nov. 8
Dec. 4	Greensboro, N. C.	Nov. 15
Dec. 4	Hyde Park (Boston P. O.), Mass.	Nov. 22
Dec. 4	Slayton, Minn.	Nov. 22
Dec. 5	St. Louis, Mo.	Nov. 15
Dec. 5	Little Rock, Ark.	Nov. 22
Dec. 5	Baltimore, Md.	Nov. 22
Dec. 7	Tacoma, Wash.	Nov. 22
Dec. 7	Sturgis, Mich.	Nov. 29
Dec. 8	Buffalo, N. Y.	Nov. 29
Dec. 10	Mt. Vernon, O.	Nov. 29
Dec. 10	Indianapolis, Ind.	Nov. 15
Dec. 10	Ft. Worth, Tex.	Nov. 22
Dec. 10	New York, N. Y.	Nov. 22
Dec. 10	Richmond Hill (Jamaica P. O.), N. Y.	Nov. 22
Dec. 10	Brooklyn, N. Y.	Nov. 22
Dec. 11	Cedar Falls, Ia.	Nov. 22
Dec. 12	Grand Rapids, Mich.	Nov. 15
Dec. 15	Wichita, Kan.	Nov. 15
Dec. 15	Spearfish, S. D.	Nov. 29
Dec. 17	Camden, N. J. Adv. Nov. 29.	Nov. 29
Dec. 17	Wash., D. C. Adv. Nov. 29.	Nov. 29
Dec. 18	Ironwood, Mich.	Nov. 15
Dec. 19	Falls City, Neb.	Nov. 22
Dec. 20	Sioux City, Ia.	Nov. 15
Dec. 20	Duluth, Minn.	Nov. 29
Dec. 21	New Orleans, La.	Nov. 29
Dec. 21	Charleston, W. Va.	Nov. 15
Dec. 21	East Boston (Boston P. O.), Mass.	Nov. 29
Dec. 22	Newport, Ind.	Nov. 29
Dec. 28	Morgantown, W. Va.	Nov. 15
Jan. 1	Williamson, W. Va.	Nov. 22
Jan. 2	Bloomington, Ind.	Nov. 15
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	Galveston, Tex.	Nov. 29
Feb. 1	Dorchester, Mass.	Nov. 29

FEDERAL GOVERNMENT WORK

Dec. 3	Cement—Florence, Ala.	Nov. 29
Dec. 3	Barge and Hull—New Orleans, La.	Nov. 8
Dec. 4	Dredging—Phila., Pa.	Nov. 15
Dec. 5	Post Office — Marianna, Ark.	Nov. 8
Dec. 7	Well—Oklahoma City, Okla.	Nov. 22
Dec. 7	Post Office—Ripon, Wis.	Nov. 22
Dec. 7	Post Office—South Bend, Ind.	Nov. 22
Dec. 10	Towboat—Montgomery, Ala.	Nov. 8
Dec. 10	Maneuver Boat, etc.—Huntington, W. Va. Adv. Nov. 15 to 29.	Nov. 15
Dec. 10	Remodeling — Allentown, Pa.	Nov. 15
Dec. 14	Dredging, etc.—New York, N. Y Adv. Nov. 15 to 29.	Nov. 15
Dec. 15	Operating Machinery—Louisville, Ky. Adv. Nov. 22 and 29.	Nov. 22
Dec. 17	Bridge—Seattle, Wash.	Nov. 29
Dec. 19	Dredging — Wilmington, N. C. Adv. Nov. 22 and 29.	Nov. 22
Dec. 19	Generator, Motor, etc.—Huntington, W. Va.	Nov. 29
Dec. 19	Towboat—Memphis, Tenn. Adv. Nov. 22 and 29.	Nov. 22
Dec. 19	Bungalows—Wash., D. C.	Nov. 22
Dec. 22	Hospital—Livermore, Calif. Adv. Nov. 22 and 29.	Nov. 22
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15

UNCLASSIFIED

Dec. 4	Dragline Machines—Greenville, Miss.	Nov. 1
Dec. 4	Test Borings—Phila., Pa.	Nov. 29
Dec. 20	Pavilions—New York, N. Y.	Nov. 29
Dec. 24	Heating and Ventilating Apparatus—Cincinnati, O.	Nov. 29
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

MATERIALS AND EQUIPMENT

Dec. 3	Lumber—Atlantic, Ia.	Nov. 22
Dec. 3	Bars, etc.—Mason City, Ia.	Nov. 29
Dec. 3	Highway Materials, etc.—New York, N. Y.	Nov. 29
Dec. 3	Steel—New York, N. Y.	Nov. 29
Dec. 4	Wire and Cable—Austin, Minn.	Nov. 29
Dec. 4	Material for Bridge Repairs, etc.—Phila., Pa.	Nov. 29
Dec. 4	Plank and Piling—Onawa, Ia.	Nov. 29
Dec. 5	Inorganic Dust—New York, N. Y.	Nov. 29
Dec. 5	Lumber—Marengo, Ia.	Nov. 29
Dec. 13	Pipe—Baton Rouge, La.	Nov. 22

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Ballston Spa—Voted $325,000 bonds Crook Brook Water supply, incl. reservoir, pipe lines, valve houses, etc., 1,800,000 gal. daily capacity. Noted Oct. 11.

N. Y., Southport (Elmira P. O.)—City of Elmira plans water system here. $20,000. Will mature in spring. Engineer not announced.

N. J., Clifton—Passaic Valley Sewerage Comrs., 900 Chamber of Commerce Bldg., 24 Branford Pl., Newark, reject bids Nov. 13, pumping machinery and equipment for Yanctacaw pumping station, here. Noted Nov. 1.

N. C., Chimney Rock—See "Unclassified."

Miss., Clarksdale — See "Excavation, Drainage, Irrigation."

Tenn., Union City—Voted $125,000 bonds extensions to water plant, electric light plant and sewerage system. Noted Sept. 13.

O., Fostoria—Takes bids after Jan. 1, two 150 hp. boilers and appurtenances, 3 m.g.p.d. crank and fly wheel pumping engine. $50,000. G. Champe, Nasby Bldg., Toledo, engr.

O., Marietta—Plans elevated tank, booster station and 1½ mi. mains. $30,000. C. A. Stone, city engr.

O., Toledo—Takes bids about Jan. 1, new intake, shore well and addition to present crib (intake) at Low Service Pumping Plant. $60,000. W. G. Clark, 1046 Spitzer Bldg., engr.

Ill., Orland — Making preliminary plans waterworks pumping plant, tower, distribution mains, etc. $25,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wis., De Pere — Making plans reaming and casing 3 wells, reaming holes to 10 in. diam. and casing with 8 in. w.i. pipe, 2 air lift pumps, 1 centrifugal pump, etc. $20,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

O., Barberton—Council approved $779,687 bond issue for 600 m.g. reservoir covering 600 acres, waters will be stored up by 400 ft. dam, 200 ft. wide, 30 ft. high, etc., in Wolf Creek Valley. Spillway 150 ft. wide, will be feature of dam. Total cost $1,000,000. Noted Oct. 25.

Ind., Farmersburg — Plans new waterworks with electrically operated pumps, etc. $40,000.

Minn., Little Falls—Voted $100,000 bonds for waterworks improvements. May buy privately owned system, remodel and extend same. Address City Engineer.

Mo., Cameron—Making preliminary plans waterworks and light improvements. $15,000. Burns & McDonnell Eng. Co., 401 Interstate Bldg., Kansas City, engrs.

Mo., La Plata—Plans election in spring to vote on $90,000 bonds water works improvements and sewerage system.

Tex., Corsicana—Rejected bids equipment for 2 m.g. filter plant. Will readvertise soon. W. W. McClendon, city engr.

Tex., Corsicana—Soon takes bids concrete spillway for Lake Halbert, 1,800 cu. yd. concrete and 2,000 lb. reinforcing steel. W. W. McClendon, city engr.

Tex., Crosbyton—Voted $22,000 bonds, mains and equipment. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Lone Oak—See "Streets and Roads."

Tex., Malone—Dec. 4, to vote on $40,000 bonds, complete plant and mains. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Okla., Oklahoma City—Election Nov. 30, to vote on $1,400,000 bonds for 350 ft. extension to main dam, emergency control works, flood gates, larger by pass and riprap of banks. B. M. Hart, City Hall, engr.

Mo., Boonville — Plans to purchase 350 g.p.m. motor driven pump for waterworks. C. H. Miller, city clk.

Calif., Bakersfield—See "Dams."

Calif., Manteca—See "Excavation, Drainage, Irrigation."

Calif., Santa Barbara—Montecito Co. Water Dist. having plans prepared 6,000 ft. 7 x 8 ft. tunnel through Santa Ynez Mountain at Toro Canyon, also concrete dam 135

Waterworks (Continued)

ft. high, 300 ft. long on top, 50 ft. at bottom. Leeds & Barnard, Central Bldg., Los Angeles, engrs.

Calif., Smartsville—Excelsior Water & Power Co. plans multiple arch concrete dam on Deer Creek, 100 to 166 ft. high. Penstock and power house will be built by day labor.

Ont., Neustadt—Plans waterworks system. $50,000. Securing estimates.

BIDS DESIRED

N. Y., Buffalo—Dec. 4, by Commissioner of Pub. Wks., Municipal Bldg., 63½ tons standard and special 10, 12, 16 and 24 in. pipe castings for filter plant. To exceed $5,000. G. C. Andrews, Col. Ward Pumping Station, engr.

Pa., Erie—Taking bids 20 m.g. triple expansion high duty pumping engine. G. Gensheimer, secy. and treas. of Comrs. of Waterworks.

Pa., Erie — Dec. 19, by Comrs. Water Works, Water Works Office, 8 m.g. addition to filters. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, engrs.; adv. E. N.-R. Nov. 29.

Ky., Elizabethtown—Dec. 17, by Mayor and City Council, waterworks improvements; adv. E. N.-R. Nov. 29.

Ind., Evansville—Nov. 30, by Bd. Waterworks Trustees, 10,000 ft. 2 in. and 15,000 ft. 1 in. w.i. galvanized pipe.

Ill., Chicago Heights—Dec. 3, by Bd. Local Impvts., c.i. mains in Halsted St., etc. W. J. Sadler, secy.; adv. E. N.-R. Nov. 29.

Wis., Athens—Dec. 13, by C. J. Hamilton, village clk., well reservoir, 50 ft. diam., 9 ft. deep rock excav., 30 ft. diam., 28 ft. deep, graduated to 12 ft. diam., 37 ft. deep. $15,000. W. G. Kirchoffer, Vroman Blk., Madison, engr.

Ia., Carlisle — Dec. 22, for waterworks. $22,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs. Noted Nov. 15.

Ia., Washington—Dec. 14 by City Clerk, waterworks improvements, incl. brick building, electric driven pumps, piping and equipment, and 200,000 gal. elevated steel tank. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engrs. Noted Nov. 22.

Minn., Minneapolis—Dec. 5, by F. S. Gram, city purch. agt., 62,000 ft. 6 and 8 in. Class C. c.i. pipe. 16 ft. lengths, also 7,400 lin.ft. 12 and 16 in. Class B c.i. pipe, 12 ft. lengths, two hundred and twenty-five 6 in. gate valves, hub and Class C; thirty 8 in. gate valves hub end, Class C; twenty 12 in. gate valves, hub end, Class B; 120 hydrants, 120 tons special castings. J. A. Jensen superv. waterworks.

Minn., St. Paul—Dec. 4, by H. W. Austin, city purch. agt., furnishing and delivering 88,440 lin.ft. Class B c.i. water pipe and 19 tons c.i. specials. G. M. Shepard, city engr.

N. D., Fargo—Dec. 5, improving waterworks, 6 in. c.i. lateral mains, hydrants, etc. in North Fargo, $25,000. Stevenson, Miller & Luckey, Fargo, engrs.

Tex., Corsicana—City Com. taking bids 2 m.g. filter plant, $30,000, also concrete spillway at Lake Halbert, 1,800 cu.yd. concrete, etc. $25,000. W. W. McClendon, city engr.

Calif., Los Angeles—Dec. 3, by Supervs. Los Angeles Co., 2 unit water softener filter at county farm.

Calif., Pasadena—City Water Dept. receiving bids 12,000 ft. 4 in., 16,000 ft. 6 in., 16,000 ft. 8 in. and 4,000 ft. 12 in. c.i. mains for Green St.

Calif., Red Bluff—Dec. 3, for 2,500 ft. or more, 12 in. No. 10, riveted water pipe. E. F. Lennon, clk.

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Nov. 23, mains in Kingshighway and Ave. P, from N. De Stefano, 257 Glenn Ave., Tompkinsville, $20,300; Aves. N and O, etc., from Grippo Contg. Co., 85 Webster Ave., Long Island City, $16,800; Ampere and Bayview Aves., etc., from Melrose Constr. Co., 103 East 125th St., New York, $15,500. Noted Nov. 15.

O., Cleveland—For 30 in. and 24 in. c.i. mains in Woodhill Fd., Contr. 32, Sects. N and S, from Winterbottom Connelly Co., 2997 Meadowbrook Blvd., Cleveland Heights, $126,690 and $117,645 respectively.

Wis., Hurley—Water purification plant and pumping station at Lake Lavina, from J. W. Hildred & Co., 721 Commerce Bldg., St. Paul, Minn., $35,200. Noted Nov. 8.

CONTRACTS AWARDED

N. J., Woodbury—C. S. Davis, city clk., c.i. pipe, to U. S. Cast Iron Pipe Co., 1421 Chestnut St., Phila., $35,987 castings, etc., to Rensselaer Valve Co., 50 Church St., New York City. Noted Nov. 1.

Pa., Bethlehem—Laying 6,700 lin.ft. c.i. pipe to F. H. Clement Co., Inc., Bethlehem. $2.15, pumping equipment and electrical work to Bethlehem Electric Co., Bethlehem, $14,673 and $4,354 respectively.

Miss., Moorehead — Water works plant, 100,000 gal. tank, 4, 6 and 8 in. pipe, two 500 g.p.m. pumps, to G. P. Sledge, Abbebille, La., $50,000. Noted Oct. 25.

O., Cleveland—Concrete tunnel to Fairmount Rd. for Baldwin-Fairmount Project, Contr. 43, 1,710 cu.yd. concrete, to P. F. Connolly, East 102nd St. near Euclid Ave., $140,000. Noted Nov. 15.

Wis., New Holstein — Drilling 800 ft. artesian well, 180 ft. 12 in., 390 ft. 10 in. and balance 8 in., to M. T. Peterson, 120 North Franklin St., Madison. Engrs. est. $15,000. Noted Nov. 22.

Minn., St. Cloud—City, 20 blocks mains, hydrants, valves, etc., to E. T. Webster, 1463 Goodrich Ave., St. Paul, $17,841. Noted Nov. 8.

Tex., Ft. Worth—For 8 m.g. centrifugal pump, to A. M. Lockett & Co., Magnolia Bldg., Dallas, $15,300.

Sewers

PROPOSED WORK

N. C., Chimney Rock—See "Unclassified."

Tenn., Union City—See "Waterworks."

O., Toledo — Voted $490,000 bonds completing intercepting sewerage system, constructing sewage pumping station and disposal plant. A. Jackson, City Bldg., dir. Pub. Serv.. Will mature in spring.

Ill., Rockdale (Joliet P. O.)—Plans 10,000 ft. 8-24 in. main and lateral sewers. $90,000. Will probably mature about Jan. 1. Engineer not selected. Address F. J. Gospodarie, mayor, D'Arcy Bldg., Joliet.

Minn., Willmar—City making plans complete sanitary and storm sewerage system, remodeling present system and install new treatment plant with pump, filter beds, etc. $100,000. Claussen & Carroll, 406 Metropolitan Bank Bldg., St. Paul, engrs.

Mo., La Plata—See "Waterworks."

Tex., Alvin—Making plans disposal plant and sewers. $25,000. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Tex., Cameron — Making plans disposal plant and sewers. $25,000. A. F. Mitchell, Cameron, engr.

Tex., Kerrville—Dec. 18, to vote on $78,000 bonds, complete disposal plant. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Calif., La Verne—City plans election to vote on $65,000 bond issue for sewerage system. Black & Veatch, Fay Bldg., Los Angeles, engrs.

Calif., Pismo Beach—City to vote on $35,500 bonds issue for disposal plant, 1,200 ft. c.i. out fall sewer and septic tank. Black & Veatch, Fay Bldg., Los Angeles, engrs.

Calif., South San Francisco—Dec. 3, to vote on $58,000 bond issue, sewers in San Bruno Rd. and portions of Butler Rd., etc. G. A. Kneese, c/o Courthouse, Redwood City, engr.

Calif., Whittier—To vote on $50,000 bond issue for completion of disposal plant. Black & Veatch, Fay Bldg., Los Angeles, engrs.

Ont., Hamilton—Election in January to vote on $890,000 bonds for sewage disposal and storm overflow system. W. L. McFaul, City Hall, engr.

BIDS DESIRED

N. Y., Brooklyn — Dec. 5, by E. Riegelmann, boro pres., Boro Hall, sewer basins in various locations of Kingshighway between Flatbush and Ocean Aves., Douglass St., Ave. N, and southwest corners of East 28th and East 29th Sts.; northwest, southwest and southeast corners of Riverdale Ave.; sewers in Ferris, 80th and East 28th Sts., Ft. Hamilton Parkway between 83rd and 84th Sts., Ft. Hamilton Parkway, east side, between Bay Ridge Ave. and 68th St., Ft. Hamilton Parkway, west side, between 72nd and 73rd Sts.

N. Y., Long Island City—Dec. 3, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Forest, 45th, 167th, 168th, 99th and 108th Sts., 134th St. from Wyoming to Liberty Aves., 134th St. from 101st to Liberty Aves.

Md., Baltimore—Dec. 5, by Bd. of Awards, 13,500 ft. of 6-48 in. sewers and drains, Sanitary Contr. 207. $60,000. B. L. Crozier, 2721 St. Paul St., engr.

N. C., Laurinburg — Dec. 18, by H. W. Malloy, mayor and Bd. Comrs., sanitary sewer extensions. W. E. Matthews, Laurinburg, engr.; adv. E. N.-R. Nov. 29.

BIDS RECEIVED

Ky., Louisville—Comrs. of Sewerage, constructing "Dry Run Relief Drain," 1,200 ft. of 9 ft. semi elliptical, 258 ft. of 8 ft. 6 in. semi elliptical and special structures, from H. Bickel Co., 413 West Garden St., $133,723. Noted Nov. 2.

Ill., Chicago — Chicago Sanitary Dist., 910 South Michigan Ave., for Calumet Intercepting Sewer, Contr. 1, and 95th St. Pumping Station, Divisions A, B, C, D, E, F and G, from T. J. Forschner Contg. Co., 125th St. and Michigan Ave., (with Division D from Sanitary Dist. of Chicago pump plans), $969,050; (with Division D from makers pump plans), $1,039,050. Noted Nov. 8.

Calif., Los Angeles—Furnishing 195,000 vitr. clay sewer lining blocks, Model B, for Sects. 4-8 inclusive, north outfall sewer, from Pacific Clay Products Co., Amer. Bank Bldg., $294 per M.; Tropico Potteries, Inc., Glendale, $294 per M.

CONTRACTS AWARDED

Conn., Meriden—Laying 8-20 in. sewers in Britannia, Hillcrest, Carpenter, Flower and Highland Aves., to L. Suzio Constr. Co., State St. Engrs. est. $33,000.

N. J., Trenton—Concrete sewer in Remsen St., also 8 in. drains in DeKlyn and Cortlandt Sts., to J. Cifelli, Fair St., $31,400.

O., Cleveland—Cuyahoga Co. 2,700 ft. 8-27 in. vitr. clay and 725 ft. 33 in. segmental block sewer in Snow Rd. Impvt. 39, to Duff & O. H. Champion, 1471 Arthur Ave., Lakewood, $38,386. Noted Nov. 15.

Wis., Milwaukee—Sewerage Comn., 508 Market St., East High Lever Sewer, Sect. 2. rein.-con. pipe, Cambridge and Brady Sts. to Cambridge and Concord Sts., to Hammen & Co., 516 Garfield Bldg., Detroit, Mich., $575,187. Noted Oct. 25.

Mo., University (St. Louis, P. O.) — C. Crane Wilmore Corp., Boatmens Bank, St. Louis, about 4,000 ft. 8-36 in. storm and sanitary sewers, etc., in University Hills subdivision, here, to Frazier-Davis Constr. Co., Arcade Bldg., St. Louis. Engrs. est. $35,000. Noted Oct. 18.

Ark., Hot Springs—For 10,400 ft. 24 in. sewer, etc., to E. B. Mooney, 348 Valley St., $41,000.

Tex., Clarksville — Imhoff tank disposal plant and sewers, to Mitchell Constr. Co., Carter Bldg., Houston, $36,000. Noted Sept. 20.

Tex., Laredo—Storm sewer system, precast mains and laterals, to Kirkwood & Wharton, 231 West Commerce St., San Antonio, $83,040. Noted Oct. 11.

Calif., Alhambra—For 52,956 lin.ft. 8 in. vitr. sewer, 1,491 house connections, etc., in Dists. 3 and 5, to Hickay & Harmon, 1501 Mission St., $62,387 and $74,385 respectively. Noted Nov. 8.

Calif., Pasadena—Plans to vote on $125,000 bonds for pipe line connections to new disposal plant.

Que., Montreal—Constructing 930 ft. 2 x 3 brick sewer and 2,100 ft. 12 in. tile sewer in Sherbrooke St. from Wurtels to Bourbonniere Sts., to C. Frascareli, 654 Berri St., $38,245. Noted Nov. 15.

Waste Disposal

BIDS DESIRED

Calif., Marysville — J. O. Wanzer, city mgr., taking bids garbage incinerator, Nye Odorless or equal.

Bridges

PROPOSED WORK

Fla., Lake Worth — See "Excavation, Drainage and Irrigation."

Ohio—See "Streets and Roads."

Ill., Centralia—City plans concrete and steel viaduct over Illinois Central and Chicago, Burington & Quincy R.R. tracks. City and railroads will share cost. Address A. Lender, mayor.

Bridges (Continued)

Minn., Mendota—Hennepin Co. (Minneapolis) having plans prepared and opens bids early in January, 4,100 ft. bridge, 110 ft. high, 45 ft. roadway, two 6 ft. sidewalks, over Minnesota River, here. Alternate designs on rein.-con. arch and on concrete piers, steel deck trusses and concrete deck, $1,570,000 and $1,400,000 respectively. W. H. Wheeler & C. A. P. Turner, 1112 Metropolitan Life Bldg., Minneapolis, associated engrs. Noted May 31.

Ark., Jasper—Newton Co. making plans 5 concrete bridges. $82,000 appropriated.

Tex., Dallas—See "Streets and Roads."

Tex., Fairfield—See "Streets and Roads."

Tex., Houston—Harris Co. election Dec. 18, to vote on $750,000 bonds, bridge across ship channel near 79th St., also miscellaneous bridges and paving Washington Ave. Howe & Wise, co. engrs.

BIDS DESIRED

Delaware—Dec. 19, by State Hy. Dept., Dover, Seaford Bridge and roadway, Contr. 42-B; adv. E. N.-R. Nov. 29.

Miss., Grenada—See "Streets and Roads."

Ohio—See "Streets and Roads."

Ind., Indianapolis—Dec. 19, by Marion Co., rein.-con. bridge over Fall Creek on Delaware St., three 81 ft. spans. $206,000.

Tex., Palestine—See "Streets and Roads."

Tex., Richmond—Dec. 14, at office C. D. Myers, judge Fort Bend Co., state highway bridge over Brazos River; adv. E. N.-R. Nov. 29.

BIDS RECEIVED

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Nov. 22, following bridges, from J. R. Stevens Co., Monmouth, 3 concrete slab and 1 concrete substructure, on Route 2, Sect. 74-B, Lee Co., 711 cu.yd. concrete, $24,167; from Chernuss Constr. Co., Minneapolis, Minn., 1 steel superstructure Route 2, Sect 74C, Lee Co., $7,027; from G. C. Fairclo Paxton, 1 concrete girder, Route 3, Sect. 40-B, McDonough, $11,197; from C. T. Laird, Pittsfield, 2 concrete girders Route 36, Sect. 18-B, Pike Co., $13,351; from Whitewater Bridge Co., Whitewater, Wis., 1 concrete overhead bridge Route 37, Sect. 13 C, Williamson Co., $13,516. Noted Nov. 15.

Tex., Jefferson—See "Streets and Roads."

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., 100 ft. concrete slab with 577 ft. bituminous macadam approach, over Thomas River in Middleboro and Bridgewater, to Lane Constr. Co., 37 Colony St., Meriden, Conn., $152,576; one span bridge 75 ft. long, 26 ft. wide, with 950 lin.ft. bituminous macadam approaches, in Bernardston, to C. I. Hosen, Turners Falls, $38,377.

S. C., Walhalla—See "Streets and Roads."

Fla., West Palm Beach—Palm Beach Co., steel draw bridge and approaches over St. Lucie Canal, Loop Rd., 260 ft. long, to Champion Bridge Co., Fort Lauderdale, $38,942.

Kentucky—State Hy. Dept., Frankfort, 162 ft. steel span over Red River, Federal Aid Project 108, Powell Co., to Brooksville Bridge Co., Brooksville, O., $39,267. Noted Aug. 23.

Ohio—See "Streets and Roads."

Ia., Spencer—Clay Co., 1 pony truss, to Parsons, Meyer Constr. Co., Dyersville, $7,900; 1 high truss, to Humphrey & Sons, Cherokee, $18,752; 1 high anl 1 pony truss, to E. Landsman, Everly, $22,550. Noted Nov. 1.

Calif., Salinas — Monterey Co., 712 ft. bridge, 21 ft. wide, near Hilltown, to J. G. Williams Constr. Co., 519 California St., San Francisco, $32,437; furnishing and delivering 500 ton steel for same, to Judson Mfg. Co., 817 Folsom St., San Francisco, $42,440. Noted Nov. 15.

Dams

PROPOSED WORK

N. C., Chimney Rock—See "Unclassified."

Okla., Oklahoma City—See "Waterworks."

Calif., Bakersfield—Kern River Water Storage Dist. plans to acquire existing canals and irrigation facilities and construct dam on Kern River, install pumping plants, and building new canals, etc. $15,000,000. Engineer not selected.

Calif., Santa Barbara—See "Waterworks."

Calif., Smartsville—See "Waterworks."

BIDS DESIRED

Calif., Los Angeles—Jan. 7, by Los Angeles Co., core and test drilling to determine foundations at site of proposed flood control dam in San Gabriel Canyon for Los Angeles Co. Flood Control Dist. County appropriated $50,000 to conduct investigations for project which includes dam, ultimately 425 ft. high, 1,800 ft. long on top, 420 ft. thick at base, requiring approximately 2,000,000 cu.yd. concrete, 20 balance valves and variable head power plant. $20,000,000. J. W. Reagan, ch. engr.

CONTRACTS AWARDED

Tenn., Shelbyville—Pub. Light and Power Co., 18 ft. concrete dam about 300 ft. long to develop 750 hp., also power house, to Foster, Creighton & Co., 4th and 1st Bldg., Nashville. Est. cost $80,000.

Railways

PROPOSED WORK

North Carolina—Southern Ry., 13th St. and Pennsylvania Ave., Wash., D. C., plans enlargement of yards at Asheville, N. C. and Knoxville, Tenn. Making surveys for double tracking line from Asheville to Leadville.

Indiana—See "Industrial Works" under Evansville.

CONTRACTS AWARDED

Minnesota—Duluth-Superior Traction Co., 2631 West Superior St., Duluth, will extend railway from Kenwood Ave. and 14th St. to St. Marie St., by day labor. Work includes 1½ mi. double standard steel 90 lb. rails. $68,000. H. Warren, mgr.

Texas—U. S. Gypsum Corp., Sweetwater, 3 mi. trackage and plant site grading at Sweetwater, to List & Gifford, North Texas Bldg., Dallas, $200,000. Total cost of plant $1,000,000.

Excavation, Drainage and Irrigation

PROPOSED WORK

N. C., Columbia — D. D. 1, Tyrrell Co. plans cleaning out old canal, constructing new ones, clearing right of way, etc. on several projects. $50,000. J. G. Brickhouse, chn. Bd. Drainage Comrs.

Fla., Lake Worth—South Lake Worth Inlet Dist. Com. election Dec. 11, to vote on $125,000 bond issue, to connect Lake Worth with Ocean at point 1½ mi. north of Boynton Beach, will be 100 ft. wide, also plans to extend Ocean Blvd. over canal on rainbow arch bridge, 24 ft. driveway, 5 ft. walk on each side.

Fla., Tampa—Dover D. D., Hillsborough Co., Giddius Bldg., had plans prepared for system to drain 11,340 acres, 630,000 cu.ft. excav. $171,988. McElroy Eng. Co., Giddius Bldg., engrs.

Miss., Clarksdale—Burkes Landing D. D., c/o Supervs. Coahoma Co., Court House, soon takes bids drainage ditches and pumping plant. $25,000.

Ia., Newton—Jasper Co. plans drainage work along Skunk River. $100,000. Engineer not selected.

Calif., Bakersfield—See "Dams."

Calif., Manteca—South San Joaquin Irrigation Dist. plans to purchase two 1,000 g.p.m. and two 750 g.p.m. centrifugal pumping plants. G. W. Parker, supt.

Calif., Williams — Williams Irrigation Dist. plans to vote on $115,000 bonds for canals, etc.

BIDS DESIRED

Fla., Tampa—Interstate Investment Co., Citizens Bank Bldg., taking bids dredging 130,000 cu.yd. rock and sand in Tampa Harbor. To exceed $25,000.

Calif., Knights Landing (Grafton P. O.)—F. H. Tibbetts, engr., Alaska Commercial Bldg., San Francisco, receiving bids constructing irrigation and drainage ditches, 7,500 ft. Lateral 2, 5,800 cu.yd. earth work; 4,600 ft. upper main canal, 7,875 cu.yd. earth work; 5,100 ft. lower main canal, 2,350 cu.yd. excav.; 1,400 ft. drain H, 1,575 cu.yd. excav.; 10,000 ft. main drainage canal to be cleaned, etc., for Meek Estate, c/o engineer.

BIDS RECEIVED

Ark., Jonesboro—D. D. 25, Craighead Co., 560,000 cu.yd. earth by floating dredge and 218,000 cu.yd. by drag line of Bay City machine, to McWilliams Dredging Corp., Exch. Bldg., Memphis, Tenn., $0.9785 per cu.yd. Noted Nov. 8.

Nev., Lovelock—Lovelock Valley D. D. 1, 336,495 cu.yd. excav., etc., for drainage canals, from Union Constr. Co., Ogden, Utah, $0.1375. Noted Oct. 25.

CONTRACTS AWARDED

Ark., Walnut Ridge—Beaver Dam Duck Pond D. D. 236,000 cu.yd. drainage ditches, to W. M. Steinagle, Walnut Ridge, $0.115 per cu.yd.

Calif., Oroville—Directors Thermalito Irrigation Dist., constructing Lake Wilenor storage work (known as Concow Dam), to S. J. Greaves, Oroville, $23,543. Noted Nov. 1.

Ont., Trent River—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, 35,000 cu.yd. rock excav. in tailrace of power development at Dam 9, to Lumsden Eng. & Transport Co., 6 Adelaide St. E., Toronto, $75,000.

Streets and Roads

PROPOSED WORK

Connecticut—State Hy. Dept., Hartford, plans paving with waterbound macadam, 11,450 sq.yd. highway in Groton, 24,660 sq.yd. in Southbury, 13,700 sq.yd. Arlington Rd. in Pomefret and 42,000 sq.yd. in Sharon; concrete paving 10,130 cu.yd. in Kent, 5,700 cu.yd. in East Lyme, 8,500 cu.yd. in Waterford, and 38,000 sq.yd. in Old Lyme. J. A. MacDonald, state highway comr.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, received no bids Nov. 21, repaving Concord St., grade 1 granite. Noted Nov. 15.

Pa., Ebensburg—Comrs. Cambria Co., open bids about Dec. 21, constructing 12,244 ft. brick or concrete highway on Menoher Pike, 18 ft. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Erie—Plans to resurface and widen from 40 to 60 ft. 10th St. from State to Parade Sts., $27,000, widen from 56 to 64 ft. 12th St. from French to Holland Sts., $40,000, resurface with sheet asphalt 16th St. from State to Parade Sts., $25,000, and 10th St. from Parade to East Aves. $40,000. F. G. Lynch, city engr.

Pa., Lewistown—Comrs. Mifflin Co. take bids after Jan. 1, constructing 2 mi. brick or concrete highways in Armaugh, Menno and Oliver Twps. $75,000. J. B. Long, Lewistown, engr.

Pa., Nanty-Glo—Comrs. Cambria Co. (Ebensburg) plan paving 2,727 ft. 2nd St., here, brick on concrete, 18 and 26 ft. County to pay $25,000 of cost, Boro. and Twp. balance. C. C. Hauth, Trust Bldg., Ebensburg, engr.

Maryland—State Rds. Comn., Baltimore, rejected bids paving 2.37 mi. Park Heights Ave., BC-41, 60,000 sq.yd. bituminous macadam on concrete. Noted Nov. 22.

N. C., Chimney Rock—See "Unclassified."

Fla., Jacksonville—Plans to pave Riverside Ave., 2 in. asphalt, Schofield St., 6 in. concrete, 15th and 18th Sts., 6 in. lime rock, $25,500, also Broad St., vitr. brick, Simmons and South Goodwin Sts., 6 in. concrete, $28,000. W. E. Sheddon, city engr.

Fla., Key West—Monroe Co. voted $149,000 bonds for roads, bridges, etc., between here and mainland in Dade Co., also $151,000 bonds for roads and bridges on Stock Island near here, and between here and mainland. B. C. Moreno, co. engr.

Fla., Madison—Dec. 11, to vote on $60,000 bonds to pave various streets. C. S. Wadsworth, Madison, will probably be engr.

La., New Orleans—Plans to expend $840,000 for 1924 paving program. W. G. Black, comr. Dept. Pub. Property.

Tenn., Clarksville—Voted $75,000 bonds street improvements.

Tenn., Columbia—Maury Co. voted $492,000 bonds improving 192 mi. of county, state and federal aid roads. Noted Oct. 25.

Kentucky—State Hy. Dept., Frankfort, plans grading 3 mi. Harlan-Loyal Rd., 24 and 28 ft. State Project 6, Harlan Co. J. S. Boggs, state highway engr.

Ky., Hickman—Voted $30,000 bonds to pave streets.

Ohio — The sum of $6,125,325 will become available for improvement of county and township roads in following counties within next few years: Athens Co. $90,000, Carroll Co. $47,330, Harrison Co. $56,245

Streets and Roads (Continued)

Hocking Co. $59,130, Jefferson Co. $224,600, Lucas Co. $535,000, Montgomery Co. $315,-000, Pike Co. $31,600, Portage Co. $67,800.

Ohio—Dept. Highways and Pub. Wks., Columbus, rejected bids grading, bridging and paving 2.939 mi. Sect. "S" New Lexington-Athens Rd., Perry Co., and 2.554 mi. Sect. "B" Marietta-Athens Rd., Athens Co. A. V. Donaheys, dir. highways. Noted Nov. 22.

O., Dayton—Preparing estimates paving Harvard Blvd., Cornell Dr., Ridge, Cambridge, Victor, Linda Vista, Ferndale, Redfern, Staley, Norman and Home Aves., East 3rd, South Orchard, Quitman and Albany Sts., brick, concrete, asphalt and rolled gravel. J. B. Hale, city engr.

O., New Philadelphia — Tuscarawas Co. plans improving 3½ mi. Dennison Natl. Pike, 20 ft., macadam, $125,000; 1 mi. State St. in Newcomerstown, 40 ft., brick, $35,000; 5.4 mi. Uhrichsville-Gnadarhutten Rd., Rds. 352 and 341, all 20 ft., $205,000. State will appropriate toward cost.

O., Sandusky—C. W. Sadler, city mgr., takes bids in spring resurfacing Washington Row, Columbus and Tiffin Aves. $54,001. J. M. Eakin, city engr.

Ill., Mt. Vernon — Making preliminary plans grading and paving with concrete, asphaltic concrete or brick, 25,000 ft. various streets. Contract will probably be awarded in spring. $250,000. C. E. Wilson, Marion, engr.

Minn., Duluth—St. Louis Co. plans gravel surfacing in 1924 Hibbing-Miller trunk connection, Duluth part of Congdon Blvd., Thomson Hill-Worden St. connection, Gilbert-Miller Trunk connection, Ely-Finland Rd., State Rd. 1 north of Vermilion Lake, and connection of Fond-du-Lac-Wrenshall-Nickerson Rd., total $522,000. The above will be paved with 18 ft. concrete during 1925. R. W. Acton, co. engr.

Minn., St. Paul—Ramsey Co. having revised plans prepared grading, etc., Project 23-60, Prescott Connection between Point Douglas Rd. and Minnesota Trunk Highway 3. $50,000. Former bids rejected. G. J. Ries, co. aud. Noted Sept. 20.

Kan., Hutchinson—Soon takes bids grading and paving North Plum St. from 4th to 11th Sts., and West 30th St. from Main to Monroe Sts., 10,400 sq.yd. asphaltic concrete on 5 in. concrete. H. J. Haskard, City Hall, comr.

Kan., Smith Center—Plans paving 9,450 sq.yd. Main St., probably vitr. brick on concrete. $30,000 to $35,000. Engineer not named.

Kan., Topeka—Shawnee Co. takes bids soon concrete paving 3.898 mi., Federal Aid Project No. 177, Sect. C., 18 ft. A. C. Lagerwall, Topeka, engr.

Ark., Fayetteville—Making preliminary plans grading, paving, etc., South College Ave., East, Rock and Mountain Sts., concrete or asphaltic concrete. $27,000.

Ark., Ft. Smith—Plans resurfacing 30,000 sq.yd. School, South School and Prairie Sts., asphalt. W. L. Winters, 700 South 20th St., Ft. Smith, engr.

Ark., Pine Bluff — Making preliminary lans grading and concrete paving, etc., 11,000 ft. in Country Club Impvt. Dist., ncl. Cherry, 26th, 27th, 36th and 44th Sts. nd through Goldview Addition. $100,000.

Tex., Amarillo—Potter Co. plans surfacng 20 mi. road from Canyon to Amarillo. 200,000. O. Seward, co. engr.

Tex., Archer City—Archer Co. plans elecion to vote on $300,000 bonds highway improvements. E. M. Hooper, co. judge.

Tex., Colorado—Mitchell Co. plans elecon to vote on $1,000,000 bonds, construcon Highway 1. F. F. Du Bose, co. engr.

Tex., Cuero—De Witt Co. election soon o vote on $133,000 bonds, improving 30 mi. ighway from here to San Antonio. State nd Federal Government to appropriate 266,000.

Tex., Dallas — Soon takes bids paving 25,000 sq.yd. Alamo, Cockrell, Colonial, th, Fitzhugh, 4th, Henderson, Madison, th, Oakland, Oram, 2nd, Waverly, Walter nd Hord Sts., brick, asphaltic types both ock and artificial mixes. $450,000. E. A. ingsley, city engr.

Tex., Dallas—Making plans bituminous aving 1½ mi. Colorado Blvd., 100 ft. wide, lso building several bridges over creeks, tc. $40,000-$50,000.

Tex., Desdemona—Making plans paving reets, various types. $30,000 bonds voted. . Gresham, city engr.

Tex., El Paso—El Paso Co. voted $1,260,-000 bonds hard surfacing various roads. State and Federal Government appropriated $440,000. L. A. White, co. engr. Noted Nov. 8.

Tex., Fairfield—Freestone Co. election Dec. 22, to vote on $1,000,000 bonds for road construction, also bridge over Navasoto River. F. Roper, co. judge.

Tex., Ft. Worth—Making plans paving East Magnolia St. near Hill Side Park, brick or bituminous types. $50,000. D. L. Lewis, city engr.

Tex., Gonzales — Gonzales Co. election Dec. 22, to vote on $125,000 bonds, highway improvements. State and Federal Government to appropriate $250,000.

Tex., Hebbronville—Jim Hogg Co. plans grading and surfacing with bituminous macadam 12 mi. State Highway 12, 18 ft. $60,000 bonds voted. State and Federal Government each to appropriate $60,000. A. M. Brumford, co. judge.

Tex., Houston—See "Bridges."

Tex., Jacksboro—Jack Co. voted $400,-000 bonds grading and hard surfacing 70 mi. State Highways 25 and 39, 18 ft. State and Federal Government will appropriate $600,000. J. D. McComb, co. judge.

Tex., Lone Oak—Dec. 18, to vote on $50,-000 bonds, paving and waterworks extensions. Address mayor.

Tex., McAllen—Attorney Generals Dept., Austin, approved $30,000 bond issue for street paving. Address F. B. Freeland, mayor. Noted Aug. 9.

Tex., New Braunfels—Comal Co. plans election to vote on $200,000 bonds highway improvement between here and Seguin. J. H. Caldwell, co. engr.

Tex., Palo Pinto—Palo Pinto Co. making plans grading and surfacing with bituminous macadam 5 mi. State Highway 1, 18 ft. $110,000. G. W. Courter, co. engr.

Tex., Sonora—Sutton Co. making plans grading 20.1 mi. and gravel surfacing 17 mi. Old Spanish Trail Highway, 18 and 24 ft. $430,000. H. P. Stockton, co. engr.

Tex., Sinton—San Patricio Co. election Dec. 8, to vote on $25,000 bonds, additional highway improvements in Rd. Dist. 3. F. M. Percival, Rockport, co. engr.

Okla., Fairview—Major Co. having plans prepared grading and graveling 12 mi. road, 125,000 sq.yd. gravel, 80,000 cu.yd. earth and 6,000 cu.yd. rock excav. $60,000. F. G. Simmons, Capitol Bldg., Oklahoma City, engr.

Okla., Holdenville — Plans grading and paving 14 blocks Huckley, Oak, Plum and Cedar Sts., 15,000 sq.yd. concrete, 3,900 lin. ft. curbing, 3,900 lin.ft. gutter, 4,100 cu.yd. excav. $60,000. C. Edge, Holdenville, engr.

Okla., Norman—Plans grading and paving 18 blocks, 16,000 sq.yd. concrete, 4,600 lin.ft. curbing, 5,100 cu.yd. excav. $56,000. Packham & Sutton, 227 West Grand St., Oklahoma City, engrs.

Okla., Okmulgee—Plans paving 8 blocks Bryan and Belmont Sts., 8,400 sq.yd. vertical fibre brick, 4,800 lin.ft. curbing, 2,600 cu.yd. excav., $42,000; 7 blocks 9th St., 6,200 sq.yd. vertical fibre brick, 2,400 lin.ft. curbing, 2,400 lin.ft. gutter, 1,800 cu.yd. excav., $30,000. T. J. Embree, Okmulgee, engr.

Okla., Pauls Valley—Garvin Co. having surveys made grading and paving 2 highways, 35 mi. long, 18 ft. wide. $500,000. P. A. Little, Pauls Valley, engr.

Okla., Pawhuska — Plans grading and paving 24 blocks in Dist. 26, 28,000 sq.yd. concrete, etc. $90,000. J. M. Buckley, Pawhuska, engr.

Okla., Perry—Plans grading and paving 7 blocks E St., 8,600 sq.yd. concrete, 3,200 lin.ft. curbing, etc. $36,000. C. A. Woods, Stillwater, engr.

Okla., Sayre—Plans grading and paving 6 blocks Maple and 2nd Sts., 3,750 sq.yd. concrete, etc. $26,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engr.

Okla., Tahlequah—Surveys being made concrete paving 9 blocks Cherokee St., 12,-500 sq.yd. concrete, 4,500 lin.ft. curbing, 2,600 cu.yd. earth and 1,200 cu.yd. rock excav. $50,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs.

Okla., Wewoka — Seminole Co. having surveys made grading and paving 20 mi. highway, 200,000 sq.yd. gravel, 125,000 cu. yd. excav. $100,000. F. G. Simmons, Capitol Bldg., Oklahoma City, engr.

Nevada—State Hy. Dept., Carson City, plans gravel and concrete surfacing 3.3 mi. Federal Aid Project 87, Clark Co., $63,142.

California—State Hy. Dept., Sacramento, having plans prepared grading 12 mi. Truckee Canyon Project, Nevada and Sierras Counties, 20,000 to 30,000 yd. excav. per mile; grading 7.5 mi. Truckee Canyon Project from Truckee to state line, Nevada and Sierra Counties; 4.3 mi. concrete and 7 mi. gravel surface from Belltane to Schellville, Sonoma Co. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, making plans gravel and concrete surfacing 4 mi. Schellville-Beltane Rd., 24 ft., Sonoma Co.; grading 7 mi. Truckee-Boca Rd., Nevada Co., approximately 50,000 cu.yd. excav., also 10 mi. road between Quail Lake and north boundary, Los Angeles Co. R. M. Morton, state highway engr.

Calif., Fresno—Plans to widen Belmont Ave. between Glenn and Forthcamp Sts. $25,000. W. Stranahan, city engr.

Calif., Los Angeles—Dec. 15, to vote on $450,000 bonds for 10 mi. street paving in Westgate Dist. R. Dominguez, city clk.

Calif., Los Angeles—Appropriated $100,-000 for street replacement work. J. A. Griffin, city engr.

Calif., Oakland — Had plans prepared grading and 6 in. concrete paving Castro St. between 1st and 7ts Sts., 62,936 sq.ft. grading, 60,317 sq.ft. 6 in. concrete base with 2 in. warrenite bitulithic surface, 2,054 lin.ft. concrete curb without guard, etc. W. W. Harmon, city engr.

Calif., San Diego—Plans improving A, B, 29th, Ash, Dale, Granda and Grape Sts., 55,176 sq.yd. 2½ in. asphaltic concrete base and 1½ in. asphaltic wearing surface, 21,610 sq.ft. cement sidewalk, 4,564 lin.ft. curb, etc.; Union, Brant and Curlew Sts., 19,516 sq.yd. 2½ in. asphaltic concrete base and 1½ in. sheet asphalt wearing surface, 5,809 sq.-ft. sidewalk, 1,190 lin.ft. cement curb, etc.; Fern St., 14,350 sq.yd. 4 in. cement base and 1½ in. sheet asphalt wearing surface. F. A. Rhodes, city engr.

Ont., Toronto—Plans to grade Norway Ave. $175,000, Wetherell Ave. $1,340, Glengarry Ave. $2,000, Main St. $14,300, Weller St. $10,030, Beaufort Rd. $15,800, Danforth Ave. $1,350 and lane near Willow Ave. $31,000; grading and extending Lascelles Blvd. $6,750; concrete curbs on Simpson Ave. $650; concrete sidewalks on East Lynne Ave. $1,400, Gledhill Ave. $665, Elmer Ave. $750, Indian Valley Crescent $530; pavement, (probably asphalt) on 8th Ave. $14,400, Simpson Ave. $12,400. R. C. Harris, city engr.

BIDS DESIRED

N. Y., East Aurora—Dec. 17, by Bd. Village Trustees, 1 Church St., curbing, storm drains and paving North Grove St., Whaley, Fillmore and Oakwood Aves. G. C. Diehl, 577 Ellicott Sq., Buffalo, civil engr.; adv. E. N.-R. Nov. 29.

N. Y., Brooklyn — Dec. 5, by E. Riegelmann, boro pres., Boro Hall, paving and repaving Glenwood Rd. and 87th St., asphalt on concrete.

N. Y., Long Island City—Dec. 3, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks, etc., on Howland St.; sheet asphalt paving 90th Rd., 87th Ave., Howland, Darvall and 44th Sts.; grading, curbing and laying sidewalks on Darvall St., 87th Ave. and 90th Rd.; grading and regrading North Jane St.; grading, curbing, laying sidewalks and sheet asphalt paving for width of approximately 27 ft. centrally located in Rene Pl.; grading, curbing, laying sidewalks and sheet asphalt paving 85th Dr., 87th Rd. and 132nd St.

N. Y., Syracuse—Dec. 9, by Bd. Contr. & Supply, asphalt paving 29,195 yd. Clifton Pl., Amherst, Clairmonte, Fernwood, Glenwood, Parkside, Roosevelt and Westminster Aves., 25 ft., $194,080; 23,150 yd. Fellows Ave. and Kirkpatrick St., 27 ft., $142,440; 6,800 yd. Spring St., 27-36 ft., $55,040; asphalt resurfacing 11,290 yd. Westcott St., 34 ft., $89,410. T. H. Mather, city engr.

N. Y., Troy—Dec. 1, by Bd. Contr. & Supply, tearing up present block pavement, repairing base and repaving 0.92 mi. 2nd Ave., 56 ft., 11,000 lin.ft. granite curb, 32,-000 sq.yd. granite block, 980 cu.yd. concrete. $42,000. M. F. Roche, City Hall, engr.

Pa., Ebensburg — Dec. 5, by Comrs. Cambria Co., 2.104 mi. Nicktown-Cover-Belsano Rd., Barr Twp. Hillside vitr. brick on concrete. C. E. Schlicher, Reilly Bldg., Spangler, engr.

Streets and Roads (Continued)

Pa, Wilkes-Barre—Dec. 4, by F. H. Gates, city clk., paving 2,300 ft. Dagobert, Beaumont, Hillard and Reichard Sts., asphalt, 24-30 ft., to exceed $25,000. B. K. Finch, city engr.

N. C., Fayetteville—Dec. 12, by Mayor and Bd. Aldermen improving 75,000 sq.yd. various streets asphalt on concrete with combination concrete curb and gutter, etc. W. C. Olson, Raleigh, engr.

Fla., Punta Gorda—Dec. 5, by J. T. Swinney, chn. Comrs. Charlotte Co., grading, etc., 10,885 mi. Project 564, Sect. of Rd. 5, 167,070 cu.yd. excav., 51,300 ft. untreated structural timber, 98,100 ft. treated structural timber, 5,104 lin.ft. untreated piles trestle. $60,000.

Ala., Tuscaloosa—City taking bids asphaltic concrete paving 8th St. and 14th Ave., 40 to 60 ft. wide. $42,000. W. H. Nicol, city engr.

Miss., Collins—Dec. 21, by Covington Co. at Court House, grading and graveling 2.708 mi. Federal Aid Project 165, 18 ft. $33,290. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Grenada—Dec. 17, by Grenada Co. at Court House, grading and bridging 6.264 mi. Federal Aid Project 147 A, 24 ft., 100 ft. steel span. $108,000. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Ohio — Dec. 11, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 15.3895 mi. roads in Cuyahoga, Marion, Medina, Montgomery, Pickaway, Stark and Summit Counties. A. V. Donaheys, dir. highways.

Ind., Indianapolis — Dec. 10, by L. K. Fessler, aud. Marion Co., grading and concrete paving 2.97 mi. Russell N. Edwards Rd. and Penn St., 20 ft. $114,750. J. J. Griffith, co. engr.

Ind., Marion—Dec. 4, by Grant Co., hard surfacing Arthur L. Ackley Rd., and Frank A. Barr Rd., in Center Twp., and Chester C. Mason Rd., Mill Twp. A. D. Hunt, aud.

Ind., Rushville—Dec. 18, (extended date) by Council, paving 10,000 sq.yd. Morgan St., $35,000-$60,000. A. L. Stewart, city engr. Noted Nov. 15.

Michigan—Dec. 6, by State Hy. Dept., Lansing, grading and surfacing 3.041 mi. State Trunk Line Rd. 13-44, St. Joseph Co., 7,171 cu.yd. excav., 32,070 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Michigan—Dec. 7, by State Hy. Dept., Lansing, grading and surfacing 2.628 mi. Federal Aid Project 101, Sect. C, Van Buren Co., 31,411 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr. Noted Nov. 22.

Michigan—Dec. 10, by State Hy. Dept., Lansing, grading and surfacing 4.026 mi. Federal Aid Project 63, Sect. B, Bay Co., 44,603 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr. Noted Nov. 22.

Michigan—Dec. 12, by State Hy. Dept., Lansing, grading and surfacing 0.987 mi. Federal Aid Project 123, Sects. A and B, Cheboygan Co. 11,344 sq.yd. concrete, asphalt or bituminous concrete. F. F. Rogers, state comr. Noted Nov. 22.

Michigan—Dec. 18, by State Hy. Dept., Lansing, grading and surfacing 0.487 mi. State Trunk Line Rd. 46-24, Sandusky Co., 6,500 sqyd. asphalt, concrete or bituminous concrete. F. F. Rogers, state comr.

Ill., McLeansboro — Dec. 15, by G. B. Foote, mayor, grading and concrete paving 3,500 ft. various streets, 27 ft. $31,500. Caldwell Eng. Co., Jacksonville, engrs. Noted Nov. 15.

Ill., Wilmington—Dec. 1, by J. Hanrad, mayor, grading and concrete surfacing 6,500 ft. Bridge and Baltimore Sts. $65,722. H. A. Steffens, Joliet Natl. Bank Bldg., Joliet, engr.

Kan., Kansas City—Dec. 10, by O. K. Williamson, engr., Wyandotte Co., concrete or rock asphalt paving 11,000 yd. various roads. Noted Aug. 4.

Ark., Little Rock—Dec. 3, by W. Townsend, attorney Impvt. Dist. 360, Boyle Bldg., curbing, grading, constructing concrete base, etc., and 16,750 sq.yd. asphaltic wearing surface. $55,000. H. R. Carter, 313 Exch. Bldg., engr.

Mo., St. Louis—Dec. 26, by Bd. Pub. Serv., 208 City Hall, concrete curbing and refined asphalt paving 4,665 sq.yd. Magnolia, Pearl, North and South Magnolia Sts., $28,600; granite curbing anl refined asphalt paving 6,445 sq.yd. St. Louis Ave. and Dewey St., $43,920; refined asphalt resurfacing 3,130 sq.yd. Compton and Ray Sts., $13,440; granite curbing, refined asphalt or warrenite paving 11,945 sq.yd. Laclede and Kingsbury Sts., $75,120; granite curbing, refined asphalt or bitulithic paving 2,160 sq.yd. Keokuk St., $11,800; concrete curbing and asphaltic concrete paving 12,875 sq.-yd. Smiley Ave., Henry, Lansdown and Marmaduke Sts., $76,320. W. W. Horner, city engr.

Tex., Angleton—Dec. 18, by J. T. Loggins, judge Brazoria Co. grading and bridging, etc. 5.06 mi. State Highway 19 A. Federal Aid Project 351-B 16 ft., $74,400; grading 7.85 mi. State Highway 19, Federal Aid Project 387, 16 ft., $97,833. Will shell surface, both projects at later date. E. N. Gustafson, co. engr.

Tex., Hallettsville — Dec. 29, by Comrs. Lavaca Co., grading, etc., 14.23 mi. highways, 94,000 cu.yd. earth and 800 cu.yd. rock excav., 40,000 cu.yd. earth borrow, etc. $175,000. W. K. Koetcher, co. engr.

Tex., Houston—Dec. 10, by Comrs. Harris Co. resurfacing Houston-Katy Rd. with gravel. $25,000. Howe & Wise, co. engrs.

Tex., McKinney — Dec. 11, by O. T. Murray, judge Collin Co. grading and rein.-con. paving 6.19 mi. State Highway 6, Federal Aid Project 402, 18 ft. $263,040. F. W. Cawthon, co. engr.

Tex., New Boston — Dec. 4, by J. B. Pirkey, judge Bowie Co., scarifying, reshouldering and surfacing with bituminous topping, etc., 3.63 mi. State Highway 5, 18 ft. $56,035. F. E. Hess, 310 Medical Arts Bldg., Dallas, engr. Noted Oct. 25.

Tex., Palestine—Dec. 10, by W. C. Quick, judge Anderson Co., grading, gravel surfacing and bridging 10.75 mi. Palestine-Brushy Rd., 16 ft. $50,000. E. W. Davis, co. engr.

Tex., Sierra Blanca — Dec. 19, by J. M. Walling, judge Hudspeth Co., grading and gravel surfacing 9.03 mi. State Highway 1, Federal Aid Project 399. $35,000. J. W. Carter, Courthouse, engr. Noted Sept. 6.

Okla., Fairfax—Dec. 4, by J. N. Fly, city clk., grading and paving 4th St. and Maple Ave., 3,800 lin.ft. concrete curbs and gutters, 12,500 sq.yd. vertical fibre brick, 5,000 cu.yd. excav. $82,500. V. V. Long & Co., 1300 Colcord St., Oklahoma City, engr.

Okla., Wewoka—Dec. 5, by D. R. Fraser, city clk., grading and paving 18 blocks Okfuskey, Mikosukey and Plum Sts., 27,450 sq.yd. vertical fibre brick, 8,600 lin.ft. curbing 6,000 cu.yd. excav. $149,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 22.

Calif., Fresno—Dec. 6, by City Council, 17,524 sq.ft. 4 in. asphaltic concrete base, 2 in. Warrenite bitulithic surface, 1,872 sq. ft. sidewalks, 18,980 sq.ft. grading, curbs, gutter, etc., on Divisadero St. W. Stranahan, city engr.

Quebec — Dec. 11, by J. L. Boulanger, deputy minister Dept. Rds., Quebec, 4,074 ft. oiled waterbound macadam on Laprairie-Lacolle Highway, 16 ft., St. Luke and St. John Parishes.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Nov. 21, asphalt paving Carroll and Crown Sts., from Borough Asphalt Paving Co., 1301 Metropolitan Ave., $7,108 and $11,415 respectively; Ave. D, from Brooklyn Alcatraz Asphalt Paving Co., 407 Hamilton Ave., $26,765; 14th St., from Uvalde Asphalt Paving Co., 1 Bway., New York, $71,430; Wilson Ave., from Sicilian Asphalt Paving Co., 41 Park Row, New York, $32,813; grading, curbing and flagging Ave. D, from C. Bennett Contg. Co., 414 Rutland Rd., $18,621. Noted Nov. 15.

N. Y., Buffalo—Dept. Parks & Buildings, City Hall, asphalt paving McKinley Parkway, from Rock Asphalt & Constr. Co., Morgan Bldg., $174,345.

Michigan — State Hy. Dept., Lansing, grading and surfacing (1) 0.582 mi. State Trunk Line Rd. 53-3, Sanilac Co., (2) 1.464 mi. State Trunk Line Rd. 38-7, Sanilac Co., (a) concrete, (b) asphalt, from Murray & Fremont, Bad Axe, (1a) $22,150, (2a) $59,051; Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, (1b) $28,874 (2b) $78,201.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Nov. 22, concrete paving **1-33 Saline means Route 1 Sect. 33, Saline Co.**, from Mautz & Oren, Effingham, 3.19 mi. 1-33 Saline, $69,074, 4.37 mi. 1-34 and 26.44 mi. 2-A, both Williamson-Johnson, Christian, Shelby and Fayette, $95,059 and $575,948 respectively; from C. E. Hamilton, Carbondale, 3.97 mi. 1-35 Johnson, $108,078, 5.87 mi. 1-36 Johnson, $184,155 and 4.14 mi. 1-37 Johnson, $116,700; from L. S. Kuhn, Lincoln, 6.3 mi. 2-63 Woodford, $131,137; from W. C. Meneely Co., Decatur, 32 mi. 2-B, Christian, Shelby and Fayette, $622,914; from E. J. Eiff Co., Quincy, 3.12 mi. 3-51 Greene, $77,824; from J. Kesl & Son, Edwardsville, 8.54 mi. 9-33 McDonough, $177,615 and 11.1 mi. 12-Comb I, Clay, $219,000; from Mathis Coal and Constr. Co., Davenport, Ia., 12.31 mi. 3-Comb E, Rock Island-Mercer, $242,008; from W. O'Neil Sons Co., Faribault, Minn., 2.12 mi. 3-22 Mercer, $51,271 and 7.17 mi. 3-23 Mercer, $174,017; from M. H. Lewis & Co., Hoopeston, 5.9 mi. 25-22 Douglas $134,544; from Simmons & Reed, Quincy, 14.72 mi. 3-Comb H, Randolph, $349,968; from W. D. Lonergon Constr. Co., New Madrid, Mo., 14.57 mi. 3-Comb J La Salle Co., $276,170; grading from E. P. Olson, 2901 Monterey St., St. Joseph, Mo., 21,284 cu.yd. 3-40A McDonough, $11,643 and 50,172 cu.yd. 3-41A McDonough, $29,841; from Cameron, Joyce & Co., Keokuk, Ia., 45,389 cu.yd. 3-42A Schuyler, $32,915 and 131,585 cu.yd. 36-18A Pike, $64,165; from J. B. Drew, Tampico, 82,466 cu.yd. 2-74A Lee, $40,552; from Powers-Thompson Constr. Co., Joliet, 54,796 cu.yd. 19, 24A Lake, $36,348. Noted Nov. 15.

Tex., Jefferson — Marion Co. grading, gravel and clay surfacing and bridging 14.8 mi. State Highway 49, Federal Aid Project 364, 1,067.35 cu.yd. concrete, 111,694 cu.yd. roadway, 70,549 cu.yd. borrow and 1,403 cu.yd. rock excav., 85,201 lb. reinforcing, 34,716 cu.yd. gravel and 6,754 cu.yd. clay, from Womack Constr. Co., Sherman, $108,419. Noted Oct. 11.

Calif., Sausalito — Grading, curbing and paving Princess St, etc., 2,500 cu.yd. excav., 790 cu.yd. concrete pavement, 165 cu.yd. concrete culvert, 380 cu.yd. rubble masonry, 500 sq.ft. concrete walk, 1,000 sq.ft. grout and rock gutters, etc., from McDonald Impvt. Co., 567 Pacific Bldg., San Francisco, $36,380.

CONTRACTS AWARDED

Massachusetts—State Hy. Dept., Boston, paving 6,600 ft. highway in Revere, 20 ft. and up, bituminous macadam, to M. McDonaugh, Swampscott, $72,319; 3,652 ft. in Swansea, 18 ft. and up, rein.-con., to J. McCormick, East Providence, R. I., $45,641; 13,878 ft. in Haverhill, 20 ft. and up, rein.-con., to L. C. Carchia, 308 Bellevue St., West Roxbury (Boston P. O.), $164,769. Noted Nov. 8.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, curbing, flagging, reflagging anl granite block paving West 155th St., to Casper Helbock, Inc., Harlem River and 150th St., $100,555. Noted Nov. 22.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Turnpike, granite block, to C. Vanderbilt, Elizabeth St., West New Brighton, $27,630; paving Center and Moore Sts., concrete, also Gifford Lane, bituminous macadam, to J. Johnson Sons, 455 Bway., West New Brighton, $20,960 and $33,774 respectively. Noted Nov. 22.

N. C., Rutherfordton—Extending street paving, 8,000 sq.yd. concrete, to Geer-Wilson Ccntg. Co., Rutherfordton, $30,000.

N. C., Salisbury—Paving 30,000 sq.yd. various streets, sheet asphalt, warrenite bitulithic and asphaltic concrete, to R. G. Lassiter Co., Oxford, $124,000.

S. C., Batesburg—Paving 20,000 sq.yd. various streets, sheet asphalt, to Carolina Contg. Co., Spartanburg, $55,000.

S. C., Walhalla—Oconee Co. topsoil surfacing 6.4 mi. State Route 18, Federal Aid Project 225, to F. M. Deaver, Carlisle, $25,926; bridge work, to Southern Concrete Constr. Co., Anderson, S. C. $5,334. Noted Nov. 15.

Kentucky—State Hy. Dept., Frankfort, paving roads, **(F.A.P. means Federal Aid Project, S.P., State Project)** concrete paving 3.16 mi. Newport-Falmouth Rd., 18 ft., S.P. 21, Sect. B, Campbell Co., to E. E. Hine & Son, Harrison, $111,534, 10.098 mi. Newport-Falmouth Rd., 18 ft. S. P. 21, Sect. A Campbell and Pendleton Counties, and 6.32 mi. Compton-Falmouth Rd., 18 ft., S. P. 62, Sect. C, Kenton Co., to Cynthiana Constr. Co., Cynthiana, $393,649 and $197,577 respectively; rock asphalt paving 723 ft. street in city of Somerset, S.P. 22, Sect. C, Pulaski Co., to Cash & Lynn, Stanford, $8,180; grading 2.6 mi. Bartinsville-Corbin

Streets and Roads (Continued)

Rd., 24 and 28 ft., F.A.P. 62, Sect. B, Knox Co., to Costello Bros., Henson Bldg., Nashville, Tenn., $65,457, 1.31 mi. Clay City-Winchester Rd., 24 and 28 ft., F.A.P. 108, Powell Co., to F. M. Schimfessel, Clay City, $4,217. Noted Nov. 8.

Ohio—Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 3.463 mi. Sect. "J-1" and 1.827 mi. Sect. "J-2" Twinsburg-Elyria Rd., Cuyahoga Co., rein.-con. and brick, to D. Aller, Findlay, $168,848 and $93,305 respectively, 3.02 mi. Sect. "C" Archbold-Defiance Rd., Defiance Co., bituminous macadam, asphalt, to A. C. Schmenck, Ottawa, $68,955, 3.396 mi. Sect. "C" Bryant-Ft. Wayne Rd., and 2.112 mi. Sect. "A" Haicksville-Auburn Rd., Defiance Co., rein.-con., to R. Doaust, Defiance, $90,910 and $51,599 respectively, 0.166 mi. Sect. "Leesburg North," 0.208 mi. Sect. "Leesburg South," and 0.173 mi. Sect. "Hillsboro" Hillsboro-Washington Rd., Highland Co., brick, to A. K. Grandle, Leesburg, $7,432, $10,532 and $8,453 respectively, 1.628 mi. Sect. "F" Ironton-Miller Rd., Lawrence Co., bituminous macadam, asphalt, to C. Mahl, Ironton, $55,335, 1.047 mi. Sect. "P" Ohio River Rd., Columbiana Co., brick and bituminous macadam, asphalt, to Tatgenhorst-McLaughlin, East Liverpool, $79,223; grading, etc. 4.867 mi. Sect. "Y" also paving 4.867 mi. Sect. "Y" Glendale-Milford Rd., Hamilton Co., plain concrete, to J. L. Radabaugh, Montgomery, $59,026 and $170,236 respectively, 2.78 mi. Sect. "M" Pomeroy-Marietta Rd., Meigs Co., to Foy-Nixon Co., Columbus, $35,557, 3.536 mi. Sect. "A-1" Dennison-Natl. Rd., Tuscarawas Co., to G. F. Druschel, Kenton, $46,124, 5.869 mi. Sect. "H" Marietta-Athens Rd., Washington Co., to Ada Constr. Co., Ada, $78,103, Sect. "B" and 0.336 mi. Sect. "Blakeslee" Bryan-Eldon Rd., Williams Co., to F. F. Walton, Upper Sandusky, $19,934 and $1,730 respectively; bridge on Sect. "A" Jackson-Gallipolis Rd., Jackson Co., to I. J. Kuhner, Jackson, $3,813. Noted Nov. 22.

O., Marion—To H. P. Streicher, Marion, improving with sheet asphalt 1 mi. Sect. 1 George St. $25,474, engrs. est. $30,000, 1½ mi. Sect. 3 George St. $37,750, $40,000, ½ to ¾ mi. Sect. 2 George St. $25,943, $27,500, Thew Ave. $28,182, $30,000, Wilson Ave. $28,440, $30,000, all 40 ft. wide.

Michigan—State Hy. Dept., Lansing, producing and stocking 40,000 cu.yd. concrete aggregates on Federal Aid Project 113, Sect. C, Kent Co., and grading 5 mi. State Trunk Line Rd. 39-9, Kent Co., 50,000 cu.yd. excav., to G. P. Schail, Muskegon, $60,636 and $30,000 respectively.

Michigan — State Hy. Dept., Lansing, grading and surfacing 5.148 mi. Federal Aid Project 57, Sect. D, Kent Co., to Hersey Gravel Co., Hersey, 58,110 cu.yd. excav. $0.55, 54,503 sq.yd. 8 in. rein.-con. pavement $1.53, total $134,776. Noted Nov. 1.

Minn., Red Wing—Goodhue Co., 5 mi. Job 2401, 93,553 cu.yd. excav., to J. J. and M. S. Mergens, 400 Temple Court, Minneapolis, $32,618, culverts, 478 cu.yd. concrete, to C. Palzer, Mazeppa, $8,844; 2 mi. Job 2302, 43,950 cu.yd. excav., one 200 ft. wooden pile and deck span bridge, to Campbell Constr. Co., 3050 Hennepin Ave., Minneapolis, $23,454. Noted Oct. 4.

Ark., Russellville—Grading and concrete surfacing 1 mi. in Russellville Rd. Impvt. Dist., to Western Constr. Co., Little Rock, $25,000.

Tex., Amarillo—Potter Co. grading and gravel surfacing 6.13 mi. Bushland Rd., State Highway 12, State Aid Project 430, 16 ft., to Hoffman Constr. Co., Eastland, $49,517. Engrs. est. $55,000. Noted Nov. 15.

Tex., Center—Hard surfacing various streets, to Brammer & Wilder, 308 Stewart Bldg., Houston, $2.65 per yd., total $122,847. Noted Oct. 4.

Tex., Clarksville—Red River Co. constructing Jim Hogg Highway, to McGuire & Cavender, Sherman, $25,446.

Tex., Dallas—Dallas Co. paving, etc., 12.7 mi. Richardson Rds., to Smith Bros. Inc., Sumpter Bldg., paving $1.10, concrete base $1.65, etc., total $530,000. Noted Oct. 25.

Tex., Ft. Worth—Paving, curbing and guttering, etc., 12,000 sq.yd. Virginia Pl., Western Ave., Terrell and North Houston Sts., to General Constr. Co., Cotton Exch. Bldg., $2.80 per sq.yd. for 1½ in. Uvalde on 5 in. base; 15,000 sq.yd. Tulsa Way, Lilac, Chambers, Tennessee, Tremont and Wabash Sts., to West Texas Constr. Co., Cotton Exch. Bllg., $3.18 per sq.yd. for 2 in. Warrenite bitulithic. Noted Nov. 22.

DAM—MERCED, CALIF.

Following are lowest three bids opened Nov. 8, by Merced Irrigation Dist., for constructing exchequer dam, (A) L. S. Atkinson, Jr., Chapman Bldg., Los Angeles; (B) Bent Bros., Inc., 1714 Eagle St., Los Angeles; (C) Twohy Bros. Co., Sharon Bldg., San Francisco, and P. Welch & Co., Seattle, Wash. The unit bids were as follows:

	A		B		C
	Form No. 1	Form No. 2	Form No. 1	Form No. 2	Form No. 2
6,000 cu.yd. common excavation	$3.00	$3.00	$4.00	$4.00	$5.00
35,000 cu.yd. rock excavation, foundations	5.00	5.00	4.00	4.00	5.00
15,000 cu.yd. rock excavation, spillways	4.00	4.00	4.00	4.00	5.00
310,000 cu.yd. concrete	4.50	2.80	5.00	2.90	3.20
60 cu.yd. pressure grout	60.00	60.00	50.00	50.00	60.00
1,000 lin.ft. drainage wells	5.00	5.00	6.00	6.00	5.00
2,000 lin.ft. grout holes	3.00	3.00	5.00	5.00	3.00
5,000 lin.ft. contraction seals	2.00	2.00	1.00	1.00	2.00
9,000 lin.ft. grout and miscellaneous imbedded pipes	.60	.60	.25	.25	.50
85,000 lb. reinforcing steel	.05	.05	.03	.03	.04
60,000 lb. structural steel and outside pipes	.05	.05	.05	.05	.05
5,000 sq.ft. coating for metal work	.10	.10	.10	.10	.05
8,000 sq.ft. coating for unlined waterways	.10	.10	.10	.10	.05
1,100,000 lb. setting valves gates and outlet lining	.03	.03	.03	.03	.04
Extended totals	$1,719,550	$1,192,550	$1,840,100	$1,189,100	$1,352,150

SUB-STRUCTURES—SAN FRANCISCO, CALIF.

Bids were opened by Bd. Pub. Wks., Oct. 17, for sub-structures for bridge across Dumbarton Straits, Hetch Hetchy Project, to carry water pipes on series of steel truss spans for part of distance and laying pipe as submerged lines in trenches in bottom of San Francisco Bay for remainder of distance, (A) Healy-Tibbitts Constr. Co., 64 Pine St. (awarded contract); (B) San Francisco Bridge Co., Nevada Bank Bldg. The unit bids were as follows:

	A	B
20,000 cu.yd. mud excavation, cylinder piers	$1.48	$5.00
140,000 ft. timber piles	.29	.34
2,350 piles to be driven	17.12	12.00
1,500 piles to be cut off	.84	.50
3,250 cu.yd. concrete placed under water by tremie	45.75	60.00
Concrete placed in forms, in the dry:		
Number of cu.yd. to be placed in piers total height of which fall between limits of 1,250 cu.yd. 0 and 45 ft. (both inclusive)	47.82	48.00
2,200 cu.yd. 46 and 50 ft. (both inclusive)	54.16	53.00
3,350 cu.yd. 51 and 60 ft. (both inclusive)	59.88	58.00
800 cu.yd. 61 and 75 ft. (both inclusive)	66.23	71.00
600,000 lb. reinforcing steel	.05½	.07
10,000 lb. metal work furnished by city	.05	.10
8,250 cu.yd. mud excavation, caisson	1.48	5.00
60,000 ft. timber piles	.29	.34
850 piles to be driven	16.80	12.00
600 piles to be cut off	.84	.50
2,200 cu.yd. concrete placed under water by tremie	46.08	55.00
5,800 cu.yd. concrete placed in forms, dry	54.25	35.00
35,000 lb. reinforcing steel	.05½	.06½
75,000 lb. metal work furnished by city	.05	.10
Extended totals	$1,192,484	$1,248,175

Tex., Hillsboro—Hill Co., grading and gravel surfacing 5.65 mi. State Highway 2 E, 16 ft. in Itasca Dist., and 4.85 mi. State Highway 2 E, in Covington Dist., 16 ft., to Womack Constr. Co., Sherman, $31,515 and $30,483 respectively, 14,195 cu. yd. gravel $28,500 and 12,617 cu.yd. gravel $27,000 to be furnished by county on respective jobs, engrs. ests. $66,000 and $64,000 respectively. Noted Oct. 25.

Tex., Hondo — Medina Co. grading gravel surfacing and bituminous topping 1.56 State Highway 3, Federal Aid Project 270 B, and grading and gravel surfacing 2.65 mi. State Highway 3, Federal Aid Project 270 E, both 18 ft., to P. Schriewer, Seguin, $24,491 and $26,541 respectively. Noted Nov. 15.

Tex., McKinney—Collin Co. constructing 3 mi. road in Anna-Melossa Rd. Dist., macadam, to G. Stiff, Louisiana St., $25,000.

Tex., Tyler—Smith Co. grading and bridging 6.25 mi. State Highway 15, 233 cu.yd. concrete, 24,788 cu.yd. roadway and 32,230 cu.yd. borrow excav., 19,822 lb. reinforcing, etc., to Smith Co., c/o D. R. Pendleton, co. judge, Tyler, $23,676. Engrs. est. $26,043. Noted Oct. 18.

Okla., Holdenville—Grading and paving 6 blocks Hinckley Ave., 5,430 sq.yd. concrete, 3,800 lin.ft. curbing, 1,625 cu.yd. excav., to E. H. Locker, Okmulgee, $27,562. Noted Aug. 30.

Colo., Denver—Curbing, grading and surfacing 1 mi. North Denver Impvt. Dist. 33, ½ mi. wide, to J. Collier, 63 South Logan St., $81,511. Engrs. est. $103,000. Noted Nov. 1.

Nevada—State Hy. Comn., Carson City, grading and gravel surfacing 11.81 mi. between Eastgate and East Co. Line (Carroll Summit), Federal Aid Project 56, 2-F, Contr. 93, Churchill Co., to F. Coolidge, Laramie, Wyo., $173,147; grading and building culverts on 3.35 mi. road from Lawton to point 2 mi. east of Verdi, Federal Aid Project 73, 1A-2, Contr. 94, Washoe Co., to C. Miles, 2500 L St., Sacramento, $74,695. Noted Nov. 22.

Wash., Tacoma—Pierce Co., paving 2.25 mi. Center St., 36½ ft., with 3½ in. warrenite on present hard gravel, to Warren Constr. Co., Perkins Bldg., $56,887. Engrs. est. $57,270.

California—State Hy. Comn., Sacramento, grading and surfacing with crushed gravel or broken stone 9.8 mi. between point 2 mi. south of Hornbrook and Oregon State Line, Siskiyou Co., to Dunn & Baker, Klamath Falls, Ore., $205,000. Engrs. est. $226,113. Noted Nov. 22.

Calif., Bakersfield—Kern Co., grading and paving Arvin and Weed Patch Rds., Impvt. Dist. 26, 38,400 cu.yd. excav., 890,724 sq.ft. 2 in. asphaltic concrete on 4 in. bituminous base, etc., to Griffith Co., 502 Los Angeles Ry. Bldg., Los Angeles, $238,000. Noted Nov. 1.

Calif., Fresno—City, 139,358 sq.ft. 6 in. concrete pavement, 161,496 sq.ft. grading and 18,247 sq.ft. walks, etc., Fresno Ave. between Belmont and Olive Sts., to W. F. Hanrahan, Brix Bldg. $43,199. Noted Nov. 15.

Calif., Glendale — Improving Alameda, Mountain and Glenwood Sts., 6,615 ft. curb, 6,346 sq.ft. gutter, 119,919 sq.ft. 5 in. oil macadam, etc., to F. R. Mosher, 118 South Kenwood St., $29,350 (approximately); Stanley Ave. and Verdugo Rd., 1,574 ft. curb, 2,990 sq.ft. gutter, 7,900 sq.ft. walk, 20,486 sq.ft. oil macadam, etc., to E. L. Fleming, 1018 East Howard St., $7,000; Railroad St., 18,117 sq.ft. 6 in. concrete, etc., to W. J. Curren, 379 West Patterson St., $6,256. Noted Nov. 1.

Calif., Los Angeles—Grading, curbing, paving, etc., portion of O'Farrell St., 160,223 sq.ft. asphalt pavement, to Griffith Co., Railway Bllg., $64,900.

Calif., Lynwood—Paving Agnes and Cedar Sts., etc., 4 in. macadam, to Hall-Johnson Co., Post Office Box 51, $92,260.

Calif., Porterville—Grading, curbing, paving, etc., Belleview Ave., 47,976 sq.ft. concrete paving, etc., to Griffith Co., Railway

Streets and Roads (Continued)

Bldg., Los Angeles, $11,764; Valentine and Hanrahan Sts., etc., 483,680 sq.ft. grading, 483,680 sq.ft. concrete paving, 14,925 lin.ft. concrete curb, 1,483 lin.ft. rein.-con. culvert, etc., to Valley Paving anl Constr. Co., Visalia, $130,262. Noted Nov. 1.

Calif., Redwood City — San Mateo Co., improving various streets in Lomita Park, Rd. Dist. 2, 16,000 cu.yd. excav., 542,900 sq.ft., 4 in. concrete base with 1½ in. warrenite bitulithic surface, etc., to Municipal Impvt. Co., 306 12th St., $211,495. Noted Nov. 15.

Calif., San Diego—Improving Arizona St., 108,901 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, etc., to G. R. Daley, 440 Boundary St., $29,905. Noted Sept. 20.

Calif., Santa Ana—City, paving with 5 in. concrete and belt finish surface, North Garnsey St. between West 6th and West 8th Sts., to Wells & Bressler, Santa Ana, $63,915. Noted May 3.

Calif., Visalia—Improving West Center and North Giddings Sts., etc., 4,631 cu.yd. grading, 212,757 sq.ft. 1½ in. warrenite bitulithic on 4 in. base, etc., to Valley Paving and Constr. Co., Visalia, $58,997. Noted Nov. 22.

Industrial Works

PROPOSED WORK

Mass., Taunton — City had plans prepared by Jackson & Moreland, engrs., 387 Washington St., Boston, and takes bids about Dec. 5, light and power plant, 15 x 18 ft. and 30 x 50 ft., brick. $225,000. Noted Sept. 13.

Conn., Hartford — J. Blumenthal, 22 Florence St., having plans prepared by Berenson & Moses, 30 Allyn St., 3 story, 50 x 75 ft. storage, rein.-con., brick and steel, plain foundation, Front St. $65,000.

Conn., New London—L. Lubchansky, 45 Howard St., having plans prepared by F. de Gange, 28 Ocean Ave., 3 story, 40 x 100 ft. storehouse, etc., brick, steel and tile, plain foundation, Howard St. $75,000.

Conn., Waterbury—Waterbury American Inc., Printers Court, soon takes bids 4 story, 50 x 60 ft., rein.-con. and brick plant, plain foundation, Printers Court. $165,000. Lockwood-Greene & Co., 101 Park Ave., New York City, archts. and engrs. Noted Nov. 24.

N. Y., Brooklyn—J. Strattman, c/o T. Goldstone, archt. and engr., 50 Graham Ave., having plans prepared rein.-con., brick and steel garage, plain foundation, 39th St. $100,000.

N. Y., Buffalo—Mitchell & Frank, 1021 Main St., had plans prepared 3 story, 54 x 77 ft., rein.-con. and brick mill, Woodlawn Ave. $75,000. Engineers and architects name withheld.

N. Y., Canandaigua—Roper Knitting Co. plans factory addition, 3,500 sq.ft. floor space, will mature in spring, $40,000; 2 story, brick and steel factory addition, 8,000 sq.ft. floor space, Main St., will mature in fall, $75,000. Private plans.

N. Y., Johnson City—Douglas Dickson Co., 343 Grand Ave., plans warehouse, Riverside Dr. W. $50,000. Address, W. T. Dixon, pres. Will mature in spring. Engineer and architect not selected.

N. Y., Oswego—Voted $350,000 bonds electric light and power plant. Will mature in spring.

N. Y., Troy—Troy Record Co. plans remodeling present building and erecting 3 story, 58 x 87 ft., brick and steel addition, plain foundation, Bway. $155,000. W. A. Gunn, Troy, archt. and engr.

Pa., Altoona—Penn Cress Ice Cream Co., Front St., plans 3 story and basement, 110 x 120 ft. brick and steel plant, power house and office, Beale Ave. and 28th St. $150,000.

Pa., Monaca — F. Cancillo plans warehouse to replace one recently destroyed by fire. $40,000. Engineer and architect not announced.

Pa., Williamsport — E. S. Bullock, 1st Natl. Bank Bldg., plans 2 story, 100 x 110 ft. box factory, Chestnut St. $100,000.

Pa., Williamsport—Mead & Goodrich, Inc., 350-370 West 3rd St., takes bids in spring 3 story and basement, 120 x 170 ft. concrete and steel garage, West 3rd St. $140,000.

Md., Amcelle (Cumberland P. O.)—Amer. Cellulose & Chemical Co., Ltd., 15 East 26th St., New York City, having plans prepared addition to plant, rein.-con. and brick, plain foundation, here. $500,000. Private plans.

Md., Baltimore—J. E. Moxley, Jr., archt., 20 East Lexington St., preparing plans 2 story, 120 x 150 ft. garage, show room and store building, brick and steel. $150,000. Owner's name withheld.

N. C., Raleigh—State College of Agriculture and Engineering making plans new power plant, boiler 1,000 hp., will also extend textile building 75 ft. J. E. Sirrine & Co., Greenville, S. C., engrs.

La., New Orleans—Parke-Davis & Co., Camp and Howard Sts., having plans prepared by M. H. Goldstein, Hibernia Bank Bldg., 105 x 125 ft. plant, in rear of present building.

O., Cleveland—J. E. Strator, 13003 Superior Ave., had plans prepared by H. P. Whitworth, Hickox Bldg., 2 story, 38 x 67 ft., brick, steel and concrete factory, Woodworth Rd. $40,000.

O., Cleveland—Villa Beach Club, c/o F. W. Bail, archt., Hanna Bldg., had plans prepared 2 story and basement, 62 x 98 ft., brick, steel and concrete garage, 15445 Lake Shore Blvd. $50,000.

O., Columbus—F. J. Heer Printing Co., 55 East Main St., 2 story and basement, 120 x 133 ft., rein.-con. and brick plant, 368-384 South 4th St., to Middle States Constr. Co., 524 East Hudson St., $123,500.

O., Sandusky—Lake Shore Electric Ry. Co., 129 Columbus Ave., plans electric power substation. $50,000.

O., Toledo—City plans garage and repair shop. $160,000. A. Jackson, City Bldg., dir. Pub. Serv. Engineer and architect not announced.

Ind., Evansville — Illinois Central R.R., 135 East 11th Pl., Chicago, plans addition to railroad shops and terminal yards at Harwood Yards, here. $750,000. F L. Thompson, ch. engr.

Ind., Ft. Wayne—Schiefer Auto Co., 715 Barr St., having plans prepared by Pohlmeyer & Pohlmeyer, Central Bldg., 1 story, 60 x 150 ft. auto service station, brick. $75,000.

Ind., Ft. Wayne—Wayne Tank & Pump Co., Anthony Hotel, plans addition to plant. $50,000.

Ind., Indianapolis—Home Ice Co. plans 2 story and basement ice plant, rein.-con. and brick, concrete pile foundation. $40,000. Private plans.

Ind., Indianapolis—L. B. Millikan, Barton Hotel, plans 1 story, 97 x 107 ft. rein.-con., brick and steel garage, concrete pile foundation, Talbott and East 21st Sts. $50,000. Private plans.

Ind., Indiana Harbor—Youngstown Sheet & Tube Co., Stambaugh Bldg., Youngstown, O., plans blast furnace and mills, here. $4,000,000. J. A. Campbell, pres. Engineer and architect not announced.

Ind., Kokomo—Realty Co. having plans prepared by Vonnegut, Bohn & Mueller, 610 Indiana Trust Bldg., Indianapolis, 2 story and basement, 33 x 132 ft. garage, rein.-con. and brick. $60,000. E. Eberhardt, pres.

Ind., Kokomo—Standard Sanitary Mfg. Co. having plans prepared by Elmer E. Dunlap Co., 1125 North Buckeye St., 1 story, 100 x 580 ft., brick and steel addition to plant. $100,000.

Mich., Battle Creek—Rich Steel Products Co. having plans prepared 2 story, 80 x 131 ft. brick factory, plain foundation. $42,000. Private plans.

Ill., Chicago—J. K. Neede, archt., 2522 Aubert St., preparing plans 1 story brick and stone garage, North Clark St., $60,000. Owner's name withheld.

Ill., Chicago—Huszagh & Hill, archts., 72 West Washington St., preparing plans 1 story, 82 x 400 ft. garage, Wells St. near North Ave. $200,000. Owner's name withheld.

Ill., Chicago—See "Buildings."

Wis., Bowler—Bowler Lumber Co., c/o W. O. Baum, pres., having plans prepared rebuilding 1 story, 70 x 110 ft., saw mill, brick and timber, recently destroyed by fire. $40,000. Private plans.

Wis., Milwaukee—Eslein Sheet Metal Wks., 1001 30th St., soon takes bids 3 story, 60 x 120 ft., brick and timber factory, plain foundation. $60,000. C. F. Behnke, 827 34th St., archt.

Wis., Milwaukee—Hotel Wisconsin Realty Co., 182 3rd St., having plans prepared by Holabird & Roche, 104 South Michigan Ave., Chicago, 5 story service building, power house, laundry, etc., brick and concrete, plain foundation. $150,000-$200,000.

Wis., Milwaukee — Prime Mfg. Co., 653 Clinton St., plans 1 story, 60 x 120 ft. foundry. $50,000. F. D. Chase, Inc., 645 North Michigan St., Chicago, engr.

Minn., Minneapolis—Rent-A-Ford Co., 7th St. and 2nd Ave. S., having plans prepared by Ekman, Helm & Co., 302 Pheonix Bldg., 2 story and basement, 50 x 140 ft. rein.-con., brick, tile and stone garage, 902 1st Ave. N. $45,000.

Mo., Desloge—St. Louis Smelting & Refining Co., Internation Life Bldg., St. Louis, plans rebuilding crusher house, roll plant, power house, ore storage bins, conveyor houses, etc., recently destroyed by fire, here. $200,000. Private plans.

Mo., Springfield—Missouri Rubber Products Co. will build 100 x 300 ft., brick and steel factory, by day labor under supervision of E. E. Love, owners engrs. $500,000.

Tex., Amarillo—Plans prepared oil refinery and 17 mi. pipe line from Carson County. $500,000. Owner's name withheld. Address Secretary Chamber of Commerce.

Tex., Ft. Worth—F. H. Jones, 200 Commerce St., making plans 3 story, garage and storage building, brick and concrete, 1st and Commerce Sts. $100,000. Engineer and architect not announced.

Tex., Houston—Cheek Neal Coffee Co., Preston and St. Emanuel Sts., having plans prepared by J. Finger, Woolworth Bldg., 5 story, brick and concrete warehouse. $60,000.

Tex., Rotan—Universal Gypsum Co. having plans prepared 200 ton plant. $250,000. C. T. Murphy, c/o owner, engr. in charge of construction.

Tex., San Antonio—Mission Ice Co. plans ice plant, Fredericksburg Rd. and Woodlawn Ave. $150,000. Engineer and architect not announced.

Tex., Sweetwater—See "Railways" under "Contracts Awarded."

Calif., Castroville—Mitchell-Silliman Co. plans warehouse to replace that destroyed by fire. $80,000 to $100,000.

Calif., Hayward—Natl. Ice and Cold Storage Co., Postal Telegraph Bldg., San Francisco, plans ice and cold storage plant, here. $75,000.

Calif., Oakland—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, had plans prepared 2 story, rein.-con., and steel substation, 21st St. near Grove St. $280,000. Private plans. Noted Aug. 23.

Calif., San Francisco—J. Allec, Folsom and 18th Sts., had plans prepared by A. S. Bugbee, 26 Montgomery St., 2 story, rein.-con. addition to dyeing and cleaning plant, Folsom St. near 18th St. $55,000.

Calif., San Francisco — American La France Fire Engine Co., Elmira, N. Y., (local representative office, 151 New Montgomery St.), plans assembling plant, office and service department. $150,000.

Calif., San Francisco—Drendell Electrical Co., 1345 Howard St., having plans prepared 1 story, concrete factory, Howard and Erie Sts. $40,000. Private plans.

Calif., San Francisco—R. W. Kinney Co., 645 Howard St., had plans prepared by B. G. McDougall, 381 Bush St., 3 story, concrete warehouse, 5th and Bryant Sts. $40,000 or more.

Calif., San Francisco—L. R. Lurie Co., 315 Montgomery St., had plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 2 story and basement, rein.-con. warehouse, 11th St. near Harrison St. $40,000, also 2 story, rein.-con. warehouse and scenery painting lofts, 11th St., $50,000.

Calif., San Francisco—R. J. O'Brien & E. Rhine, 608 Alexander Bldg., plan rein.-con. warehouse, 4th and Townsend Sts. $60,000.

Calif., San Francisco—C. Rhine & R. J. O'Brien, 608 Alexander Bldg., plan 4 story and mezzanine, rein.-con., warehouse, Harrison and Division Sts., $1,000,000.

Industrial Works (Continued)

Calif., San Jose—Beech-Nut Co., 4th and Margaret Sts., plans 1 story concrete and steel addition to candy factory. $40,000. W. T. Cox, mgr.

Calif., Wasco—Wasco Creamery plans addition. $40,000, incl. equipment.

Alta., Medicine Hat—Sarnia Oil & Gas Co., Sarnia, Ont., preparing plans gasoline plant here. $300,000. Private plans.

BIDS DESIRED

O., Cleveland—Richman Bros., 1600 East 55th St., taking bids 4 story, 65 x 200 ft., brick and rein.-con. factory addition. $125,000. Christian, Schwarzenberg & Gaeda, 1900 Euclid Ave., archts. Noted Sept. 27.

Ill., Chicago—A. S. Alschuler, archt., 28 East Jackson Blvd., receiving bids 5 story, 120 x 200 ft. warehouse, for Standard Sanitary Mfg. Co., 14 North Peoria St.

Ill., Chicago—Halperin & Braun, archts., 19 South La Salle St., receiving bids 2 story and basement, 125 x 196 ft. auto sales and garage, 1832 West Madison St., $100,000. Owner's name withheld.

Ill., Oak Park—E. Roberts, archt., 155 North Clark St., Chicago, receiving bids 1 story, 103 x 125 ft. auto service station, Wesley and Madison Sts., for Hill Motor Car Co., 810 West Madison St., Oak Park.

Tex., Galveston—See "Buildings."

CONTRACTS AWARDED

Me., Winthrop—Winthrop Mills Co., 3 story, 36 x 100 ft., brick and steel addition to warehouse, plain foundation, to Brown Constr. Co., 574 A Congress St., Portland. Archts. est. $45,000 to $50,000.

Conn., New Britain—New Haven Dairy, Woodland St., 2 story, 50 x 50 ft. garage, etc., brick and steel, plain foundation, Woodland St., to Hayes Constr. Co., 9 Court St. Archts. est. $40,000.

N. Y., New York—Western Realty Corp., c/o V. Mayper, archt. and engr., 15 East 40th St., will build 2 story, rein.-con., brick and steel garage, plain foundation, West 207th St., by day labor. $60,000.

Md., Baltimore—E. H. C. Browne, archt., Equitable Bldg., 2 story, 25 x 104 ft. garage and office, concrete and brick, plain foundation, 423 Exchange Pl., to Lewis Constr. Co., Calvert Bldg., for H. Gamse & Bros., 421 Exchange Pl. Archts. est. $40,000. Notel Nov. 15.

Md., Baltimore—Leonhardt Wagon Wks., 417 East Saratoga St., will build 1 story, 156 x 250 ft. factory, concrete and steel, plain foundation, 8th St. near Phila. Rd., by day labor. $60,000. E. M. Leonhardt, pres. J. L. Barr, 202 North Calvert St., archt.

Md., Baltimore—Rennous Kleinle Div. of Pittsburgh Plate Glass Co., 3221 Frederick Rd., 5 story, 100 x 100 ft. factory, concrete and brick, plain foundation, 3221 Frederick Rd., to C. L. Stockhausen Co., Gay and Water Sts. Archts. est. $160,000. Noted Nov. 15.

Md., Baltimore—F. Schulte, 3600 Dillon St., will build two 1 story garages, 140 x 150 ft., and 150 x 190 ft. brick, plain foundations, Fleet and 5th Sts., by day labor. $43,000. Private plans.

Tenn., Shelbyville—See "Dams."

O., Cleveland—City Ice & Fuel Co., c/o H. D. Norval, 1933 Euclid Ave., 1 story, 66 x 187 ft., brick, steel and concrete plant, 12400 ULnion Ave., to Younger & Farmer Co., 1670 Crawford Rd. Archts. est. $100,000. Noted Oct. 25.

O., Cleveland — Ferro Machine & Fdry. Co., East 66th St. and Hubbard Ave., 1 story, 100 x 200 ft., brick and steel factory, to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $75,000. Noted May 3.

O., Cleveland — W. H. Hatch, archt., Guardian Bldg., 3 story and basement, 34 x 77 ft., brick and steel plant, 2420 Cedar Ave., to Russell-Wales Co., 1419 St. Clair Ave., for Van Gastel Cleaning Co. Archts. est. $40,000. Noted Sept. 13.

O., Cleveland — E. H. Bryant, 1251 Superior Ave., 2 story, 36 x 150 ft., brick and steel garage addition, to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $50,000.

O., Minerva — G. H. Bowman Co., 224 Euclid Ave., Cleveland, steel contract for 3 story and basement, 46 x 90 ft., factory, here, to Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa. Total est. $75,000.

O., Toledo—Ohio Trent Coal & Coke Amalgam Co. rein.-con., steel and brick factory, also railroad switches, etc., to M. F. Moriarty & Co., 301 Spitzer Bldg., $300,000.

Ind., Indianapolis — Ostrom Realty Co., Peoples Bank, will build 1 story and basement, 195 x 202 ft. garage, brick and rein.-con., East Ohio St., by day labor. $125,000. Private plans.

Mich., Kalamazoo—Upjohn Chemical Co., 4 story and basement, 78 x 120 ft. addition to factory, rein.-con. and brick, plain foundation, Lovell St., to Miller Boyer Co., Pratt Bldg., cost plus basis. Archts. est. $44,000.

Ill., Chicago—West Side Ice Co., 839 North Hoyne Ave., 1 and 2 story, 100 x 125 ft. ice plant, fireproof, Hoyne Ave. and Walton Pl., to E. W. Sproul Co., 2001 West Pershing Rd. Archts. est. $50,000. Noted Nov. 1.

Ill., Ottawa — E. L. Damon, Centralia, awarded contract 2 story, 100 x 155 ft. garage, rein.-con. and brick. Archts. est. $40,000. Owner's name withheld.

Wis., Madison—L. F. Schollkoff, 210 East Washington Ave., 4 story, 43 x 85 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, to C. B. Fritz Co., 136 South Frances St. Archts. est. $45,000.

Wis., Milwaukee—Koehring Co., 31st St. and Concordia Ave., 1 story, 54 x 100 ft., brick and steel warehouse, plain foundation, to H. Schmitt & Son, 430 Farwell Ave. Archts. est. $45,000. Noted Oct. 18.

Wis., Milwaukee—Natl. Biscuit Co., 12 Erie St., 1 story and basement, 54 x 100 ft., brick, tile and concrete garage, plain foundation, Milwaukee St., to Nicholson Constr. Co., 90 Nock St. Archts. est $40,000.

Ia., Davenport—United Light and Railways Co., 701 Michigan Trust Bldg., Grand Rapids, Mich., will build central station, 200,000 kw. capacity, etc., near here, along Mississippi River, by day labor. $10,000,000.

Minn., Minneapolis—Minneapolis Garage Co., 3411 Hennepin Ave., converting 9 story, 135 x 165 ft. manufacturing building into garage, rein.-con. and brick, 2nd Ave. and 3rd St., general contract to H. N. Leighton Co., 127 South 10th St. Total $100,000.

Minn., St. Paul—Paper Calmenson & Co., East 7th and Cypress Sts., 1 story, 73 x 450 ft.; steel and concrete warehouse, general contract to Siems, Helmers & Schaffner, 514 Guardian Life Bldg. Est. building complete $40,000.

Tex., Big Springs—Stokes Motor Co., 2 story, 50 x 140 ft., brick garage, to J. M. Morgan, Big Springs, $45,000.

Tex., Bronte — F. E. Brown will build power plant by day labor. $50,000. C. C. Holder, engr. and part owner. Noted Aug. 2.

Tex., Houston—Myers-Spalti Mfg. Co., 2118 Runnels St., brick and tile dry kiln, Marsden St., to Amer. Constr. Co., Gulf Bldg., $25,000.

Calif., San Francisco—Lyons Calif. Glace Fruit Co., 535 Folsom St., rein.-con. factory, warehouse and office, Mariposa and 17th Sts., to G. Wagner, 251 Kearney St. $250,000.

Calif., Smartsville — See "Waterworks" under "Proposed Work."

Buildings

PROPOSED WORK

R. I., Bristol—School—Elizabeth Wardwell Guiteras School Bldg. Com. having plans prepared by Clark & Howe, Turks Head Bldg., Providence, 3 story fireproof. $245,000. R. J. Connery, chm.

R. I., Newport—Courthouse—Newport Co. plans brick and stone. $300,000. H. B. Baker, chn. Architect not selected.

R. I., Olneyville — Church — Tabernacle Parish having plans prepared by Woodberry & Stuart, 53 State St., Boston, 1 story, stone. $250,000. J. H. Slutz, pastor.

R. I., Pawtucket—Clubhouse—I. O. O. F. Realty Corp., c/o R. C. Monahon, archt., 255 Main St., having plans prepared 3 story, brick and steel, Broad St. $150,000.

R. I., Providence—College—R. I. College of Education, c/o W. R. Walker & Son, archts., 49 Weybosset St., having plans prepared fireproof college buildings. $400,000.

Conn., Ansonia—Y. M. C. A., 53 Main St., plans 3 story, brick and steel, plain foundation, State St. $150,000. Orr & Del Grella, 956 Chapel St., New Haven, archts.

Conn., Hartford — High School — High School Comn., Municipal Bldg., plans 3 story, New Britain Ave. $1,500,000. Engineer and architect not selected.

Conn., Waterbury — Church — St. Margarets Roman Catholic Parish, plans church, Willow St. $150,000. E. J. Brennan, pastor. Engineer and architect not selected.

N. Y., Albany—Hotel and Store—Levison Bros., Green and Beaver Sts., plans to demolish 5 houses and construct 5 story, 42 x 132 ft., brick and timber, plain foundation, Beaver St. $150,000. Engineer and architect not selected.

N. Y., Auburn—Hospital—City and Cayuga Co. plans to build and equip hospital. $700,000. Engineer and architect not announced.

N. Y., Brooklyn—Municipal—City, Boro Hall, had plans prepared by McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York, about 11 story, brick and steel, plain foundation, Court and Joralemon Sts. $5,800,000.

N. Y., Buffalo — Apartment — Mutual Planning Co., Prudential Bldg., had plans prepared by E. W. Goldstein, Mutual Life Bldg., 5 story, 108 x 249 ft., rein.-con., brick and steel, Linwood Ave. To exceed $500,000.

N. Y., Carthage—Club—Carthage Lodge F. & A. M. plans new clubhouse. $100,000-$150,000. Engineer and architect not announced.

N. Y., Le Roy—High School—Voted $225,000 bonds high school, Wolcott St. Tooker & Marsh, 101 Park Ave., New York, archts. Noted Nov. 1.

N. Y., New York—Apartment—H. A. Lanzner, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., having plans prepared 6 story, brick, steel and stone, plain foundation, Haven Ave. and West 177th St. $800,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., had plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., rein.-con., brick, steel and stone, plain foundation, 204 2nd Ave. $750,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., having sketches made by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., brick steel and stone, plain foundation, Sherman Ave. $500,000.

N. Y., New York—School—Church of St. Rose of Lima, c/o R. J. Reiley, archt. and engr., 50 East 41st St., soon takes bids 4 story, brick, steel and stone, plain foundation, 164th St. between Amsterdam and St. Nicholas Aves. $250,000.

N. Y., New York—Y. M. C. A., 2 West 45th St., having sketches made brick, steel and stone, plain foundation, 318 West 56th St. $1,250,000. Private plans.

N. Y., Niagara Falls—Hotel— J. Geisler, 468½ 9th St., represents group of men who plan 99 x 159 ft., 1st and Cherry Sts. $400,000. Engineer and architect not announced.

N. Y., Niagara Falls—Office—Simons-Baker Co. takes bids about Dec. 15, 2 story and basement, 50 x 91 ft., brick and rein.-con., plain foundation, 3rd and Ferry Sts. $150,000. Kirkpatrick & Cannon, Gluck Bldg., archts.

N. Y., Niagara Falls—Science—Niagara University, Lewiston Rd., plans science building. $200,000.

N. Y., Richmond Hill (branch of Jamaica)—High School—Bd. Educ., 500 Park Ave., New York, plans brick, steel and stone, plain foundation, here. $1,148,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Rochester — Schools — Rochester Catholic Diocese plans new Aquinas Institute, Dewey Ave., $650,000., will mature in spring. J. F. Warner, Granite Bldg., archt. When plans are completed on above, owner plans adjunct of Aquinas Institute, $250,000. Probably above architect will prepare plans for same.

N. Y., Watertown—Orphanage—Jefferson Co. Orphanage plans 5 buildings. $200,000. A. Skinner, 228 Arsenal St., archt.

N. J., Newark—School—Bd. Educ., Broad St., had plans prepared by Guilbert & Bettelle, 2 Lombardy St., 3 story, brick, steel and stone, plain foundation, Maple and Goldsmith Aves. $600,000. Noted May 10.

Pa., Altoona — Office — See "Industrial Works."

Pa., Coatesville — School — City plans school. $160,000. Engineer and architect not selected.

Buildings (Continued)

Pa., Erie—Schools—Election in spring to vote on $2,000,000 bonds for schools. Engineer and architect not selected.

Pa., Wilkes-Barre — Hotel — Community Hotel Corp., c/o A. J. Sordini, Chamber of Commerce, plans hotel under direction of Hockenberry System. $1,000,000 to $1,500,000.

Md., Baltimore — Apartment — Wyatt & Nolting, archts., Keyser Bldg., soon take bids 9 story, 75 x 208 ft., brick, plain foundation, University Parkway. $750,000. Owner's name withheld. Noted Feb. 8.

Md., Baltimore—Hotel—Hotel Emerson, Calvert and Baltimore Sts., having plans prepared by W. G. Beecher, 12 East Pleasant St., 16 story, 40 x 104 ft. addition, brick, concrete and steel, Baltimore St. near Calvert St. $600,000. W. H. Parker, mgr. Noted Nov. 1.

Md., Baltimore—Natatorium—Natatorium Assn., Hearst Tower Bldg., having plans prepared by D. M. Ach, 1 Madison Ave., New York City, 4 story, rein.-con. and brick, Carlins Park. $500,000. J. OBrien, chn.

Va., Charlottesville — Hotel — Jackson Park Hotel Co., Inc., plans hotel, 5th and Jefferson Sts. $250,000-$1,000,000. Engineer and architect not selected.

W. Va., Bluefield—Office—City Council takes bids about Jan. 15, 4 story. $175,000. Mills, Gary & Sheffey, Bluefield, archts.

W. Va., Wellsburg — Bank — Wellsburg Natl. Bank having plans prepared by T. M. James Co., Wellsburg, 2 story and basement. $150,000.

N. C., Chimney Rock—See "Unclassified."

Ala., Auburn — Engineering — Alabama Polytechnic Institute plans engineering building. $300,000.

Ala., Birmingham—Hotel—T. H. Molton, 617 Idelwild Circle, takes bids about February, 100 x 190 ft. (not less than 10 story), 5th Ave. and 21st St. $1,500,000. Engineer anl architect not announced.

La., New Orleans—School—Orleans Parish School Bd., City Hall, opens bids about Dec. 12, for Capdau School, 3 story, 108 x 172 ft., Franklin, Louis and Jonquet Sts. $175,000. E. A. Christy, archt.

Tenn., Nashville — Seminary — Amer. Baptist Theological Seminary, 161 8th Ave., N., purchased site and plans seminary dormitories, college buildings, etc. $250,000. O. L. Haley, secy.

Ky., Louisville — Hospital — City and County Tuberculosis Hospital, 215 East Walnut St., having plans prepared by A. Loomis, Todd Bldg., hospital on 18th St. Tuberculosis Board sold $750,000 bonds. County will furnish $250,000.

O., Canton — Hospital — Stark Co. had plans prepared by Thayer & Johnson, archts., 5716 Euclid Ave., Cleveland, 3 story, brick, steel and concrete. $300,000. Noted March 1.

O., Cleveland—Apartment—B. Benjamin, 9917 Parkgate Ave., had plans prepared 4 story, 54 x 201 ft., brick, 2036 East 100th St. $350,000. Private plans.

O., Cleveland—Apartment—H. Latin, 1121 East 98th St., having plans prepared by M. Weis, Union Bldg., 3 story and basement, 76 x 115 ft., brick, East 90th St., near Euclid Ave. $150,000.

O., Cleveland — Commercial — J. Babin, Williamson Bldg., having plans prepared by N. Petti, Williamson Bldg., 3 story and basement, 55 x 160 ft., brick, steel and terra cotta, 3602 Euclid Ave. $150,000.

O., Cleveland — Commercial and Apartment—N. M. Berkowitz, 716 Guardian Bldg., had plans prepared by A. Sogg, 319 Hippodrome Bldg., 3 story and basement, 61 x 108 ft., brick, 12803 St. Clair Ave. $150,000.

O., Lakewood (Cleveland P. O.)—Apartment—W. Blusinsky, 508 Ulmer Bldg., Cleveland, had plans prepared by M. Weis, Union Bldg., Cleveland, 2 story, 18 x 160 ft., brick, Atkins Ave., here. $200,000.

O., Warren—High School—Bd. Educ. having plans prepared by Keitch, O'Brian & Hosker, Warren, high school. $900,000. Will mature in spring. Noted Nov. 15.

O., Youngstown—Church—First Baptist Church, Market and Boardman Sts., plans new church. $150,000. Engineer and architect not announced. Will mature in spring or summer.

Ind., Crown Point — Hospital — Comrs. Lake Co. plan 2 story, 34 x 525 ft. and 2 story, 50 x 100 ft. hospitals, 1 story power plant, 2 story childrens building, 2 story negro patients building and 1 ten car garage, rein.-con. and brick, outside city. $350,000. K. D. Norris, Calumet Bldg., East Chicago, archt.

Ind., Decatur—High School—St. Marys Church, plans 2 story and basement, 127 x 175 ft. brick and stone, $200,000. H. Gaul, 111 West Washington St., Chicago, archt.

Ind., Evansville—Church—Bethel Evangelical Church plans 2 story and basement, rein.-con. and brick, Garwin St. $150,000. Engineer and architect not selected.

Ind., Evansville—Church—Central Methodist Episcopal Church plans 2 story and basement, brick and stone. $150,000. Engineer and architect not selected.

Ind., Evansville—Medical Arts—G. C. Baughman, and W. H. Axton, representing owners, plan 6 story and basement, 70 x 200 ft., brick, steel, tile and marble, fireproof construction, 3rd and Sycamore Sts. $650,000. H. E. Boyle & Co., Furniture Bldg., Evansville, archts.

Ind., Ft. Wayne—Schools—Bd. School Trustees plans "Southside Grade School," 2 story and basement, brick, $275,000, C. R. Weatherhogg, 250 Ft. Wayne St., archt.; "Lakeside Grade School," 2 story and basement, brick, $275,000, G. Mahurin, 500 Lincoln Life Bldg., archt.; 2 story and basement school addition, brick, $200,000, Griffith & Goodrich, 211 East Berry St., archt.

Ind., Greenfield—School—School Trustees plan 2 story and basement, 70 x 160 ft., brick, semi fireproof construction, plain foundation. $150,000. O. P. Gordon, Greenfield, archt.

Ind., Hammond — Hospital — Franciscan Sisters of the Poor having plans prepared by D. X. Murphy & Bro., Louisville Trust Bldg., Louisville, Ky., 4 story, 46 x 288 ft., rein. con. $300,000.

Ind., Indianapolis—Office—Reserve Loan Life Insurance Co., plans 8 story and basement, brick, fireproof, North Pennsylvania St. $500,000. Rubush & Hunter, 428 Amer. Central Life Bldg., archts.

Ind., Kokomo—High School—Bd. School Trustees plans 2 story and basement, brick. $300,000. Engineer and architect not selected.

Ind., Kokomo—Hospital—Howard County Hospital Assn. plans hospital, brick, fireproof. $250,000. Elmer E. Dunlap Co., 1125 North Buckeye St., archts.

Ind., Kokomo—Office—Realty Co. having plans prepared by Vonnegut, Bohn & Mueller, 610 Indiana Trust Bldg., Indianapolis, 8 story, 44 x 132 ft., rein.-con. and brick. $340,000. E. Eberhardt, pres.

Ind., Marion — School — School Trustees plan 2 story and basement, rein.-con., brick and steel, concrete pile foundation, 4th St. $250,000. H. Elder, Custer Bldg., archt.

Ind., Richmond—Hotel—W. F. Williams, 200 South 6th St., plans hotel. $175,000. Ready for bids about Jan. 1. C. E. Werking & Son, Palladium Bldg., archts.

Ind., South Bend — High School — Bd. School Comrs. having plans prepared by Austin & Skambleau, 111 North Lafayette St., 2 story and basement, 75 x 360 ft., brick. $600,000. Noted May 3.

Ind., South Bend—Lodge—Eagle Lodge plans brick and fireproof. $300,000. Nicol, Scholes & Hoffman, Ross Bldg., Lafayette, archts.

Ind., Terre Haute—Dormitory—Gibeault Home for Boys, Allendale, Terre Haute, plans 2 story and basement brick. $150,000. Shourds-Stoner Co., 510 Tribune Bldg., archt.

Ill., Beardstown — High School — Bd. Educ. soon takes bids 2 story and basement, brick and rein.-con. $150,000. M. J. Geise, 800½ Main St., Quincy, archt.

Ill., Chicago — Office, etc. — Hartman Furniture and Carpet Co., 230 South Wabash Ave., plans office and furniture building, Adams and Wabash Aves., $1,000,000. A. S. Alschuler, 28 East Jackson Blvd., archt.

Ill., Oak Park—Apartment—D. Collins, 810 West Madison St., plans 5 story, 140 x 155 ft., fireproof, Madison St. and Oak Park Ave. $1,000,000. Hall, Lawrence, Rippel & Ratcliffe, 123 West Madison St., Chicago, archts.

Ill., Peoria—Bank and Office—Commercial Natl. Bank, 321 South Adams St., having preliminary plans prepared by Hewett & Emerson, 1600 Peoria Life Bldg., 7 or 8 story and basement, 72 x 120 ft., rein.-con., brick and steel, concrete pile foundation.

Ill., Savanna—School—Bd. Educ. plans Lincoln School, 2 story and basement, rein.-con., brick and steel. $175,000. J. R. Slate, pres. Architect not selected.

Wis., Fond du Lac—Theatre and Business—Fisher Paramount Theatres, 36 South State St., Chicago, having plans prepared by R. Levine & Co., 6957 South Green St., Chicago, 3 story and basement, 140 x 240 ft., brick, terra cotta and concrete, plain foundation, North Main St., here. $500,000.

Wis., Madison—Chapel and Club House—St. Francis Episcopal Society, c/o S. M. Cleveland, pastor, 1015 University Ave., plans 2 story, brick, rein.-con. and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Milwaukee — Church — Immanuel Evangelical Lutheran Congregation, c/o C. F. Dietz, pastor, 1122 Garfield Ave., having plans prepared by H. C. Haeuser, 445 Milwaukee St., 2 story, brick and tile, plain foundation, Teutonia Ave. $150,000. Noted Nov. 1.

Wis., Milwaukee — Club — Jugo-Slav Societies, c/o J. Match, pres., 467 Park St., plans 2 story, brick and concrete, plain foundation. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Hospital—City, c/o G. Ruhland, health comr., having preliminary plans prepared by C. E. Malig, City Hall, 2 story and basement addition, brick and concrete, plain foundation, Mitchell St. $150,000.

Minn., Cambridge—Hospital—State Bd. of Control, St. Paul, making plans 3 story and basement, rein. con., brick, tile and stone. $150,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., St. Paul—Apartment—Cleveland Realty Co., 302 Pittsburgh Bldg., having plans prepared by W. Stevens, 302 Pittsburgh Bldg., 3 story and basement, 92 x 118 ft., brick, concrete and steel. $175,000.

S. D. Huron—Auditorium and Gymnasium—Huron College takes bids in December or early in 1924 for 4 story and basement, rein.-con., brick and stone. $400,000. Engineer and architect not selected.

Mo., Cape Girardeau—High School—Nov. 30 to vote on $268,000 bonds 2 story and basement high school, also additions to 2 existing grade schools.

Mo., Kansas City—School—Bd. Educ. soon takes bids rein.-con. and brick addition to Bristol School. $200,000. C. A. Smith, Finance Bldg., archt.

Tex., Houston—Apartment—E. M. Muehlendorff, archt., West Bldg., preparing plans 8 story, concrete and brick, Montrose Blvd. $350,000. Owner's name withheld.

Tex., Houston — Club and Office — Carpenters Union 213, Caroline St., having plans prepared by J. Finger, Woolworth Bldg., 4 story, brick, terra cotta and concrete, Capitol St. $150,000.

Tex., Houston — Convent — Sisters of Charity of Incarnate Word having plans prepared by M. Sullivan, Carter Bldg., 3 story, 60 x 275 ft., brick, steel and concrete. $500,000.

Tex., San Marcos—Schools—Dec. 20, to vote on $200,000 bonds, schools and improvements. C. E. Rugel, secy. School Bd.

Okla., Bristow—High School—Bd. Educ. having plans prepared by C. L. Curran, Groom Bldg., 3 story and basement, 140 x 180 ft., rein.-con. and brick. $150,000. Noted Nov. 8.

Okla., Ponca City — Office — Ponca City News having plans prepared by C. H. Woodruff, Fort Worth, Tex., 2 story, 100 x 140 ft., brick and steel, plain foundation, 4th and Walnut Sts. $151,000.

Ore., Portland—F. E. Taylor, 1201 Yeon Bldg., having plans prepared by Shacht & Bergen, 607 Worcester Bldg., and takes bids about Dec. 16, 2 story, 100 x 100 ft. garage, rein.-con., solid rock foundation. Washington and Ella Sts. $75,000. Packard Service and Sales Co., 10th and Burnside Sts., lessee.

Calif., Alhambra—School—City to vote on $600,000 bond issue for additions to elementary and high schols.

Calif., Berkeley—Theatre—L. H. Ford, archt., 306 14th St., Oakland, preparing preliminary plans Class A construction theatre, Telegraph Ave. near Channing Way. $200,000. Owner's name withheld.

Calif., Cambria — School — Coast Union High School Dist. plans school buildings. $150,000.

Calif., Glendale—Hospital—O. W. Tarr, 102 East Bway., plans fireproof hospital. $150,000. Architect not selected.

Calif., Glendale—Hotel—J. B. Ferguson, Sun Bldg., Los Angeles, (representing owner), having plans prepared by Engineer-

Buildings (Continued)

ing Service Corp., Washington Bldg., Los Angeles, 3 story, 150 x 250 ft., rein. con., Colorado St., here.

Calif., Long Beach—Theatre, Store and Office—West Coast Theatres Inc., Knickerbocker Bldg., plans 8 story, 100 x 175 ft.

Calif., Los Angeles—Apartment—H. Genser, archt., Hibernian Bldg., takes bids in 1 week 3 story and basement, 125 x 250 ft., frame, Exposition Blvd. Owners name withheld.

Calif., Los Angeles — Apartment — Murstein & Neft, Seattle, Wash., having plans prepared by H. Genser, 207 Hibernian Bldg., Los Angeles, 3 story, 126 x 272 ft., wood, Exposition Blvd. and Vermont Ave., here. $200,000.

Calif., Los Angeles—Club—Los Angeles Lodge, B. P. O. E., 300 South Olive St., having preliminary plans prepared by Curlett & Beelman, Union Bank Bldg., 12 story, Class A construction, Parkview and 6th Sts. $1,250,000.

Calif., Los Angeles — Hospital — French Hospital, 531 College Ave., having preliminary plans prepared by Monaco & Bordeaux, Bank of Italy-International Bldg., 2 story and basement, rein.-con. addition to hospital, College St. $150,000.

Calif., Los Angeles—Hotel—E. A. McCarthy, 457 South Norton St., having plans prepared by Noernbery & Johnson, Railway Bldg., 3 story and basement, 50 x 115 ft., brick, Stanford Ave.

Calif., Los Angeles—Hotel—A. W. Mortimer, et al., Chapman Bldg., had plans prepared by L. A. Smith, 3rd St. and Western Ave., 12 story and basement, rein.-con., Orange and Loomis Sts. $750,000.

Calif., Los Angeles—Hotel—C. F. Whittlesey, archt., 6533 Hollywood Blvd., preparing preliminary plans 975 room hotel, probably rein.-con., Hollywood Blvd. Owner's name withheld.

Calif., Los Angeles—Office—J. Van Nuys, Van Nuys Bldg., had preliminary plans prepared by Morgan, Walls, Clemens, Van Nuys Bldg., 12 story, Class A construction, Bway. and 10th St.

Calif., Los Angeles—Store and Loft—L. Harter, c/o W. J. Saunders, archt., Laughlin Bldg., having plans prepared 6 story, 50 x 150 ft., rein.-con., 21st St. near San Pedro St.

Calif., Monrovia — Church — St. Lukes Episcopal Church, South Myrtle St., having plans prepared by C. M. Winslow, Van Nuys Bldg., Los Angeles, group of building, incl. parish house, etc., masonry construction.

Calif., Monrovia—Club—Monrovia Chamber of Commerce representing interests which plan country club buildings, grounds, etc. $150,000.

Calif., Oakland — Theatre — Orpheum Theatre Co., c/o G. A. Lansburgh, archt., 130 Montgomery St., San Francisco, having plans prepared theatre, Class A construction, probably rein.-con., 20th and Bway. $800,000.

Calif., Pasadena—Church—First Baptist Church, 65 North Morengo St., having plans prepared by C. M. Winslow, Van Nuys Bldg., Los Angeles, church, masonry construction. $350,000.

Calif., San Francisco—Hospital—Chinese Six Companies, c/o A. I. Coffey, archt., Humboldt Bank Bldg., rejected bids and having revised plans prepared, rein.-con., Jackson and Trenton Sts. $150,000. Noted Apr. 19.

Calif., San Francisco—Office—See "Industrial Works."

Calif., San Francisco — Office — Pacific Telephone & Telegraph Co., 333 Grant Ave., having plans prepared by T. Ronnenberg, engr., Crocker Bldg., and Miller & Pflueger, archts., Lick Bldg., associated with A. A. Cantin, 68 Post St., 26 story and basement, rein.-con., steel and terra cotta, New Montgomery St. $2,500,000. Noted July 5.

Calif., San Jose—Educational—San Jose Presbyterian Church having plans prepared by F. W. Reid, 312 Call Bldg., San Francisco, 4 story, rein.-con., 4th St. $150,000.

Calif., San Rafael—Courthouse—Marin Co. plans election to vote on $600,000 bond issue, for courthouse. R. E. Graham, clk. Architect not selected.

Calif., Tulare—Lodge—Tulare Lodge, B. P. O. E., having preliminary plans prepared by Swartz & Ryland, Rowell Bldg., Fresno, 2story, brick. $150,000.

Calif., Watsonville—Store—C. Ford Co., c/o Wyckoff & White, archts., Growers Bank Bldg., San Jose, having plans prepared, 2 story, rein.-con. addition. $150,000.

Number of Contracts Let in United States in First Ten Months of 1923

	New England	Middle Atlantic	Southern	Middle West	West of Mississippi	Western	Total
Water-works	10	58	26	119	124	22	359
Sewers	9	95	30	131	103	39	407
Bridges	16	37	53	56	113	38	313
Excav. and dredging	......	7	16	25	49	24	121
Streets and roads	66	304	271	450	657	324	2,072
Industrial works	190	261	95	507	183	153	1,389
Buildings	153	497	153	462	258	255	1,778
Federal Government work	14	73	82	44	24	44	281
Miscellaneous	20	114	32	77	100	56	399
	478	1,446	758	1,871	1,611	955	7,109

Que., Outremont—Church—St. Madeline of Outremont Church, 40 Duverger St., having plans prepared 50 x 80 ft. church, Duverger St. $250,000. Architect not announced.

BIDS DESIRED

Mass., Boston—High School—Jan. 12, by Dept. Pub. Wks., 2 story and basement, 200 x 200 ft., rein.-con. and brick, wood pile foundation, Warren and Townsend Sts. $1,200,000. H. A. Atwood, Ashmont St., Roxbury, archt. Noted Feb. 1.

Mass., Dorchester (Boston P. O.)—Junior High School—Feb. 1, by Dept. Pub. Wks., Boston, 2 story and basement, 120 x 120 ft. brick and rein.-con., wood pile foundation, in Mather Dist. $500,000. O'Connell & Shaw, 134 Newbury St., Boston, archts. Noted Feb. 1.

Mass., East Boston (Boston P. O.)—School—Dec. 21, by Dept. Pub. Wks., Boston, constructing Samuel Adams School, 2 story and basement, 120 x 120 ft., brick and rein.-con., wood pile foundation. $500,000. C. R. Greco, 8 Beacon St., Boston, archt. Noted Feb. 1.

N. Y., Buffalo — Office — Dec. 18, by Supervs. Erie Co., 29 City and County Hall, 3 story, rein.-con., brick and Indiana limestone, Eagle St. $325,000. North, Shelgren & Swift, 511 Crosby Bldg., archts.

N. J., Camden—Hospital—Dec. 17, by Camden Co., group of buildings for tuberculosis hospital. A. H. Moses, Temple Bldg., archt.; adv. E. N.-R. Nov. 29.

Wash., D. C.—School—Dec. 17, by Dist. Comrs., 509 Dist Bldg., for school. Further information apply Room 427, Dist. Bldg.; adv. E. N.-R. Nov. 29.

La., New Orleans—School—Dec. 21, by E. A. Christy, archt. Orleans Parish School Bd., City Hall Annex, 108 x 172 ft. Capdau School, Jonquil, Lotus and Lavender Sts. $175,000. Noted Nov. 8.

O., Cleveland — Apartment — Abrams Bros., 203 Ulmer Bldg., taking bids 3 story and basement, 43 x .75 ft., brick, 9701 Lamont Ave. $200,000. Braverman & Havermaet, Ulmer Bldg., archts.

O., Cleveland—Apartment—H. A. Fishel, Society for Savings Bldg., taking bids and opens same about Dec. 10, 3 story and basement, 52 x 109 ft., brick, 1872 East 101st St. $160,000. Best & Hoefler, B. F. Keith Bldg., archts. Noted Nov. 8.

O., Cleveland — Apartment — S. Koslen, 1077 East 97th St., taking bids and opens same about Dec. 12, 3 story and basement, 65 x 160 x 195 ft., brick, 1794 Crawford Rd. $200,000. M. Weis, 617 Union Bldg., archt. Noted Oct. 4.

O., Cleveland—Apartment—Rosen Bros., c/o Eagle Cap Co., 608 St. Clair Ave., taking bids and opens same about Dec. 5, 3 story and basement, 37 x 110 ft., brick, 10206 Wilbur Ave. $150,000. Braverman & Havermaet, Ulmer Bldg., archts.

O., Cleveland—Store and Apartment—L. Arnoff, 545 East 117th St., taking bids 4 story and basement, 40 x 446 ft., brick, Lake Shore Blvd. $300,000. G. Rudolph, Newman-Stern Bldg., archt.

O., Mt. Vernon—High School—Dec. 10, by Bd. Educ., 2 story and basement, 64 x 146 ft., brick, stone and concrete. $185,000. W. H. Tremaine, Chamber of Commerce Bldg., Columbus, archt.

Ind., Newport—Courthouse—Dec. 22, by Vermillion Co., courthouse, Public Sq. $293,000. M. Lewis, aud.

Mich., Sturgis—Bank—Dec. 7, by Citizens State Bank, 4 story and basement, rein.-con., brick, steel and stone, plain foundation, $200,000. Robinson & Campau, 715 Michigan Trust Bldg., Grand Rapids, archts.

Ill., Chicago—Apartment—P. F. Olsen, archt., 720 Cass St., receiving bids 3 story and basement, 100 x 140 ft., Albion and Clark Sts., for A. Wallen, 5510 Kenmore St. $200,000.

Ill., Chicago—Apartment—P. F. Olsen, archt. and owner, 720 Cass St., receiving bids 3 story and basement, 100 x 160 ft., Mildred and George Sts. $150,000.

Ill., Chicago—Apartment—B. H. Stephens, archt., 407 South Dearborn St., receiving bids 3 story, 100 x 150 ft. fireproof, 2344-54 Kennilworth St., for E. Wettegan, c/o architect. $150,000.

Ill., Chicago—Apartment—M. S. Willens, 140 South Dearborn St., receiving bids 3 story and basement, 100 x 140 ft., fireproof, Wayne St. near Farwell St. $200,000. J. Cohen & Co., 140 North Dearborn St., archt.

Ill., Chicago—Store and Apartment—Z. E. Smith, archt., 305 East 55th St., receiving bids 3 story, 110 x 125 ft., fireproof, Cottage Grove Ave. and 76th St., for M. Hoffman, c/o architect. $200,000.

Wis., Madison—Chapel—Balch & Lippert, archts., Gay Bldg., taking bids 4 story, 56 x 88 ft., brick, rein.-con. and steel, plain foundation, here, for German Methodist Church, c/o W. Schwiering, 110 South Congress St., Kenosha. $150,000. Noted Nov. 1.

Minn., Duluth—Commercial—Dec. 20, by W. M. Prindle & Co., Lonsdale Bldg., agts. for R. M. Bradley and associates, Boston, 4 story, 50 x 140 ft., rein.-con. and brick, West 1st St. near 3rd Ave. W. $150,000. F. G. German, 411 Exch. Bldg., archts. and engrs.

S. D., Spearfish—School—Dec. 15, by Bd. Educ., 2 story and basement, rein.-con., brick, stone and tile. $150,000. Perkins & McWayne, 322 Paulton Blk., Sioux Falls, archts.

Tex., Galveston—Administration, etc.—Jan. 14, by Bd. Regents, University of Texas, c/o H. L. Stark, chn., Orange, administration building and power plant, brick, stone and concrete, on Campus, here. $308,000. H. M. Greene Co., North Texas Bldg., Dallas, archts.

Calif., Los Angeles—Apartment—Eastern Realty Co., taking bids 3 story, 108 x 138 ft., brick and steel, Pico St. and Wilton Pl. $185,000. H. Genser, 208 Hibernian Bldg., archt. Noted Oct. 25.

Calif., Los Angeles—Hotel and Apartment—A. F. Priest, archt., Fay Bldg., receiving bids 5 story, brick and steel, Brand and California St., for Glendalia Hotel Co. $200,000.

BIDS RECEIVED

Ill., Waukegan—Y. M. C. A., 203 North Genesee St., 4 story and basement, 104 x 122 ft., rein.-con., brick and tile, from Peterson & Weeks, 2 South County St., $207,609. Noted Nov. 1.

Buildings (Continued)

CONTRACTS AWARDED

Conn., Hartford—Apartment—D. Marra, 105 Kent St., will build 3 story, 60 x 190 ft., brick, plain foundation, Retreat Ave., by day labor. $200,000. J. E. Marchetti, 721 Main St., archt. Noted Oct. 4.

Pa., Brownsville—Store and Hotel—S. Tiff, Monongahela Hotel, 31 x 58 ft. store and hotel, Market St., to L. J. Noble, Brownsville, percentage basis. Archts. est. $300,000.

N. Y., Brooklyn—Apartment—Bermal Realty Corp., c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., will build 4 story, 100 x 100 ft., brick, steel and stone, plain foundation, 13th Ave., by day labor. $175,000.

N. Y., Brooklyn—Apartment—Kap Realty Corp., c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., will build brick, steel and stone, plain foundation, Empire Blvd., by day labor. $200,000.

N. Y., Brooklyn—Apartment—Lipthal Building Corp., c/o Seelig & Finkelstein, archts. and engrs., 44 Court St., will build 4 story, brick, steel and stone, plain foundation, Carroll St., by day labor. $200,000.

N. Y., New York—Apartment—Eight Hundred Seventy West End Ave. Corp., c/o R. Candela, archt. and engr., 200 West 72nd St., will build brick, steel and stone, plain foundation, West End Ave., by day labor. $1,000,000.

N. Y., New York—Apartment—Finkelstein & Schwartz, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, West 188th St., by day labor. $250,000.

N. Y., New York—Apartment—H. Glick, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, 153rd St. and St. Nicholas Ave., by day labor. $300,000.

N. Y., New York—Apartment—B. London, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 5 story, brick, steel and stone, plain foundation, Ft. George Ave., by day labor. $600,000.

N. Y., New York—Apartment—Stelwien Bros., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, 115th St. and Webb Ave., by day labor. $150,000.

N. Y., New York—Apartment—I. Weinstein, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 75 x 150 ft., brick, steel and stone, plain foundation, 196th St. and Creston Ave., by day labor. $200,000.

N. Y., New York—Hospital—Wiseman & Taussig, archts. and engrs., 25 West 43rd St., 9 story, 100 x 175 ft., brick, steel and stone, plain foundation, 5th Ave. anl 103rd St., to Wells Constr. Co., 237 5th Ave., for Physicians Medical Hotel Corp., c/o architects. Archts. est. $800,000. Noted April 5.

N. Y., New York—Loft—Ten East 47th St. Corp., 25 x 114 ft., brick, steel and stone, plain foundation, 10 East 47th St., to Moore & Patience, Inc., 103 Park Ave. Archts. est. $200,000.

N. J., Union Hill (Weehawken P. O.)—School—Bd. Educ., 4 story, brick, steel and stone, plain foundation, New York Ave. and Gardner St., to J. E. Bose & M. Milliment, 368 Bergenline Ave., Union Hill, $453,015.

Md., Frostburg—Dormitory—Maryland State Normal School, Frostburg, 3 story, 43 x 52 ft. addition, to O. Gerlach, Frostburg, $150,000.

W. Va., Montgomery—Bank—Montgomery Natl. Bank, 2 story and basement, 24 x 90 ft., stone and granite, to Hoggson Constr. Co., 485 5th Ave., New York. Est. $200,000. Noted June 21.

Ky., Louisville—Hotel—Citizens Hotel Co., 18 story, 124 x 148 ft., brick and stone, 5th and Walnut Sts., to Rommel Bros., 919 East Bway. Archts. est. $2,300,000. Noted Oct. 25.

Ky., Winchester—High School—Bd. Educ., 3 story, brick and terra cotta, to Central States Constr. Co., 1107 4th Ave., Huntington, W. Va. Est. cost $250,000. Noted Sept. 27.

O., Cleveland—Office and Retail—Cleveland Window Glass & Door Co., 209 Champlain Ave., 3 story and basement, 60 x 140 ft., brick, steel and concrete, 1200 Bolivar Rd., to Natl. Concrete Fireproofing Co., Citizens Bldg. Archts. est. $150,000. Noted Oct. 25.

O., Cleveland—Temple—Euclid Ave. Temple Assn., c/o J. Laronge, chn. Building Comn., 214 Williamson Bldg., 3 story and basement, 88 x 120 ft., brick, steel and concrete addition, East 82nd St. and Euclid Ave., to J. Grant & Son, 4500 Euclid Ave. Archts. est. $225,000. Noted Sept. 27.

Ind., Indianapolis—Hotel—Jackson Place Realty Co., 914 Hume-Mansur Bldg., 12 story and basement, 50 x 102 ft., brick, McCrea St. and Jackson Pl., general contract to E. G. Spink Co., 914 Hume-Mansur Bldg.; metal lath to Anchor Steel Products Co., 2039 North New Jersey St.

Mich., Dearborn—Library—Bd. Directors Pub. Library, 2 story and basement, rein.-con., brick and steel, plain foundation Michigan Ave., to F. R. Patterson Constr. Co., 624 McKerchey Bldg., Detroit, $150,000.

Ill., Chicago—Apartment—A. Ingrams, c/o Huszagh & Hill, archts., 72 West Washington St., 3 story, Rodgers and East Lake Terrace, to Holpuch Co., 111 West Washington St., $500,000. Notel Sept. 20.

Ill., Chicago—Apartment—Johnson Bros., 109 North Dearborn St., 3 story, 170 x 200 ft., 69th and Crandon Sts., to Turnquist Bros. Constr. Co., 326 East 69th Pl., $300,000. Noted Nov. 1.

Ill., Chicago—Apartment—J. Rosenberg, c/o T. R. Bishop, archt., 35 South Dearborn St., 3 story, 175 x 190 ft., fireproof, 56th and Kimbark Sts., to H. Zisook, 4451 Vincennes Ave. Archts. est. $400,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., 3 story, 152 x 175 ft., fireproof addition, 547-565 East 35th St., to Siebold & Neunkirchen, 133 West Washington St. Archts. est. $300,000.

Wis., Clinton—Church—First Presbyterian Church, c/o C. W. Collva, chn., 1 and 2 story, 75 x 90 ft., brick, rein.-con. and stone, plain foundation to J. Root, South Beloit, Ill. Archts. est. $150,000.

Wis., Madison—Apartment—M. Woldenberg, 54 West Kenzie St., Chicago, 6 story, 60 x 150 ft., brick, rein.-con. and steel, plain foundation, here, to C. B. Fritz Co., 137 North Frances St. Archts. est. $150,000.

Wis., Milwaukee—Store—Mitchell Street Bldg. Co., c/o B. Morse, 216 West Water St., 1 story and basement, 100 x 140 ft., brick, plain foundation, to S. Czaplewski & Son, 878 2nd Ave. Noted Nov. 1.

Minn., Proctor—School—School Bd., 2 story and basement, 92 x 182 ft., rein.-con., brick and steel, general contract to H. Fawcett, Mesaba Blk., Duluth, $175,000. Archts. est. $200,000. Noted Aug. 23.

Minn., St. Paul—Lodge—Fraternal Order of Eagles, Aerie No. 33, 3 story and basement, 120 x 120 ft. rein.-con., brick, tile and stone, 12th and Wabasha Sts., excavation to C. F. Sculley Equipment Co., 212 Dakota Bldg.; superstructure will be built by day labor. Est. cost $225,000.

Minn., St. Paul—School—Dept. Educ., 2 story and basement, rein.-con., brick, tile and stone, Thomas, Arundel and Edmund St., general contract to E. Bjorklund, 485 Endicott Bldg., $126,927. Noted Nov. 15.

Minn., Virginia—High School—Independent School Dist., 2 story and basement, 58 x 113 ft. addition, rein.-con., brick and stone, general contract to Beck Eng. & Constr. Co., 1137 Plymouth Bldg., Minneapolis, $133,460. Archts. est. $166,272. Noted Nov. 8.

Kan., Hutchinson—School—Bd. Educ., 2 story and basement, 122 x 156 ft., brick and concrete, Maple S ., to L. P. Riggs, Larned.

Tex., Dallas—Apartment Hotel—E. F. Hamilton, 726 North Beacon St., 8 story and basement, 275 x 400 ft., concrete and brick, plain foundation, Oak Lawn and Cedar Springs Sts., to Gilsonite Constr. Co., Southwestern Life Bldg., $1,800,000.

Calif., La Jolla—Hotel—I. M. Hopkins, 537 East Jefferson, Los Angeles, 2 story, 250 x 276 ft. frame and plaster, to Miller & Miller, 4863 West Washington St., Los Angeles. $235,000.

Calif., Oakland—School—St. Elizabeths Parish School, 1532 34th Ave., 2 story and basement, rein.-con. 34th St. Ave., to Larsen-Siegrist Co., Claus Spreckels Bldg., San Francisco. $251,777. Noted Nov. 22.

Calif., San Diego—Hotel, etc.—L. R. Lurie Co., 315 Montgomery St., San Francisco, 6 story hotel and auto stage depot, North Bway., to Vukicevich & Bagge, 815 Bryant St., San Francisco, approximately $1,000,000, awarded on percentage basis. Pickwick Stages, Inc., 683 Market St., San Francisco, lessee.

Calif., San Francisco—High School—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., will build 3 story, brick, 29th St. near Church St., by day labor. $150,000. Shea & Shea, Chronicle Bldg., archts.

Calif., San Francisco—Office and Store—Crocker Estate Co., Crocker Bldg., 3 to story, Class A construction, Market St. near Kearny St., to Dinwiddie Constr. Co., Crocker Bldg. Noted Feb. 22.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Laundry Equipment—Spec. 4930—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans reinstallation laundry equipment, here.

Wash., Camp Lewis—Buildings—Constructing Quartermaster General, War Dept., Wash., D. C., plans to replace frame buildings here, with permanent concrete buildings.

Wash., Keyport—Extension to Building—Spec. 4926—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans extensions to operating building, here.

Wash., Puget Sound—Barrack—Spec. 4928—Bureau Yards & Docks, Navy Dept. Wash., D. C., plans barrack for unmarried operators, here.

BIDS DESIRED

W. Va., Huntington—Generator, Motor, etc.—Dec. 19 at office U. S. Engineer, 1 diesel engine, generator, motor, etc., for towboat "Kanawha."

Ala., Florence—Cement—Dec. 3, at office U. S. Engineer, furnishing 115,000 bbl. American portland cement for Wilson Dam.

Ky., Owensboro—Lumber—Nov. 30, at office U. S. Engineer, P. O. Box 72, Louisville, approximately 30,000 ft. yellow pine No. 2 and better, and 90,000 ft. yellow pine, No. 1 rough, f.o.b. here.

Wash., Seattle—Bridge—Dec. 27, at office of C. E. Dole, gen. purch. agt. Alaskan Eng. Comn., Bell St. Terminal, furnishing 200 ft. through steel riveted truss span.

BIDS RECEIVED

S. C., North Island—Quarters—Spec. 492—Bureau Yards & Docks, Navy Dept. Wash., D. C., constructing quarters at radio compass station, here, (1) work complete from Simons-Mayrant Co., 506 Peoples Office Bldg., Charleston, S. C., (1) $7,57 (90 days) (2) deduct $165 (3) deduct $75 (4) deduct $350. Noted Oct. 18.

Ga., Fort Benning—Quarters—Constructing Quartermaster, 6 double sets officers quarters and hospital building, incl. heating plant, (1) work complete, from E. A. Boehl & Co., Leavenworth, Kan., (1) $117,-000 (2) $18,900 (3) $2,166 (5) $1,200 (6) $200 (180 days). Noted Oct. 25.

Ill., Great Lakes—Rebuilding Laundry—Spec. 4918—Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding laundry at Training Station, here. (1) work complete from G. I. Morgan, 342 Ridgeland Ave., Waukegan, (1) $31,992 (2) $27,851 (3) $62 (4) $400. Noted Nov. 1.

Neb., Central City—Post Office—Treas. Dept., Wash., D. C., construction incl. mechanical equipment U. S. Post Office, here from W. D. Lovell, 1415 South East 8th St., Minneapolis, Minn., $43,465. Noted Oct. 18.

Nevada—Road—C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 9 Main St. San Francisco, Calif., grading 8.87 mi. Meadow Creek Sect., Gold Creek-Jarbridge Highway, Elko Co., here, 53,500 cu.yd. excav., 1,660 lin.ft. corrugated metal pipe, etc., from Morrison-Knudsen Co., Railroad and Reclamation Aves., Boise, Idaho, $84,-793 (furnishing explosives). Engrs. est. $68,922. Noted Nov. 1.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg. Portland, constructing 7.2 mi. Detroit-Niagara Sect. Santiam National Forest Rd. Marion Co., from Payne & Padrick, Marshfield, $139,220 (Government furnishing explosives); $139,320 (contractor furnishing explosives). Noted Nov. 1.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, constructing 7.2 mi. Waldo-Elk Creek Sect., Grants Pass-Crescent City National Forest Project, Josephine Co., from MacVear, Walls & Logan, Grants Pass, 35 acres clearing $200, 21 acres grub

Federal Government Work (Continued)

bing $300, 5,000 cu.yd. rock excav. $1, 53,000 cu.yd. common excav. $0.525, 1,500 cu.yd. structural excav. $1, 120 cu.yd. Class A concrete $32.50, 145 cu.yd. Class C concrete $27.50, totals using concrete pipe $67,323, using galvanized iron pipe, $64,166. Noted Nov. 1.

CONTRACTS AWARDED

N. Y., Buffalo—Cement—U. S. Engineer, 2,000 bbl. cement, to Lehigh Portland Cement Co., Ellicott Sq., $2.83.

Va., Norfolk—Dredging—U. S. Engineer, dredging 69,000 cu.yd. in eastern branch Elizabeth River, Norfolk Harbor, from Norfolk Dredging Co., P. O. Box 494, $27,806. Noted Oct. 11.

Fla., Pensacola — Distribution System, etc.—Spec. 4715—Bureau Yards & Docks, Navy Dept., Wash., D. C., reconstruction steam distribution and heating systems, at Naval Air Station, here, to Newport Contg. and Eng. Co., Law Bldg., Newport News, Va., $23,448 (120 days). Noted Oct. 25.

Ala., Florence—Cement and Lumber—U. S Engineer, furnishing for Wilson Dam, at Muscle Shoals, 25,000 bbl. portland cement to Phoenix Portland Cement Co., Birmingham, $70,812; 450,000 ft. yellow pine lumber to Acme Lumber and Coal Co., Amer. Trust Bldg., Birmingham, $14,048; 250,000 ft. yellow pine to Flynn-Wooten Co., Columbus, Miss., $7,860.

Ill., Belleville — Hangars — Constructing Quartermaster, Scott Field, two 66 x 160 ft. steel hangars, to S. Kraus, Belleville, $9,086. Noted Oct. 11.

Alaska, Juneau—Breakwater—U. S. Engineer, furnishing and placing 15,000 tons of stone for breakwater in Wrangell Harbor, here, to N. Fleiness, 539 North 80th St., Seattle, Wash., $32,750. Noted Oct. 18.

P. I., Cavite—Reconstruction of Wharf—Spec. 4896—Bureau Yards & Docks, Navy Dept., Wash., D. C., reconstructing wharf, here, to J. E. Grant, 2030 Croquieta, Manila, $35,000. Noted Aug. 16.

Unclassified

PROPOSED WORK

Transmission Line—New York—Corning Light & Power Co., 54 East Market St., Corning, plans power line from plant in Elmira to Corning, with extensions to Riverside, South Corning, Erwin, Gang Mills and Coopers. $50,000. Engineer not announced.

Ferry Houses, etc.—New Orleans, La.—Algiers Pub. Service Corp., R. T. Nolan, mgr., plans 3 ferry houses, numerous bridge approaches for Canal St. and 3rd Dist. Ferries, also two ferry boats, 150 ft. long, 67 ft. wide. $350,000. W. T. Nolan, Canal Commercial Trust & Savings Bank Bldg., archt.

Summer Resort—Chimney Rock, N. C.—Chimney Rock Mountains, Inc., plans large lake, concrete dam, 100 ft. high, 2 hotels, 27 mi. driveways, replacement 6 mi. State Highway, club house, tennis, golf and polo grounds, water, sewer and power development for lighting purposes. $4,000,000. L. B. Morse, pres.

Stadium—Macon, Ga.—Mercer University plans concrete stadium, seating capacity 15,000. $100,000.

Dock, etc. — Cincinnati, O. — Cincinnati River-Rail Transfer Co. soon takes bids dock with railway connections along Ohio River. B. L. Baldwin, ch. engr.

Transmission Line—Wisconsin—Wisconsin Utilities Co., Monroe, plans 66,000 volt transmission line from here to Orfordville, and increasing voltage of present lines from Janesville to Orfordville from 33,000 to 66,000 volts, also increasing capacity of substation at Janesville. $100,000. Private plans.

Golf Course — Milwaukee, Wis. — Blue Mound Country Club, c/o H. W. Ellis, pres., 149 Michigan St., making plans 18 hole golf course. Will build club house later. $100,000. S. J. Rayner, Southampton, N. Y., engr.

Storage Space—Milwaukee, Wis.—Milwaukee Auditorium, 6th and Cedar Sts., making plans storage space under sidewalk, structural steel and concrete. $30,000. Clas, Shepherd & Clas, 445 Milwaukee St., engrs.

Golf Course—Mineral Point, Wis.—Blue Grass County Club, making plans 9 or 18 hole golf course, tennis courts and club house. $40,000. Private plans.

Pipe Line—Amarillo, Tex.—See "Industrial Works."

Levees—Kaufman, Tex.—Kaufman Levee Dist. 1, Kaufman Co., election Dec. 4, to vote on $140,000 bonds, repairs and maintenance of present levees.

Pipe Line—Marlin, Tex.—Natl. Petroleum Co., Magnolia Bldg., Dallas, plans pipe line from Post Oak Oil Field to San Antonio and Arkansas Pass R.R. $40,000.

Concrete Tanks—San Antonio, Tex.—W. E. Simpson, engr., Natl. Bank of Commerce Bldg., takes bids about Jan. 1, ten concrete tanks, 20 ft. diam. x 50 ft., 3,000 cu.yd. earth excav., 700 cu.yd. earth fill, 3,500 cu.yd. rein.-con., 350 tons reinforcing steel, for San Antonio Portland Cement Co., Lakeview Ave.

Lighting System—La Jolla, Calif.—City of San Diego plans ornamental lighting system, incl. 99 standards, underground conduits, marbleite posts, etc., in Girard St. and Prospect Ave., here. $25,000. F. A. Rhodes, City Hall, San Diego, engr.

Shipping Terminal — Berkeley, Calif. — East Bay Terminal & Manufacturers Assn., 6234 San Pablo Ave., Oakland, plans shipping terminal, here. $500,000. G. A. Posey, c/o Courthouse, Oakland, directing engr. R. S. Hawley, 1091 43rd St., Oakland, consult. engr.

Telephone Line—Redding, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans 188 mi. telephone line from here to Vaca-Dixon substation. To exceed $100,000.

Harbor Improvements — Ontario — Dept. Pub. Wks., Ottawa, plans improvements to harbor at Chantry Island, Bruce Co., $50,000, also dredging and improving Saugeen Harbor, extending and improving piers, etc., Bruce Co., $120,000. H. B. Craig, Royal Bank Bldg., London, engr.

BIDS DESIRED

Pavilions—New York, N. Y.—Dec. 20, in office of General Medical Superintendent, Bellevue Hospital, 415 East 26th St., Pavilions F and G of new Bellevue Hospital. J. J. McGrath, pres. Bd. Trustees Bellevue & Allied Hospitals.

Test Borings—Phila., Pa.—Dec. 4, by W. S. Twining, dir. Dept. City Transit, 1211 Chestnut St., test borings for bridge over Schuylkill River and for subway and elevated railway construction in West Phila.

Heating and Ventilating Apparatus—Cincinnati, O.—Dec. 24, by Clerk Bd. Educ., 511 West Court St., heating and ventilating apparatus in 25th Dist. School, Tremont St. To exceed $25,000. W. E. Bordenstein, 405 2nd Natl. Bank, engr.

BIDS RECEIVED

Heating and Ventilating Apparatus—New York, N. Y. — Bd. Educ., 500 Park Ave., Nov. 21, heating and ventilating apparatus in P. S. 12, Bronx, from Federal Heating Co., 300 Madison Ave., $25,431.

Heating, Ventilating, Plumbing, etc.—Phila., Pa.—F. H. Caven, dir. Pub. Wks., 216 City Hall, and Bd. Trustees Free Library of Phila., heating and ventilating system from J. H. Cooney, 210 North 4th St., Harrison, N. J., $397,500; plumbing, etc., from W. S. Connell Co., Colonial Trust Bldg., $236,000; for free library building, Vine, 20th, Wood and 19th Sts. Noted Nov. 8.

CONTRACTS AWARDED

Retaining Wall, etc.—Providence, R. I.—D. W. Flint, Inc., Allens Ave., 100 x 110 ft., rein.-con. retaining wall, rein.-con. foundations for several storage tanks and 40 x 60 ft. steel building, to Mahoney & Tucker, 72 Weybosset St. Archts. est. $25,000.

Jetty—Asbury Park, N. J.—Repairing 650 ft. jetty, to T. Proctor Co., 212 North 5th St., Long Branch, $25,000.

Foundations—Baltimore, Md.—Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., concrete and rein.-con. foundations for manufacturing buildings, 5th Ave. east of Baltimore & Ohio R.R., here, to B. A. Groah Constr. Co., 847 West North St., Pittsburgh, and Fort Pitt Bridge Wks. of Pittsburgh, Oliver Bldg., Pittsburgh, Pa. Engrs. est. $100,000. Noted May 17 under "Buildings."

Gas Line—Bastrop, La.—Excelsior Pipe Line Co., 25 mi. 8 in. gas pipe line from here to West Monroe, to General Constr. Corp., Bastrop, $25,000.

Culvert—St. Louis, Mo.—Bd. Pub. Serv., 208 City Hall, to H. A. Henske, 1504 St. Louis Ave., rein.-con. culvert to carry Delmar Blvd. over River Des Peres, 32,330 cu. yd. Class A excav. $0.85 per cu.yd., 72,560 cu.yd. Class B excav. $0.40, 8,485 cu.yd. Class C excav. $1, 64,030 cu.yd. Class A concrete $0.55, 52,470 cu.yd. Class B concrete, etc., $0.45, total $150,756. Noted Oct. 4.

Electrolier System—Los Angeles, Calif.—Electrolier system in Washington St. between Hobart and 8th Aves., to Newberry Electric Corp., 724 South Olive St., $42,136. Noted Nov. 22.

Street Lighting System — Santa Paula, Calif.—Street lighting system, incl. 123 ornamental standards, to Osborn Electric Co., Turlock, $25,115.

Improving Harbor—Port Stanley, Ont.—Dept. Pub. Wks., Ottawa, dredging and improving harbor to Port Arthur Constr Co., Ltd., Excelsior Life Bdlg., Toronto, $50,150.

Materials and Equipment

PROPOSED WORK

Motor Street Sweeper—Yuba City, Calif.—City plans to purchase street sweeper. C. C. Kline, city clk.

BIDS DESIRED

Highway Materials, etc. — New York, N. Y.—Dec. 3, by E. W. Buckley, comr. Purchase, Municipal Bldg., highway and roofing materials to Fire Dept., Depts. Health, Parks-Brooklyn and Street Cleaning.

Inorganic Dust—New York, N. Y.—Dec. 5, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 300 tons inorganic dust.

Material for Bridge Repairs—Phila., Pa.—Dec. 4, by Dept. Pub. Wks., Bureau of Highways, material for repairing bridges, furnishing granite block, furnishing dryers for city asphalt plant. F. H. Caven, dir.

Crane—Urbana, Ill.—R. G. Flaugher Constr. Co., 1105 South Race St., in market for 1¾ yd. full revolving caterpillar tread auto crane.

Snow Removing Machinery — Madison, Wis.—City, c/o H. C. Buser, clk., City Hall, taking bids snow removing machinery incl. scrapers, brooms, etc.

Lumber—Marengo, Ia.—Dec. 5, by Auditor Iowa Co., 240,000 ft. bridge lumber. C. P. McGrath, Marengo, engr.

Steel Bars, etc.—Mason City, Ia.—Dec. 3, by Auditor Cerro Gordo Co., 15 tons ¾ in. round steel reinforcing bars and 3,024 ft. 12 in. corrugated metal culbert. Iowa Hy. Comn., Ames, engrs.

Plank and Piling—Onawa, Ia.—Dec. 4, by Auditor Monona Co., 5 cars full sawn fir bridge plank and 1 car cedar piling. A. P. Borman, Onawa, engr.

Wire and Cables—Austin, Minn.—Dec. 4, by Water, Electric Gas & Power Comn., 124,000 lin.ft. Nos. 0-4-6-8 cable, 8,200 lb. Nos. 4-6-8-10 T B W P wire. J. C. Todd, secy.

Piles—California—L. H. Smith, purch. agt., State Hy. Comn., Sacramento, taking bids furnishing nine hundred fifty 40 ft. piles, on bank of Klamath River, at bridge site about 2 mi. east of Requa, Humboldt Co.

Motor Street Sweeper—Porterville, Calif.—City trustees receiving bids motor street sweeper. F. Pease, city eng.

BIDS RECEIVED

Inorganic Dust, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, Nov. 21, 1,200 tons inorganic dust, from Limestone Products Corp. of America, 17 West 42nd St., New York, $6,420; 6,000 cu.yd. asphalt sand, from T. E. McCormick, 810 Lincoln Rd., Flatbush, $7,800; 3,000 bbl. Portland cement, from Hygrade Builders Supply Co., 6th St. and 2nd Ave., $8,520; W. M. Young, $8,520, E. E. Buehler, $8,520; 2,500 cu.yd. gravel or broken stone, from Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, $6,125. Noted Nov. 15.

CONTRACT AWARDED

Steel—Cincinnati, O.—Cleveland, Cincinnati, Chicago & St. Louis R.R., Union Central Bldg., 375 tons structural steel, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa. Engrs. est. $20,000.

Concrete Aggregates — Michigan — See "Streets and Roads."

Crushing Plant—Owatonna, Minn.—Steele Co., 1 portable combined gravel, screen and crushing plant, to Russell Grader Mfg. Co., 2005 University Ave. S. E., Minneapolis, $6,725. Noted Nov. 8.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Dec. 13.

State Road Work

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its offices in Charleston, West Virginia, until ten o'clock a.m., on the 13th day of December, 1923, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following sections of State Road:

Project 3304-A—Monroe County—10 miles of the Rock Camp-Peterstown Road, for grading and draining. Certified check $7,000.00.

Project 131—Pocahontas County—2.1 miles of Marlinton-Buckeye Road, for paving with bituminous macadam. Certified check $2,500.00.

Project 132—Pocahontas County—4.2 miles of Buckeye-Mill Point Road, for paving with bituminous macadam. Certified check $4,500.00.

Project 3200—Logan County—6 miles of Blair-Ethel Road, for grading and draining. Certified check $3,500.00.

Project 3229—Taylor County—7 miles of Northwestern Turnpike, for grading and draining. Certified check $4,500.00.

Project 3278-A—Lewis County—6.5 miles of Glenville-Weston Road, for grading and draining. Certified check $3,500.00.

Project 3160—Doddridge County—8.14 miles of Northwestern Turnpike, for concrete paving. Certified check $9,500.00.

Project 3186—Preston County—5 miles of the Thomas-Oakland Road, for grading and draining. Certified check $4,000.00.

Project 3272—Preston County—5.6 miles of Reedsville-Monongalia County Line Road, for grading, draining and paving with bituminous macadam. Certified check $7,000.00.

Project 3274—Monongalia County—8 miles of Morgantown-Preston County Line Road, for grading, draining and paving with bituminous macadam. Certified check $12,000.00.

Project 134—Hampshire County—5 miles of Pleasantdale-Hanging Rock Road, for grading and draining. Certified check $2,500.00.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates may be obtained from the office of the Division Engineer in whose territory the proposed construction is located, or from the office of the State Road Commission at Charleston, West Virginia.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any and all proposals.

State Road Commission of West Virginia.
E. B. CARSKADON,
Secretary.

Bids: Dec. 10.

Sewerage, Waterworks, Etc.

New Orleans, La., Oct. 11, 1923.

Sealed proposals will be received by the Sewerage and Water Board of New Orleans up to 12 o'clock, noon, of Monday, December 10th, 1923, for furnishing labor and material, on a percentage basis, for sewerage, waterworks and drainage construction, during the year 1924. Specifications and blank proposal forms may be obtained at the office of the Board, No. 526 Carondelet Street, New Orleans, Louisiana. The right is reserved to reject any, or all bids.

GEO. G. EARL, A. G. MOFFAT,
Gen.'l Supt. Secretary.

OFFICIAL PROPOSALS

Bids: Dec. 5.

Bridge

Freehold, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the Construction of Bridge No. Hl-48, on the Squankum-Lakewood Road, consisting of one 70′ plate girder span encased in Concrete, and opened and read in public at the rooms of said board, Court House, Freehold, New Jersey, on December 5th, 1923, at 11:00 a.m., Standard Time.

Drawings and specifications for the proposed work, prepared by George K. Allen, Jr., County Engineer, have been filed in the office of said Engineer at 60 Broad Street, Red Bank, New Jersey, and may be inspected by prospective bidders during business hours. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

Plans and specifications will be furnished to prospective bidders upon payment of ten dollars ($10.00), which amount will be refunded upon return of plans and specifications before the time specified for the opening of bids.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of proposed work on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth and must be accompanied by a certified check for a sum not less than ten (10) per cent of the amount bid on the work, payable to the order of the County Treasurer and a surety company certificate stating that said surety company will provide the bidder with the required bond, and must be delivered at the place and before the hour above named.

The Board of Chosen Freeholders of the County of Monmouth reserves the right to reject any or all bids if deemed to the best interests of the County so to do.

By order of the Board of Chosen Freeholders of the County of Monmouth.
BRYANT B. NEWCOMB,
Director.

Attest:
CHARLES E. COLE, Clerk.
Freehold, N. J., October 17th, 1923.

Bids: Dec. 12.

Reservoir

Albuquerque, N. Mex.

Sealed proposals will be received at the office of the City Clerk of the City of Albuquerque, New Mexico, until two o'clock p.m. on Wednesday, December 12, 1923, for construction of a reinforced concrete reservoir of approximately 10,000,000 gallons capacity.

Plans, specifications and proposal form may be obtained from the City Engineer of the City of Albuquerque upon the deposit of twenty-five ($25.00). Deposit to be refunded upon return of plans and specifications in good condition on or before December 12th, 1923.

The City reserves the right to reject any or all bids.

B. H. CALKINS, City Manager.
F. KIMBALL, City Engineer.
IDA V. MALONE, City Clerk.

OFFICIAL PROPOSALS

Bids: Dec. 17.

Waterworks Improvements

Elizabethtown, Ky.

Sealed bids for improvements to the waterworks at Elizabethtown, Ky., will be received by the Mayor and City Council, at the office of the City Clerk until 2 o'clock p.m., December 17, 1923, at which time and place they will be publicly opened and read.

The improvements proposed consist of:

The Construction of a 750,000 gallon gravity type Filtration Plant, in two units.

Furnishing 4 centrifugal pumps and electric motors.

Bids will be received separately on furnishing and installing the filter equipment.

Plans and specifications may be examined at the Mayor's office at Elizabethtown, Ky., or at the office of the Engineer, or a copy may be obtained from the Engineer upon receipt of a deposit of $15.00 of which amount $10.00 will be refunded when the plans and specifications are returned in good order.

If additional information is required, address the Engineer.

The right is reserved to reject any and all proposals and to waive informalities.

The Contractor will be paid in cash on monthly estimates amounting to 90% of the value of the work done and materials furnished.

All proposals and bids must be accompanied by a certified check drawn on a responsible bank or trust company and made payable to Starling Wells, City Clerk, for a sum not less than 5% of the aggregate of the proposal.

The successful bidder will be required to furnish a performance bond in the sum of 50% of the contract price.

B. H. KLYCE, Engineer,
720 4th & 1st Natl. Bank Bldg.,
Nashville, Tenn.

Bids: Dec. 5.

Street Improvements

Raleigh, N. C.

Sealed proposals will be received by the Mayor and Commissioners of the City of Raleigh, N. C., until 3:00 p.m., December 5th, 1923, at the City Hall in Raleigh, N. C., for the construction of Street Improvements.

The work will consist of approximately 75,000 square yards, more or less, of Sheet Asphalt or other Bituminous pavement on a concrete foundation; or One Course Concrete Pavement; Combined Concrete Curb and Gutter; Granite Curbing; Storm Drainage, etc.

Proposals must be marked "Proposals for Street Improvements for the City of Raleigh, N. C." All bids must be submitted upon blank forms provided in copies of the proposal ,contract and specifications.

Each bid must be accompanied by a certified check for five (5) per cent of the amount of the bid, as evidence of good faith.

Plans, copies of the proposal, contract, specifications, etc., may be obtained upon application to the Engineer.

The city reserves the right to reject any or all bids or to award contracts which appear to be for the best interests of the city.

WILLIAM C. OLSEN,
Engineer,
Raleigh, N. C.
Kinston, N. C.

E. E. CULBRETH, Mayor.
C. C. PAGE, Commissioner, Public Works.
W. L. DOWELL, City Clerk.

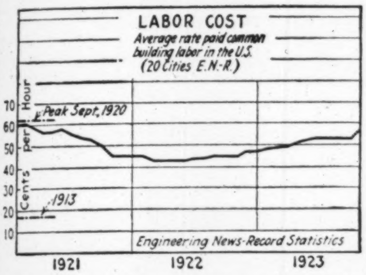
CONSTRUCTION NEWS

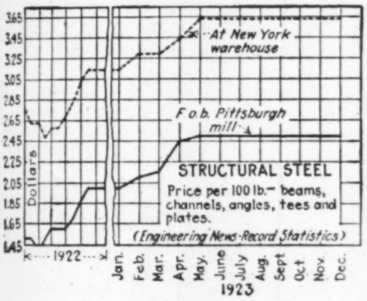
Engineering News-Record, December 6, 1923

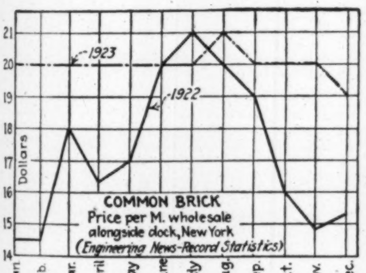
The Construction Barometer

Drop in Cost—Materials Scarcity and Higher Prices Possible in 60 to 90 Days with Present Rate of Permits

CONSTRUCTION cost has dropped somewhat during the last month; the declines occurring principally in iron, lumber, cement and brick. These recessions are seasonal, but the gain in the volume of late-autumn building permits indicates an unusually extensive winter construction program. In the New York district, November contracts awarded were the heaviest of the year. Now comes the question of building materials scarcity, from sixty to ninety days hence. Cement mill stocks since August have been heavier than for the same months last year; there are more burned brick on hand than at any time in 1922; lumber production has exceeded shipments since April. Present lumber mill stocks, however, are approximately 360,000,000 ft. under the quantity on hand one year ago, owing to the extremely heavy demand.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Nov. 15	$14,223,000	$24,496,000	$38,719,000
Nov. 22	10,461,000	9,259,000	19,720,000
Nov. 29	10,298,000	25,020,000	35,318,000
3 Weeks	$34,982,000	$58,775,000	$93,757,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

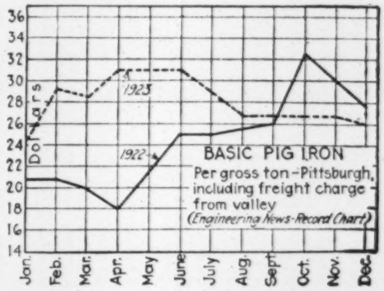
Week Ended	No.	Public Work	No.	Private Work
Nov. 15	7	$4,329,000	28	$13,526,000
Nov. 22	10	2,841,000	21	5,830,000
Nov. 29	10	2,165,000	30	12,810,000
3 Weeks	27	$9,335,000	79	$32,166,000

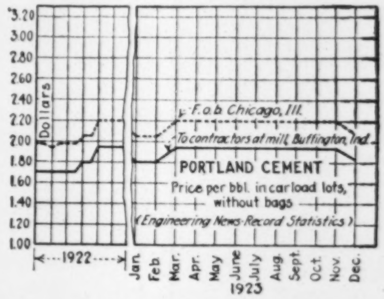
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

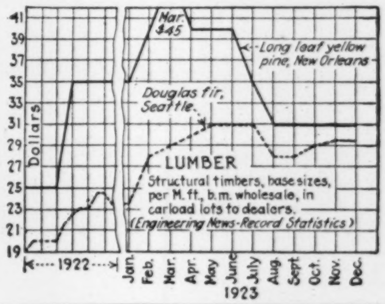
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Nov. 15	26	148	35	21	41
Nov. 22	29	185	47	31	61
Nov. 29	30	176	57	36	51

LUMBER AND CEMENT DOWN—STEEL FIRM

	Quoted on Dec. 6, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N.Y., M.ft.	57.00	61.00	Nov. 29
Fir, San Fran., M.ft.	41.00	42.00	Sept. 27
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 11	Menominee, Mich.	Dec. 6
Dec. 11	New York, N. Y.	Dec. 6
Dec. 11	Troy, N. C.	Dec. 6
Dec. 12	Keyser, W. Va.	Nov. 8
Dec. 12	Albuquerque, N. M. Adv. Nov. 22 to Dec .6.	Nov. 22
Dec. 12	Kearny (Arlington P. O.), N. J. Adv. Nov. 22 and Dec. 6.	Nov. 22
Dec. 12	Baltimore, Md.	Dec. 6
Dec. 13	Athens, Wis.	Nov. 29
Dec. 14	Seattle, Wash.	Nov. 15
Dec. 14	Washington, Ia.	Nov. 29
Dec. 17	Elizabethtown, Ky. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17	Windsor (New Windsor P. O.), Ill.	Nov. 22
Dec. 17	Richmond, Va.	Dec. 6
Dec. 18	Laurinburg, N. C.	Nov. 22
Dec. 19	San Francisco, Calif.	Dec. 6
Dec. 19	Scituate (North Scituate P. O.), R. I.	Nov. 22
Dec. 21	Denver, Colo. Adv. Dec. 6.	Dec. 6
Dec. 22	Carlisle, Ia.	Nov. 29
Dec. 23	New Holstein, Wis.	Oct. 11
Jan. 3	Erie, Pa. Adv. Dec. 6.	Dec. 6

SEWERS

Bids Close		See Eng. News-Record
Dec. 10	New Orleans, La. Adv. Oct. 11 to Dec. 6.	Oct. 11
Dec. 11	Bluefield, W. Va.	Nov. 22
Dec. 14	Detroit, Mich.	Dec. 6
Dec. 14	Great Bend, Kan.	Dec. 6
Dec. 18	Laurinburg, N. C.	Nov. 29
Dec. 18	Toledo, O. Adv. Nov. 29 and Dec. 6.	Dec. 6
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Dec. 10	New Jersey	Nov. 22
Dec. 11	McKinney, Tex.	Dec. 6
Dec. 11	Pensacola, Fla.	Dec. 6
Dec. 14	Richmond, Tex.	Nov. 29
Dec. 19	Indianapolis, Ind.	Nov. 29
Dec. 19	Delaware	Nov. 29
Dec. 20	Correctionville, Ia.	Nov. 22

Bids Close		See Eng. News-Record
Dec. 20	Audubon, Ia.	Dec. 6
Dec. 24	California	Dec. 6
May 1	Tientsen, North China	Oct. 11

DAMS

Jan. 7	Los Angeles, Calif.	Nov. 29

RAILWAYS

Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Dec. 13	Brooklyn, N. Y.	Dec. 6
Dec. 20	Charleston, Miss.	Dec. 6
Dec. 21	Corpus Christi, Tex.	Dec. 6

STREETS AND ROADS

Dec. 9	Syracuse, N. Y.	Nov. 29
Dec. 10	Kansas City, Kan.	Nov. 29
Dec. 10	Palestine, Tex.	Nov. 29
Dec. 10	Houston, Tex.	Nov. 29
Dec. 10	Indianapolis, Ind.	Nov. 29
Dec. 10	Bonner Springs, Kan.	Nov. 22
Dec. 10	Buckhannon, W. Va.	Nov. 22
Dec. 10	Palestine, Tex.	Nov. 22
Dec. 10	Michigan	Nov. 29
Dec. 10	Long Island City, N. Y.	Dec. 6
Dec. 11	McKinney, Tex.	Nov. 29
Dec. 11	Ohio	Nov. 29
Dec. 11	West Virginia	Nov. 22
Dec. 11	Michigan	Nov. 22
Dec. 11	Pennsylvania Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 11	Quebec	Nov. 29
Dec. 11	Waukegan, Ill. Adv. Dec. 6.	Dec. 6
Dec. 11	Ohio	Dec. 6
Dec. 11	Bartow, Fla.	Dec. 6
Dec. 11	Miami, Fla.	Dec. 6
Dec. 11	St. Paul, Minn.	Dec. 6
Dec. 12	New Britain, Conn.	Dec. 6
Dec. 12	Webster City, Ia.	Nov. 22
Dec. 12	Michigan	Nov. 29
Dec. 12	Fayetteville, N. C.	Nov. 29
Dec. 12	Brooklyn, N. Y.	Dec. 6
Dec. 13	West Virginia	Nov. 22
Dec. 13	Santa Rosa, Calif.	Dec. 6
Dec. 15	McLeansboro, Ill.	Nov. 29
Dec. 17	East Aurora, N. Y. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17	Grenada, Miss.	Nov. 29
Dec. 17	San Jose, Calif.	Dec. 6
Dec. 17	California	Dec. 6
Dec. 17	Eastland, Tex.	Dec. 6
Dec. 18	California	Dec. 6
Dec. 18	Indiana	Dec. 6
Dec. 18	Louisiana	Dec. 6
Dec. 18	Rushville, Ind.	Nov. 29
Dec. 18	Angleton, Tex.	Nov. 29
Dec. 18	Michigan	Nov. 29
Dec. 18	Belzoni, Miss.	Nov. 22
Dec. 19	Sierra Blance, Tex	Nov. 29
Dec. 19	Ebensburg, Pa.	Dec. 6
Dec. 20	Lakeland, Fla. Adv. Nov. 29 and Dec. 6.	Dec. 6
Dec. 20	Hallettsville, Tex.	Dec. 6
Dec. 20	Corsicana, Tex.	Dec. 6
Dec. 21	Collins, Miss.	Nov. 29
Dec. 21	Topeka, Kan.	Dec. 6
Dec. 21	Corpus Christi, Tex.	Dec. 6
Dec. 21	Uvalde, Tex.	Dec. 6
Dec. 22	Hemphill, Tex.	Dec. 6
Dec. 26	St. Louis, Mo.	Nov. 29
Dec. 27	Alabama	Dec. 6
Dec. 27	Somerset, Pa. Adv. Dec. 6.	Dec. 6
Jan. 15	Michigan	Dec. 6

INDUSTRIAL WORK

Dec. 8	Rome, N. Y.	Dec. 6
Dec. 8	Carlisle, Pa.	Dec. 6
Dec. 11	Tampa, Fla.	Nov. 15
Dec. 12	Pulaski, Tenn.	Nov. 22
Dec. 18	Palmyra, N. Y. Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 18	Waterbury, Conn.	Dec. 6
Dec. 21	Ft. Worth, Tex.	Dec. 6
Apr. 30	Wellington, New Zealand Adv. Dec. 6.	Dec. 6

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 8	Buffalo, N. Y.	Nov. 29
Dec. 8	Baltimore, Md.	Dec. 6
Dec. 10	Mt. Vernon, O.	Nov. 29
Dec. 10	Indianapolis, Ind.	Nov. 15
Dec. 10	Ft. Worth, Tex.	Nov. 22
Dec. 10	New York, N. Y.	Nov. 22
Dec. 10	Richmond Hill (Jamaica P. O.), N. Y.	Nov. 22
Dec. 10	Brooklyn, N. Y.	Nov. 22
Dec. 10	Detroit, Mich.	Dec. 6
Dec. 10	Kansas City, Mo.	Dec. 6
Dec. 10	Cynwyd, Pa.	Dec. 6
Dec. 10	New York, N. Y.	Dec. 6
Dec. 11	Cedar Falls, Ia.	Nov. 22
Dec. 12	Elizabeth City, N. C.	Dec. 6
Dec. 12	Denver, Colo.	Dec. 6
Dec. 12	Grand Rapids, Mich.	Nov. 15
Dec. 14	Lebanon, Tenn.	Dec. 6
Dec. 15	Wichita, Kan.	Nov. 15
Dec. 15	Spearfish, S. D.	Nov. 29
Dec. 15	Racine, Wis.	Dec. 6
Dec. 15	Durham, N. C.	Dec. 6
Dec. 17	Crown Point, Ind.	Dec. 6
Dec. 17	Camden, N. J. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17	Wash., D. C. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17	Memphis, Tenn.	Dec. 6
Dec. 18	Ironwood, Mich.	Nov. 15
Dec. 18	Buffalo, N. Y.	Dec. 6
Dec. 19	Falls City, Neb.	Nov. 22
Dec. 20	Sioux City, Ia.	Nov. 15
Dec. 20	Duluth, Minn.	Nov. 29
Dec. 20	Newark, N. J.	Dec. 6
Dec. 21	Wilmington, N. C.	Dec. 6
Dec. 21	Wash., D. C. Adv. Dec. 6.	Dec. 6
Dec. 21	New Orleans, La.	Nov. 29
Dec. 21	Charleston, W. Va.	Nov. 15
Dec. 21	East Boston (Boston P. O.), Mass.	Nov. 29
Dec. 22	Newport, Ind.	Nov. 29
Dec. 27	Brooklyn, N. Y.	Dec. 6
Dec. 27	New Orleans, La.	Dec. 6
Dec. 28	Morgantown, W. Va.	Nov. 15
Dec. 30	Ft. Smith, Ark.	Dec. 6
Jan. 1	Williamson, W. Va.	Nov. 22
Jan. 2	Bloomington, Ind.	Nov. 15
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	Galveston, Tex.	Nov. 29
Feb. 1	Dorchester, Mass.	Nov. 29

FEDERAL GOVERNMENT WORK

Dec. 10	Towboat—Montgomery, Ala.	Nov. 8
Dec. 10	Maneuver Boat, etc.—Huntington, W. Va. Adv. Nov. 15 to Dec. 6.	Nov. 15
Dec. 10	Remodeling — Allentown, Pa.	Nov. 15
Dec. 14	Dredging, etc.—New York, N. Y Adv. Nov. 15 to Dec. 6.	Nov. 15
Dec. 15	Operating Machinery—Louisville, Ky. Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 17	Bridge—Seattle, Wash.	Nov. 29
Dec. 17	Remodeling, etc. — Mobile, Ala.	Dec. 6
Dec. 18	Mailing Vestibule, etc.—Greenville, S. C.	Dec. 6
Dec. 19	Dredging — Wilmington, N. C. Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 19	Generator, Motor, etc.—Huntington, W. Va.	Nov. 29
Dec. 19	Towboat—Memphis, Tenn. Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 19	Bungalows—Wash., D. C.	Nov. 22
Dec. 22	Hospital—Livermore, Calif. Adv. Nov. 22 to Dec. 6.	Nov. 22
Dec. 26	Extension—Poughkeepsie, N. Y. Adv. Dec. 6.	Dec. 6
Dec. 27	Post Office, etc.—Paris, Tex.	Dec. 6
Dec. 27	Stone—Portland, Ore.	Dec. 6
Dec. 28	Post Office—St. Johnsbury, Vt.	Dec. 6
Dec. 28	Dredging—Savannah, Ga. Adv. Nov. 29 and Dec. 6.	Dec. 6
Dec. 28	Changes, etc. — Omaha, Neb. Adv. Dec. 6.	Dec. 6
Dec. 29	Metal Work—Louisville, Ky. Adv. Dec. 6.	Dec. 6
Jan. 2	Post Office—Liberty, Mo. Adv. Dec. 6.	Dec. 6
Jan. 3	Gates—Washington	Dec. 6
Jan. 3	Lock Gates—Addison, Ky. Adv. Dec. 6.	Dec. 6
Jan. 10	Steel Hulls — Vicksburg, Miss. Adv. Dec. 6.	Dec. 6
Jan. 16	Fuel Oil Storage—Mare Island, Calif.	Dec. 6
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15

UNCLASSIFIED

Dec. 12	Foundation—Rapid City, S. D.	Dec. 6
Dec. 20	Steel Frame and Rolling Doors—New Orleans, La. Adv. Dec. 6.	Dec. 6
Dec. 20	Pavilions—New York, N. Y.	Nov. 29
Dec. 24	Heating and Ventilating Apparatus—Cincinnati, O.	Nov. 29
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Feb. 28	Headworks — Wellington, New Zealand	May 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Dec. 11	Dump Cars, etc.—St. P Minn.	6
Dec. 12	Cement—Brooklyn, N. Y.	Dec. 6
Dec. 13	Pipe—Baton Rouge, La.	Nov. 22
Dec. 14	Graders, etc.—Georgia	Dec. 6
Dec. 17	Shell—Houston, Tex.	Dec. 6
Dec. 17	Grader—Dallas, Tex.	Dec. 6
Dec. 29	Tractors, etc.—Texas	Dec. 6

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Bristol—Water Bd. plans laying 6,000 ft. 4-8 in. c.i. pipe. $25,000. C. W. Buell, city engr.

Conn., Hartford—Bd. Water Comrs plans mains in 12 streets, 10,000 ft. 4-8 in. c.i pipe. $40,000. C. W. Saville, 1026 Main St., engr.

N. J., Maple Shade—Making plans waterworks and filtration plant. $50,000. Remington & Vosbury, 601 Market St., Camden, engrs.

Va., South Norfolk (Norfolk) — Plans election to vote on $450,000 bonds for water supply.

N. C., Fayetteville—See "Sewers."

N. C., Greensboro — City plans several miles c.i. mains to replace wooden mains. $300,000. P. C. Painter, city mgr

N. C., Lake Junaluska — Southern Assembly takes bids soon 4 mi. 6 in. mains, 1½ mi. trunk sewers, turbines and generators under dam at Lake Junaluska to generate power for Assembly grounds. $25,000. J. W. Seaver, Lake Junaluska, engr.

Fla., Center Hill — See "Streets and Roads."

Fla., Frostproof — City voted $340,000 bond issue for water plant and street paving. Noted Oct. 25.

Ala., Birmingham — Birmingham Waterworks Co. asked authority of Alabama Pub. Serv. Com. to sell $500,000 preferred stock for 5 or 6 mi. extension to watermains, adding 36 in. main to present 30 in. main, 7,500 ft. from Shades Mountain to filter plant and through north side of mountain; buildings and completion of superstructure for 8 concrete filters at Shades Mountain, piping, strainers, etc.; 10 blocks 12 in. mains in Hillman Ave.; 5,000 ft. 12 in. main in Telula St.; 16 in. main along Possum Valley Rd.; 12 in. reinforced main in 16th St., 5,000 ft.; 16 in. main from 13th Ave. to Fairview. H. H. Horner, genl. supt.

La., Melville—Voted favorably on proposition for increase from $45,000 to $60,000 for waterworks and electric light systems. Will take bids about February. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, consult. engrs. Noted Feb. 8.

Tenn., Gallatin—Having plans prepared and soon takes bids rein.-con. well, filtration plant and 1 story brick pump house. $40,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engr. Noted Oct. 11.

Tenn., Jackson—Plans to issue $100,000 bonds for waterworks improvements C. E. Griffin, engr.

Tenn., Nashville—City will expend $50,000 during 1924 for water main extensions, hydrants, etc. H. E. Howse, mayor. Noted Nov. 1.

Ky., Owensboro—Voted $100,000 bonds to extend mains. A. Hickman, mayor.

O., Barberton—Takes bids shortly after Jan. 1, dam, storage tank, pumping plant, bridge pipe lines, distribution mains and filtration plant. $750,000. W. G. Clark, 1046 Spitzer Bldg., Toledo, engr. Noted Nov. 29.

Ill., Olney — Making preliminary plans new electrical equipment for waterworks pumping plant, improving distribution system, etc. $75,000. Will probably mature in spring. A. J. Wharf, City Hall, engr.

Wis., Centuria — Making plans waterworks. $20,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Waterworks (Continued)

Minn., St. Paul—City Council authorized $500,000 bond issue for waterworks improvements in 1924. J. W. Kelsey, supt. Water Dept.

Minn., St. Peter—City plans steel tank for Water Dept. $19,000.

Mo., Festus—Soon takes bids waterworks and sanitary sewerage systems. Voted $175,000 bonds for same. J. P. Davis, Jefferson City, engr. Noted Nov. 8.

Mo., Flat River — St. Joseph Lead Co. making preliminary plans complete waterworks and distribution system, incl. pumping plant, filtration plant and distribution mains. $35,000. Private plans.

Mo., Greenfield—Plans 75,000 gal. rein.-con. reservoir, 1 deep well and 3 new pumping units. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Sept. 27.

Mo., Hannibal—Making plans waterworks improvements. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs.

Tex., Lubbock — Voted $75,000 bonds waterworks extension.: M. S. Ruby, city mgr.

Tex., Trenton—Plans election in January to vote on $30,000 bond issue for complete waterworks. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Okla., Heavener — City having surveys made for dam, storage reservoir, filter plant, pipe lines and machinery, $100,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Lynden—Plans filtration plant at Nooksack River, incl. new steel tower and tank, filtering plant, chlorine plant and improvements at intake. $35,000.

Colo., Walsenburg—Issued $35,000 bonds for improving water system.

Calif., Eureka — City plans to purchase 5,800 ft. 12 in. water pipe. H. Hannah, city engr.

Calif., Lemoore—Plans election to vote on $15,000 bonds for extension to waterworks.

Calif., Los Angeles—Pub. Serv. Comn., 207 South Bway., making surveys for waterworks on Kings River, Fresno Co., being part of hydro-electric development for city of Los Angeles. Project includes Simpson Reservoir, 215 ft. high, 2,670 ft. long on top, 180 ft. long on bottom, 20 ft. wide at top, loose rock and earth fill, to store 50,922 acre feet; 43,022 ft. concrete lined tunnel, 5 x 4 ft. diam.; 2,450 ft. penstock, 81 in. diam. on top and 60 in. at bottom; Kings River Power Plant 3, to develop 34,023 hp. using impulse waterwheels and generators at fall of 1,497 ft. $7,050,000.

Calif., Oakland — East Bay Water Co., 512 16th St., making plans Upper San Leandro Creek storage reservoir, dam will be 185 ft. high, 683 ft. long, involving 1,200,000 cu.yd. hydraulic earth fill with storage capacity of 13,600,000 gal. $3,000,000. R. S. Hawley, ch. engr.

Calif., San Fernando—Making preliminary plans storage dam in Paccima Creek. 100 ft. high, 160 ft. long on top, 60 ft. long on bottom, and 16,700 lin.ft. 14 in. riveted steel pipe line, etc. $75,000.

Calif., Santa Monica — City to vote on $1,000,000 bond issue for additions and extensions to water system. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

Calif., Stockton—T. J. Locke, c/o Case & Forslund, attorneys, Commercial Savings Bldg., making plans installing two 10 in. centrifugal pumps, operated by two 20 hp. 1,200 r.p.m. 440 volt motors, to replace existing 12 in. pump. R. G. Clifford, 2130 23rd St., Sacramento, engr.

BIDS DESIRED

N. Y., New York—Dec. 11, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Edgewater Rd., Coster and Longfellow Sts., Viele, Oak Point, Brinsmade, Calhoun, Miles, Quincy, Revere, Sampson and Swinton Aves. Former bids rejected. Noted Nov. 22.

Pa., Erie — Jan. 3 (extended date, by Comrs. Water Works, Waterworks Office, 8 m.g. addition to filters. J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, engrs.; adv. E. N.-R. Dec. 6. Noted Nov. 29.

Md., Baltimore—Dec. 12, by Bd. Awards, piping in pumping station of high-pressure fire service, for Bd. Fire Comrs. P. W. Wilkinson, Lexington and Gay Sts., secy. for Fire Bd.

Va., Richmond—Dec. 17, by E. W. Trafford, dir. Pub. Utilities, superstructures for filter plant, Contr. 3.

N. C., Troy—Dec. 11, by C. C. Broughton, mayor, and Town Comrs., brick and concrete pumping station and filter, concrete coagulating basin, concrete foundation for tanks and pumps, election pumps, furnishing and erecting switchboard, filter plant equipment, etc. H. Beebe, Spartanburg, S. C., engr.

Mich., Menominee — Dec. 11, by H. W. Blunder, city clk., installing 1 centrifugal pump, 2,500 g.p.m. connected to electric motor, 2 centrifugal pumps, 1,000 g.p.m., one 60 cycle generator, etc. $25,000. B. T. Gifford, Gay Bldg., Madison, Wis., engr.

Colo., Denver—Dec. 21, by City and Denver Co. by and through its Bd. Water Comrs., 1509 Cleveland Pl., Denver, 54 in. and 66 in. water supply conduits. B. Lowther, ch. engr.; adv. E. N.-R. Dec. 6.

Calif., San Francisco—Dec. 19, by Bd. Pub. Wks., electric transmission line insulators for Hetch Hetchy power and water supply. $200,000. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

N. Y., Corning — Corning Homes, Inc., mains and sewers, from W. Sheehan, 131 North 10th St., Olean. Noted Nov. 1.

Wash., Seattle—Bd. Pub. Wks., Nov. 23, mains in 34th Ave. S. et al., from Coluccio & Erickson, Thompson Bldg., 30 ft. 4 in. c.i. pipe $1.25, 12 ft. 8 in. $2.40, 115 ft. 12 in. $3.60 and 6,025 ft. 16 in. $5.98, total $44,108. Engrs. est. $46,780.

Ont., Toronto—Furnishing 20,000 lin.ft. 20-36 in. c.i. pipe, from F. Hankin & Co. Ltd., 386 King St. W., $228,220.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., reconstructing pumping station in Camp Rd., etc., to J. Gallo, 203 Division St., Brooklyn, $36,987. Noted Nov. 22.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in White Plains Rd., Barkley, Calhoun, Lafayette, Quincy, Revere, Swinton, Bolton, Bronx River, Cornell, Gildersleeve, Leland, O'Brien, Patterson, Thieriot and Underhill Aves., to Paladino Contg. Co., 437 East 120th St., $10,901. Noted Nov. 22.

Pa., Glassmere — Allegheny Plate Glass Co., subsidiary of Ford Motor Co., Highland Park (Detroit P. O.), intake well, here, to Dravo Contg. Co., Diamond Bldg., Pittsburgh. Engrs. est. $25,000.

Md., Baltimore—Bd. Awards, furnishing and delivering 2 centrifugal pumps to Highway Engineers Dept., to DeHuff & Hopkins, Morris Bldg., Phila., $8,980; two 60 hp. motors, to Fairbanks, Morse & Co., 115 East Lombard St., $1,810. Noted Nov. 8.

La., Crowley—Installing mains, concrete reservoir, fire hydrants, pumps, also sewers, and grading and paving streets, to McIntosh Bros., Oklahoma City, Okla., $198,000. Noted Nov. 8.

La., Ponchatoula—W. R. Wright, mayor and Bd. Aldermen, constructing reservoir and laying c.i. pipe to Chambers & Bowers, Hammond, $16,290, elevated tank and tower to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, Ill., $5,185. Noted Oct. 25.

O., Lima—Baltimore & Ohio R.R., Merchants Loan & Trust Bldg., Chicago, water treating plant, here, to J. E. Nelson & Sons, 3240 Michigan Ave., Chicago. To exceed $25,000.

O., Troy—Baltimore & Ohio R.R., Merchants Loan & Trust Bldg., Chicago, water treating plant, here, to J. E. Nelson & Sons, 3240 South Michigan Ave., Chicago. To exceed $25,000.

Mo., Joplin — Joplin Water Co. waterworks extensions, to W. R. McCormick, 1801 Sergeant St., $30,000. Noted Nov. 15.

Tex., Dallas—J. P. Stephenson, c/o Koch & Fowler, engrs., Central Bank Bldg., 20,000 ft. mains in Midway Rd. and Lovers Lane, steel tank and tower, to R. J. Estep & Co., and Pittsburg Des Moines Steel Co., Praetorian Bldg., $25,000. Noted Aug. 16.

Colo., Denver—Vertical valves, 4-48 in., to Rensselear Valve Co., 53 West Jackson Blvd., Chicago, $69,895.

Calif., Long Beach—City, 6, 8 and 12 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., Wright & Callendar Bldg., Los Angeles, $227,215. Noted June 21.

Calif., Santa Barbara — For 12 in. c.i. mains in Cliff Dr. and 8 in. main in portion of Mesa School Lane, to S. Hunter, 122 West Valerio St., $37,110.

Sewers

PROPOSED WORK

Va., Richmond — City plans to expend $300,000 for sewerage system in West End Sect. A. J. Saville, dir. Bd. Pub. Wks.

W. Va., Charleston — See "Streets and Roads."

N. C., Fayetteville — City authorized $100,000 bond issue extending water and sewerage systems.

N. C., Lake Junaluska — See "Waterworks."

Fla., Center Hill — See "Streets and Roads."

Miss., Greenwood — See "Streets and Roads."

O., Ashtabula—Takes bids after Feb. 1 sewage treatment works and 4,200 ft. of 42 in. segmental block submerged outfall pipe. $100,000. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

O., Salem — Plans rebuilding disposal plant incl. replacing 10 beds. $200,000.

Wis., Appleton — Plans 2,500 ft. trunk sewers in Richmond and South River Sts., probably 4 ft. diam. $25,000. R. M. Connelly, City Hall, engr.

Wis., Centuria—Making plans sanitary sewerage system. $25,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Mo., Festus—See "Waterworks."

Mo., Greenfield—Plans 6½ mi. sewers and 2 disposal plants. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Sept. 27 under "Waterworks."

Mo., Hannibal—Making plans improving sanitary sewerage system, to exceed $25,000. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs.

Tex., Burkburnett—Voted $50,000 bonds sewer extensions. J. L. Dellis, city engr. Noted Nov. 15.

Tex., Floydada—Plans election to vote on approximately $25,000 bonds, complete sewerage system. G. Baker, First Natl. Bank Bldg., Oklahoma City, Okla., engr.

Tex., Freeport—Election soon to vote on $60,000 bonds sewerage system. G. C. Hardman, mayor.

Okla., Tulsa—City voted $800,000 bonds for 11 mi. storm and sanitary sewers. C. Schultz, city engr. Noted Nov. 22.

Wash., Walla Walla—City making plans 15,000 ft. trunk sewers for northwest part of city, 8 18 in. pipe, 110 manholes.

Ont., Hamilton—Having plans prepared sewers in Hunter and Robert Sts., probably 8-in. pipe. $28,000. Prices wanted on materials. A. L. McFaul, city engr.

Ont., St. Catharines—Having plans prepared extending sewers in Vine, Westchester and Thorold Sts. $28,000. B. L. Lamson, city engr.

Ont., St. Thomas—Preparing plans and takes bids end of January rebuilding and extending sewage disposal system, $65,000. Prices wanted on air compressors, motors, c.i. pipe, reinforcing steel and cement. A. Miller, city engr.

Ont., Windsor — Having plans prepared sewers in Campbell Ave., probably 8 in. pipe. $30,000. Prices wanted on materials. M. E. Brian, city engr.

BIDS DESIRED

W. Va., Wheeling—Dec. 11, by C. E. Ridley, city mgr., Bluefield, furnishing and laying 8 mi. 6-10 in. sanitary sewers, 6 mi. 12-48 in. storm sewers, 2 mi. concrete conduit, 3 ft. x 6 ft. to 4½ x 10 ft.; 500 manhole castings and 200 catch basin castings; ½ mi. of ditch widening. Bids may be made on work as a whole, or in part.

O., Toledo—Dec. 18, by W. T. Jackson, dir. Pub. Serv., constructing Relief Sewer 1432. L. T. Owen, 229 Valentine Bldg., comr. Eng. and Constr.; adv. E. N.-R. Dec. 6

Mich., Detroit—Dec. 14, by Dept. Pub. Wks., furnishing and installing sewage pumps, motors, air compressors, incl. two 24 in. vertical centrifugal pumps, two 15 in. pumps and one 2½ in. centrifugal sump pump, etc. G. Jerome, city engr.

Kan., Great Bend — Dec. 14, by Ruckel Eng. Co., Hutchinson, sanitary sewerage system, 16,500 ft. trench 0-8 ft. deep, 6,300 ft. trench 8 to 12 ft. deep, 11,500 ft. wet

Sewers (Continued)

trench 0 to 3 ft., 2,400 lin.ft. 18 in., 4,950 lin.ft. 15 in. and 14,500 lin.ft. 24 in. lock joint rein.-con. pipe, for city.

Calif., Los Angeles — See "Streets and Roads."

CONTRACTS AWARDED

N. Y., Albany—See "Streets and Roads."

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., receiving basins in Junction Ave., to J. F. Clancy, Inc., 460 Lockwood St., Astoria, $900; sewer in Church St., to Spinella & Muccinni, 6102 28th Ave., Brooklyn, $25,959. Noted Nov. 22.

N. J., Newark—Connections at sedimentation section of Passaic Valley sewer in Newark Meadows, to O'Gara Constr. Co., 242 Market St., $34,000.

N. J., Plainfield—Storm sewers in portions East Front St. and Norwood Ave., to Cocuzzo & De Cicco, Hilton, $30,885.

La., Crowley—See "Waterworks."

La., Ponchatoula—W. R. Haight, mayor and Bd. Aldermen, laying sewer pipe and constructing manholes, etc., to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $19,831; disposal plant to Hayden Constr. Co., Pass Christian, Miss., $29,500; furnishing vitr. clay pipe to Southern Sewer Pipe Co., 28th Ave. N., Birmingham, Ala., $11,500. Noted Oct. 25.

Ky., Louisville — Comrs. of Sewerage, constructing Dry Run Relief Drain, 1,200 ft. of 9 ft. and 258 ft. of 8 ft. 6 in. semi-elliptical and special structures, to H. Bickel, 443 Garden St., $133,723. Noted Nov. 29.

Minn., Winona—Sewers in Dist. 4, 7,529 ft. 12-18 in. vitr. clay pipe, 45,429 lin.ft. 6 and 8 in. standard vitr. clay pipe, 155 brick manholes, to W. Fraser & Son, 810 Guardian Life Bldg., St. Paul, $93,301. Noted Nov. 1.

Mo., University (St. Louis P. O.)—For 3,400 ft. of 10-36 in. vitr. sewers, etc., in Kingsland Ave., Dists. 31 and 35, to Myers Constr. Co., Merchants-Laclede Bldg., St. Louis, $29,100. Noted Sept. 20.

Calif., Santa Paula—Concrete septic tank for sewerage system to Cox & Tegert, 615 North Olive St., Alhambra, $16,330; 3 mi. 6-20 in. concrete pipe, to Bent Concrete Pipe Co., Security Bldg., Los Angeles, $9,025. Noted Aug. 30.

Waste Disposal

PROPOSED WORK

Calif., Los Angeles—City plans incinerator, $150,000 to $200,000. J. Griffin, city engr.

Bridges

PROPOSED WORK

N. Y., Columbiaville—Town of Stockport plans election to vote on $75,000 bonds two 80 ft. concrete arch spans, concrete girder approaches, to replace present 150 ft. girder bridge, here. Bureau of Highways, Albany, engrs.

Fla., Palatka—Putnam Co. plans election to vote on $500,000 bond issue for bridge over St. Johns River here. S. C. Stallings, Palatka, engr.

Miss., Jackson—See "Streets and Roads."

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, having surveys made for bridge over Harpath River, Cheatham Co. To exceed $25,000. J. G. Creveling, highway comr.

Wis., Merrill — Plans bridge over Wisconsin River on West Main St. $25,000. H. R. Allen, clk. Engineer not selected.

Mo., St. Louis—Soon takes bids rein.-con. and steel bridge to carry Gravois Ave. across River Des Peres. $115,000. L. E. Bowen, 301 City Hall, engr.

Okla., Arnett—Ellis Co. election Dec. 6, to vote on $108,000 bonds for 3 bridges to replace those destroyed by recent flood. F. L. Simmons, Capitol Bldg., Oklahoma City, engr.

Washington—See "Streets and Roads."

Wash., Tacoma — City and Pierce Co. plan bridge over Hylebos Waterway at 11th St., probably bascule with 100 ft. clear channel beneath. $120,000. C. H. Votaw, co. engr. C. E. Putnam, city engr. Noted July 26.

Ore., Albany—Linn Co. voted bonds for 2 spans across Willamette, one here and other at Harrisburg, $294,976 and $203,592 respectively.

Ore., Portland—Multnomah Co. making plans bridge over Columbia River, using old drawspan of Burnside St. Bridge. Will mature about March 1. $75,000. Hedrick & Kremers, 250½ 3rd St., engrs.

Calif., San Raphael — See 'Streets and Roads."

Ont., Guelph — Plans concrete, rein.-con. and steel overhead bridge at Eramosa Rd. $345,000. H. S. Nicklin, city engr.

Ont., Toronto—City, (R. C. Harris, city engr), Canadian Pacific Ry., Windsor St. Sta., Montreal, Que. (J. M. R. Fairbairn, ch. engr.), and Canadian Natl. Ry., New Union Sta. (A. F. Stewart, ch. engr.), had new plans prepared for viaduct and entrance to new Union Sta., incl. 5 overhead bridges across railway tracks at York, Bay, Bathurst, John and Yonge Sts., and 8 subways, 100 ft. long carrying 6 tracks at Eastern Ave., Church, Jarvis, Frederick, Princess, Trinity, Queen and Cherry Sts., total $20,476,000, of which city will pay $4,250,000.

Mexico—Pacific Ry., Mexico City, plans additional bridges and tunnels along line through states of Sonora, Sinahara and Nayarit, $6,000,000, also concrete and steel bridge near Hermosillo, $500,000, and one near Culiacan, $500,000. H. B. Titcomb, pres.

BIDS DESIRED

Fla., Pensacola—Dec. 11, by Comrs. Escambia Co., approaches, trestles and foundations for bridge over Escambia River, McCurdy's Ferry near Century, will be known as Freedom Bridge. $30,000.

Ohio—See "Streets and Roads."

Ia., Audubon—Dec. 20, by Auditor Audubon Co., two 80 x 16 ft. and two 80 x 20 ft. pony truss bridges, and 1 I beam bridge with one 40 x 16 ft. and two 20 x 16 ft. spans. A. J. Van Sise, co. engr.

Ark., Fulton—Private interests, c/o J. B. Shults, Fulton, plan rein.-con. and steel bridge on Bankhead Highway across Red River. $200,000.

Tex., Hemphill—See "Streets and Roads."

Tex., McKinney—Dec. 11, O. T. Murray, judge Collin Co., 6 bridges on State Highway 6, rein.-con. pile trestles, concrete girders and steel spans, incl. forty-three 20 ft., one 80 ft., four 31 ft and one forty-three ft. spans. $95,360. F. W. Cawthon, co. engr.

California—Dec. 24, by State Hy. Comn., Sacramento, 6 rein.-con. girder bridges, in Tehama Co., 2,100 cu.yd. excav., 720 lin.ft. subgrade, 220 cu.yd. Class A concrete pavement, 888 cu.yd. Class A concrete in superstructures and 535 cu.yd. in frame bents, 2,700 cu.yd. excav. for bridge structure, etc. R. M. Morton, state highway engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, Nov. 27, 40 ft. 6 in. single leaf bascule span, 30 ft. roadway, incl. concrete pier, steel sheet piling, trestle approaches, gravel embankment approaches and removal of present concrete bridge over Bass River, M. P. 13.9 State Highway Route 4 on road between New Gretna and Tuckerton, in municipality of Bass River, Burlington Co., from L. J. Seiling, Broad St., Red Bank, 103.9% engrs. est. ($102,849). Noted Nov. 8.

New Jersey—State Hy. Comn., Trenton, bridge over Raritan River between Perth Amboy and South Amboy, incl. 5,536 lin.ft. earth fill approaches, 1,077 lin.ft. rein.-con. viaduct and main bridge consisting of 1,536 lin.ft. steel plate girder spans carried on concrete piers supported on piles and faced with granite, and 360 ft. swing span, etc., from Stillman, Delahanty & Ferris Co., 1 Exchange Pl., Jersey City, $3,738,921; Frederick Snare Corp., 114 Liberty St., New York City, $3,759,957; Patrick McGovern, Inc., 50 East 42nd St., New York City, $3,862,847. Noted Nov. 1.

Virginia—State Hy. Dept., Richmond, 326 ft. bridge over Jackson River near Clifton Forge, Project S-189-A, Alleghany Co., from R. W. Curtis, Lynchburg, $62,694; 28 ft. bridge over Chuckatuck Creek, near Chuckatuck, Project S-191, Nansemond Co., from Battershill & Goode, Virgilina, $9,756. Noted Nov. 8 under "Streets and Roads."

Alabama—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, Nov. 27, bridges over Little River Diversion Channel, Cape Girardeau Co., also over Castor River, Madison Co., from Farnam Constr. Co., East St. Louis, $116,740 and $25,857 respectively, on Sta. 67 plus 22, Buchanan Co., also bridge over Morgan Branch, and 1 on Sta. 622 plus 65, DeKalb Co., from M. E. Gillioz, Monett, $9,946 and $13,843 respectively, over Cow Branch and bridge on Sta. 331 plus 30, Atchison Co., from G. W. Condon, 510 Farnam Bldg., Omaha, Neb., $11,786; over Robins Draft, Howell Co., from Jones-Harlin Constr. Co., West Plains, $11,169, over Coon Creek, Taney Co., from Easley Bros., Aurora, $8,644, over Chicago & Alton R.R. tracks, Jackson Co., from F. W. Crocker, St. Louis, $10,664, on Sta. 229 plus 18, Pettis Co., from Bertman & Menefee, Sedalia, $2,582; cleaning and painting bridge over Otter Creek, Monroe Co., from A. A. Davis & Co., Oklahoma City, Okla., $60; cleaning, painting and reflooring with (a) untreated timber (b) creosoted timber (1) bridge over Woods Fork of Gasconade River, Wright Co. (2) over Licks Fork of Gasconade River, Wright Co. (3) over Jacks Fork, Texas Co., from Short & Bramer, Monett, (a1) $2,716 (b1) $3,699 (a2) $1,745 (b2) $2,309 (b3) $4,175, Day & Richards, Summerville, (a3) $2,506. Noted Nov. 22 under "Streets and Roads."

Kan., Arkansas City—Cowley Co., (Winfield) Madison Ave. bridge, here, 130 ft. steel truss span, concrete floor and rein.-con. abutments on Federal Aid Project 163, from Maxwell Constr. Co., Columbus, $49,305.

CONTRACTS AWARDED

New Jersey—State Hy. Dept., Trenton, 15 ft. widening of seven 85 ft. arch, two 65 ft. deck plate girder and one 60 ft. bascule spans, incl. all foundations, changes to approaches for distance of 140 ft. on west side and 550 ft. on east side, paving, curbing, walks, retaining walls, gas, sewer lines and trolley tracks over Raritan River, M. P. 13.4, Route 1, Sect. 13, in municipalities of New Brunswick and Highland Park, Middlesex Co., to M. Staub, 21 Wildwood St., Pitman, $367,757. Noted Nov. 8.

S. C., Society Hill—Society Hill Bridge Bd. Marlboro Co., (Bennettsville) and Darlington Co., (Darlington) bridges over Pee Dee River, 3 span steel bridge to Hyde & Baxter, Met. Bank Bldg., Wash., D. C., $64,000; timber bridge to Salmons-Clement Co., Charleston, $35,871; 7 mi. earth work to Mayfield Constr. Co., Denmark, $69,080. Noted Nov. 8.

Ohio—See "Streets and Roads."

O., Youngstown—P. J. Carney, dir. Pub. Serv., foundation for 500 ft. concrete and steel bridge, Belmont Ave., to Parish Bros., Commerce and Decker Sts., $128,740. Noted Nov. 22.

Ind., Richmond—Pennsylvania R.R., 323 Wells St., Chicago, will build 92 ft. half through plate girder spans, by day labor, here. Structural steel, 108 tons, to Fort Pitt Bridge Wks. of Pittsburgh, Oliver Bldg., Pittsburgh. Engrs. est. $25,000. T. J. Skillman, ch. engr.

Minn., St. Paul—City and Ramsey Co., constructing Pier No. 1 of proposed steel and concrete bridge over Mississippi River at Robert St. (bridge to be 1,500 ft. long, 76 ft. wide), to W. J. Hoy Co., Burgess and Mackubin Sts., $53,328. Noted Nov. 8.

S. D., Mobridge—State Hy. Dept., Pierre, 1,488 ft. concrete and steel bridge over Missouri River, here, to Minneapolis Bridge Co., Metropolitan Life Bldg., Minneapolis, Minn., $281,000. Noted Nov. 1.

Kan., Winfield—Crowley Co., two 130 ft. steel truss spans on East Madison Ave., across Walnut Creek, Federal Aid Project 163, to Maxwell Constr. Co., Columbus, Kan., $49,305. Noted Nov. 1.

Tex., Marlin—See "Streets and Roads."

Ont., Prairie Siding — W. G. McGeorge, engr., Chatham, steel and cement bridge, two 100 ft. spans and one 175 ft. central span, here; steel work to Canadian Des Moines Steel Co., Chatham, $78,300. Noted Nov. 1.

Dams

PROPOSED WORK

N. C., Murphy — Southern Appalachian Power Co. plans 170 ft. dam, power house and appurtenant structures on Hiawassee River in Cherokee and Clay Counties to de-

Dams (Continued)

velop 50,000 hp., also several miles transmission line. This development will be first unit of extensive program.

Okla., Heavener—See "Waterworks."

N. M., Las Cruces — See "Industrial Works."

Calif., Los Angeles—See "Waterworks."

Calif., Pescadero — See "Excavation, Drainage, Irrigation."

Calif., Porterville — See "Excavation, Drainage, Irrigation."

Calif., San Fernando—See "Waterworks."

BIDS RECEIVED

Md., Frederick—E. C. Crum, city engr., Nov. 27, earth dam on Fishing Creek, from G. B. Mullin Co., Inc., 1296 Upshur Ave., Wash., D. C., $127,341. Noted Nov. 15.

Calif., Victorville — See "Excavation, Drainage, Irrigation."

Railways

PROPOSED WORK

Texas—Dallas Ry. Co., Interurban Bldg., Dallas, making plans extending 7th St. carline along Edgefield St. to Kings Highway, paving between track, new steel, etc. $25,000. D. A. Brown, c/o owner, engr.

Texas — Texas Electric R.R. Co., Interurban Bldg., Dallas, making surveys extending Dallas Terrell Interurban to Tyler by way of Wills Point or College Mound, to exceed $200,000. D. A. Brown, Interurban Bldg., Dallas, engr.

Texas — See "Industrial Works" under "Dallas."

California — State Bd. Harbor Comrs., Ferry Bldg., San Francisco, having plans prepared reconditioning and extending Belt Line tracks in San Francisco. $50,000. F. G. White, Ferry Bldg., San Francisco, ch. engr.

CONTRACTS AWARDED

Georgia—Davis-Zirkle Lumber Co., Zirkle, will construct 5 mi. standard gauge logging railroad from Mershon to Hurricane Creek, also in market for one 50 ton standard gauge locomotive, spikes, bolts, etc. W. M. Zinkle, secy. Work will be done by company forces.

Excavation, Drainage Irrigation

PROPOSED WORK

Minn., Caledonia—Houston Co., making plans 64,000 lin. ft. open ditch. E. N. Newhouse, aud. Midwest Eng. Co., Albert Lea, engrs.

Minn., Redwood Falls—Redwood Co. making plans Co. Ditch 64. $122,948. F. H. Anthony, Redwood Falls, engr.

Minn., Redwood Falls — Redwood Co. plans Ditch 57, excavation and tiling. $1,500,000. D. W. Gibbs, Marshall, engr.

Mo., St. Louis—Soon takes bids straightening and constructing 5 mi. open drainage canal along bed River Des Peres between Leamington Court and Southwest Ave. $500,000. W. W. Horner, 300 City Hall, engr. Noted Feb. 15.

Wash., Vancouver—Vancouver Shillapo Dist. plans draining Vancouver Lake, 5,108 acres, includes dyking, ditching and pumping plant. $517,488. W. A. Schwarz, Vancouver, engr.

Wash., Yakima — Drainage Impvt. Dist. 41, Wide Hollow Valley, plans system to develop 1,267 acres. $30,000.

Calif., Anderson—Anderson-Cottonwood Irrigation Dist., making plans enlarging canals, siphons and laterals. $25,000. J. H. Larkin, dist. engr.

Calif., Crows Landing—Stanislaus Irrigation Dist. plans to reorganize district incl. approximately 36,000 acres, will divert water from San Joaquin River for irrigation by installation of centrifugal pumps, ranging from 20-36 in., operated by electric motors. E. N. Bryan, Forum Bldg., Sacramento, engr.

Calif., Oakland—Plans election to vote on $4,500,000 bonds dredging along harbor front and constructing pier approximately 6,000 ft. long, 900 ft. wide, with railroad tracks, freight equipment, etc.

Calif., Pescadero—D. H. Atkins, et al., 260 California St., San Francisco, having plans prepared irrigation system, 3 dams, one 50 ft. high, 475 ft. long, 25 ft. on top, earth and rock fill, one 30 ft. high, 570 ft. long and 10 ft. wide on top, rock fill, other 12 ft. high, 600 ft. long, 5 ft. wide on top; pumping plant for first dam 2 centrifugal pumps, 1 No. 4, 4 in. suction, other 4 in. 2 stage, lifts of 60 ft. and 300 ft., second dam one 4 in. suction pump, 100 ft. lift, 20 hp. motors, third dam one 4 in. suction pump. Canals and pipe lines included in project. C. E. Grunsky, Jr., Mechanics Institute Bldg., San Francisco, consult. engr.

Calif., Pescadero—Ano Nuevo Irrigation Dist., c/o Humphreys Estate, 1014 Hobart Bldg., San Francisco, making plans irrigating 2,900 acres, includes storage dam, 120,000 cu.yd. earth fill, 2 mi. main canal and laterals, approximately 1.5 mi. 18 in. riveted steel pipe line, etc. Tibbals & Percival, Forum Bldg., Sacramento, consult. engrs.

Calif., Porterville—C. M. Jones and W. W. Slayden, plan 1.5 mi. canal, small rock dam and power house to develop 182 hp. $15,000.

Calif., San Bernardino — Making plans 1,800 lin.ft. canal from Waterman Canyon Cutlet, north of here, to Twin Creek. $150,000. C. E. Johnson, city engr.

Calif., San Francisco—State Bd. Harbor Comrs. making plans extending seawall south of present grain terminal 1,000 ft., to reclaim 25 acres. $800,000. F. G. White, Ferry Bldg., ch. engr.

Calif., Victorville—Mojave River Irrigation Dist., plans election to vote on $450,000 bonds for hydraulic and earth fill type dam and 21 mi. canals. J. B. Lippincott, Central Bldg., Los Angeles, engr.

Calif., Woodland—Recl. Dist. 1600, c/o H. L. Huston, attorney, Woodland, voted $300,000 bonds for reconstruction and realignment of existing levees, and construction of new levees, ditches, etc.

BIDS DESIRED

N. Y., Brooklyn—Dec. 13, by E. Riegelmann, boro pres., Boro Hall, dredging Gowanus Canal, Newtown Creek Canal and basins, Wallabout Canal, and foot of 64th St. and New York Bay.

Tex., Corpus Christi—Dec. 21, by H. R. Sutherland, judge Nueces Co. dynamiting and dredging Nueces River, removing old sunken craft and deepening river bed. $25,000. C. E. Cocke, co. engr.

BIDS RECEIVED

New York—J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York City, Nov. 30, dredging channels, constructing dikes, placing fill on West Island in connection with improvement of Jamaica Bay, Queens Boro, from Standard Dredging Co., Inc., (a) $627,520 (d) $271,300; Arundel Corp., foot of Fulton St., Brooklyn, (b) $504,232 (c) $812,586. Noted Nov. 22.

CONTRACTS AWARDED

N. J., Newark — Dept. Streets & Pub. Impvts., City Hall, dredging portion City of Newark channel at Port Newark Terminal, to Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, $114,000. Noted Nov. 1.

Tex., Edinburg—Dirs. Hidalgo Co. Water Impvt. Dist. 4, 10 mi. concrete canal reconstruction, bridges, etc., to H. B. Livingston, San Benito, $37,034. Noted Sept. 20.

Nev., Lovelock—Lovelock Valley D. D. 1, 336,495 cu.yd. excav., etc., to Union Constr. Co., Ogden, Utah, $0.1375 per cu.yd. Noted Nov. 29.

Streets and Roads

PROPOSED WORK

New York — State Hy. Dept., Albany, plans concrete paving 146,780 sq.yd. Rds. 5338, 127 and 267, Broome Co. $635,500. C. M. Edwards, 116 Chenango St., Binghamton, div. engr.

N. Y., Rochester—Plans extending, curbing and paving 1 mi. Monroe Ave. $50,000. Will mature in spring. G. A. Poole, City Bldg., engr.

N. Y., Schenectady — Soon takes bids grading, laying sidewalks and paving 2.4 mi. Erie Blvd., 68 ft., asphalt or concrete. $250,000. G. Howard, city engr.

D. C., Wash.—Dist. Comrs., 509 Dist Bldg., plan widening M St. to 200 ft., with parkway in center.

Va., Richmond — Takes bids this month curbing and guttering Monument Ave. $50,000. A. J. Saville, dir. Bd. Pub. Wks.

W. Va., Charleston—Dec. 20 to vote on $1,500,000 bond issue for paving, sewers, parks and new market house.

W. Va., Charleston — Union Dist., Kanawha Co., election Dec. 17 to vote on $220,000 bond issue for road work. R. B. Barton Co., engr.

N. C., Asheville — Making plans new thoroughfares from South Market to Biltmore Sts., from Coxe to French Broad Sts. and from French Broad to Clingman Sts. $150,000. F. L. Conder, dir. Pub. Wks.

N. C., Beaufort—Plans to improve and pave streets in business sections and along water front. $100,000.

N. C., Greensboro—Making plans concrete or asphaltic paving 15,000 sq.yd. Lexington St. $40,000. P. C. Painter, city mgr.

Fla., Bradentown — Dec. 21 to vote on $43,000 bond issue for paving various streets. Kirley & Myler, Bradentown, engrs.

Fla., Brooksville — Hernando Co. plans election to vote on $75,000 bonds 12 mi. road Spring Lake to Pasco Co. line; $72,000 bonds 12 mi. road from Pettaway Farm at Spring Lake to Richland; $44,500 bonds 7½ mi. road from Spring Lake and Richland Rd. to Pasco Co. line and Rerdell Rd.; $78,000 bonds 12 mi. road from Brooksville to Citrus Co., through Annullalaga; $25,000 bonds 3 mi. road from Lykes Place to North; $25,000 bonds 4 mi. road from Kitchen's corner northwest to Annullalaga Rd.; $25,000 bonds 4¾ mi. road from Brooksville via Springstead Place east and south; $30,000 bonds 5 mi. road from Brooksville easterly; $36,000 bonds 10 mi. road from Spring Hill Rd. via Rock Hill school and Istachatta to Citrus Co.; $29,500 bonds 4 mi. road from Rd. No. 5, north of Brooksville to Tucker Hill. A. Allen, Brooksville, engr.

Fla., Center Hill — City voted $66,000 bonds paving, curbing, and storm sewerage system, $18,000 water works system and $2,000 extension to electric light system. Noted Oct. 25.

Fla., Frostproof—See "Water Works."

Fla., La Belle—City to vote on $25,000 bond issue for paving various streets.

Ala., Birmingham—City and Jefferson Co. take bids in January widening 1st Ave. from 41st to 47th Sts., from 50 to 70 ft., and paving with concrete and bitulithic. A. J. Hawkins, city engr. Noted May 10.

Miss., Biloxi—Voted $90,000 bond issue for street paving and seawall work, and $110,000 for ward school.

Miss., Greenwood—Plans to pave and lay sewers in Church, Mississippi, George and Market Sts. $135,000. W. S. Hawkins, engr.

Miss., Jackson — Dec. 15, to vote on $250,000 bond issue for streets, railway bridges, elimination of grade crossings, etc.

Ky., Hickman — Fulton Co. election in January to vote on $550,000 bonds for Hickman-Fulton Rd., 32 mi. long, 18 ft. wide.

Ky., Pikeville — Pike Co. sold $250,000 bonds for road and bridge work.

Ky., Prestonsburg — Floyd Co. Fiscal Court authorized expenditure of $125,000 for constructing 24 mi. Mayo Trail from Ashland to Pikesville.

O., Akron — Plans brick paving ¾ mi. South Arlington St., 60 ft., $75,000-$85,000; resurfacing ¾ mi. Bway. St., 60 ft., $50,000; widening (6 ft.) and resurfacing about 1 mi. East Exchange St., 68 ft., $150,000. Will mature in spring. E. A. Kemmler, City Bldg., engr.

O., Cleveland — Cuyahoga Co. making plans and opens bids about March 15, bridge on Hilliard Rd., steel superstructure, concrete substructure. $825,000. F. R. Lander, Court House, engr. Noted Aug. 2.

O., Cuyahoga Falls — Plans improving Payne Ave. $70,000.

O., Rocky River—New York, Chicago & St. Louis R.R., Columbia Bldg., Cleveland, takes bids in spring concrete bridge, Blount St., here. $250,000. E. E. Hart, Columbia Bldg., Cleveland, engr. Village of Rocky River, Cuyahoga Co. and railroad, owners.

O., Youngstown—Plans widening 1 mi. Andrews Ave. from 60 to 70 ft. $30,600. W. E. Turner, City Bldg., engr.

Streets and Roads (Continued)

Wis., Kilbourn—Making plans and takes bids about Feb. 1, paving Washington Ave., La Crosse and Eddy Sts., various types incl. concrete. $60,000. E. B. Parsons, Jefferson, engr.

Wis., Manitowoc—Manitowoc Co. election in April to vote on $3,000,000 bonds concrete surfacing, etc., various roads. Wisconsin Hy. Comn., Madison, engrs.

Kan., Victoria—City plans grading, and brick or rein.-con. paving 16 blocks, Glass Forest, Moody and Goodwin Sts., etc. $45,000. Contracts will probably be awarded in spring.

Neb., Papillon—Sarpy Co. voted $80,000 bonds for 12½ mi. hard surfaced roads, vitr. brick and gravel. H. E. McClintock, Bellevue, engr.

South Dakota—State Hy. Dept., Pierre, plans grading 9.8 mi. Federal Aid Project 167, Bon Homme Co., $31,663; 23.5 mi. Federal Aid Project 158, Clay and Turner Counties, $108,262; 25.5 mi. Federal Aid Project 149, Spink Co., $83,044. Lettings early in spring. F. D. Hugdins, state engr.

Mo., Clayton—St. Louis Co. plans grading, opening road where necessary and surfacing Denny Rd. extension from Olive Ave. to St. Charles Rd., macadam, also surfacing Denny Rd. from Gravois to Olive Aves., rein.-con. $75,000-$100,000. W. Elbring, Court House, engr.

Mo., St. Louis—Soon takes bids paving 64,073 sq.yd. Botanical, Castleman, Cleveland and Flat Sts., willite asphalt, $233,100; 5,185 sq.yd. Duncan St., granite on concrete, $40,400; 27,290 sq.yd. Flora St., Kentucky rock asphalt on concrete, $47,900. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, soon takes bids curbing, guttering and paving 2,490 sq.yd. Ohio St., asphalt on concrete, $13,300; resetting curb, building up present base and paving 1,965 sq.yd. Lucas Ave., $12,300. W. W. Horner, city engr.

Ark., Camden—Making preliminary plans 14,000 ft. concrete sidewalks in Shady Grove, Parkview and Washington Heights Dists., average width 5 ft. $25,000.

Tex., Alpine—Brewster Co. making plans grading and gravel surfacing 15.15 mi. State Highway 12, 16 ft. $87,000. A. L. White, co. engr.

Tex., Anson—Jones Co. plans election to vote on $1,500,000 bond issue for constructing Haskell Abilene Rd., brick or concrete. J. F. Linsey, co. judge.

Tex., Cameron—Milam Co. making plans grading and gravel surfacing 4.13 mi. State Highway 43, 18 ft. $40,000. A. F. Mitchell, co. engr.

Tex., Childress—Making plans paving 5 or 6 residence streets, various types. $50,000. R. G. Carraway, city engr.

Tex., Colorado—Mitchell Co. election Dec. 19, to vote on $650,000 bonds, concrete paving State Highway 1, grading and gravel surfacing other roads, 16 and 18 ft. State and Federal Government will appropriate $600,000 if election carries. F. DuBose, co. engr. Noted Nov. 29.

Tex., Crockett—Rd. Dist. 3, Houston Co., election Dec. 15, to vote on $210,000 bonds road work, Dist. 4, also to vote on $80,000 bonds for construction Highway 21. C. H. Milburn, co. engr.

Tex., Dallas—See "Railways."

Tex., Ft. Worth — Making plans hard surfacing various parts Meandering Rd. at Lake Worth. $50,000. D. L. Lewis, city engr.

Tex., Henderson — Rusk Co. soon takes bids grading and gravel surfacing 4.1 mi. State Highway 15 A, 16 ft. $50,000. F. E. Hess, 315 Medical Arts Bldg., Dallas, engr.

Tex., Leakey — Real Co. making plans and soon takes bids grading and bridging 18 mi. Kerrville-Rock Springs Rd., 24 ft. shoulder to shoulder. $90,000. W. E. Simpson, 414 Natl. Bank of Commerce Bldg., San Antonio, engrs.

Tex., Lubbock — Voted $150,000 bonds permanent paving various streets. M. S. Ruby, city mgr.

Tex., Munday—Munday Rd. Dist. Knox Co. plans election to vote on $100,000 bonds, hard surfacing section Abilene Wichita Falls Rd.

Tex., Richmond—Ft. Bend Co. voted $75,000 bonds, highway improvements in Rd. Dist. 7. C. H. Kendall, co. engr.

Tex., Rock Springs—Edwards Co. takes bids soon grading and surfacing with crushed rock on sledged stone 17.13 mi. State Highway 41. $154,000. W. E. Simpson, 414 Natl. Bank of Commerce Bldg., San Antonio, engr.

Tex., Vernon — Wilbarger Co. defeated $600,000 bond issue concrete and gravel surfacing 37 mi. highways and laterals. J. Nabors, co. engr. Noted Nov. 8.

Okla., Barnsdale — Plans grading and paving Main and Chestnut Sts., 5,600 sq.yd. vertical fibre brick, 3,100 lin.ft. concrete, 2,800 cu.yd. earth, 130 cu.yd. rock excav. $30,633. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Durant—Plans grading and paving 4th, Elm and Beech Sts., 11,250 sq.yd. concrete, 4,900 lin.ft. curbing, etc. $46,000. L. V. Stinson, Durant, engr.

Okla., McAlester—Plans grading and paving Commanche, Seminole, Osage and 7th Sts., 15,300 sq.yd. concrete, 9,000 lin.ft. curbing and 5,800 cu.yd. excav. $71,000. E. M. Fry, McAlester, engr.

Okla., Norman—Plans grading and paving Symnes, Trout, Jenkins, Elm and Brooks Sts., 16,250 sq.yd. concrete, 8,400 lin.ft. curbing, etc. $67,500. F. Cobb, Norman, engr.

Okla., Oklahoma City — Plans grading and paving 12th, 19th and 29th Sts., 6,800 sq.yd. asphalt, 3,800 lin.ft. curbing, etc. $28,000. B. M. Hart, City Hall, engr.

Okla., Oklahoma City—Plans grading and paving 5 blocks 3rd St., 5,200 sq.yd. asphalt, etc. $27,500. B. M. Hart, City Hall, engr.

Okla., Pryor—Mayes Co. having surveys made grading and graveling 8 mi. Jefferson highway, 75,000 sq.yd. gravel, 40,000 cu.yd. excav. $30,000. F. Settle, Pryor, engr.

Washington—State Hy. Dept., Olympia, plans to expend $5,300,000 on new road work, incl. paving 53 mi. highway, grading 280 mi., constructing several large bridges, grading 50 mi. on Olympic Peninsula and paving 16 mi. highway between McCleary Creek and Elma. J. Allen, state highway comr.

Wash., Kelso — City Comn. takes bids about Dec. 11, paving Cedar, Grant and cross streets, West Kelso. $144,000. U. G. Jackson, city engr. Noted Nov. 1.

Wash., Seattle—King Co. had plans prepared grading and gravel surfacing 1.2 mi. 10th Ave. N. E. $42,000. T. R. Beeman, co. engr.

Oregon—State Hy. Dept., Salem, sold $1,000,000 bonds for highway construction. R. F. Klein, state highway engr.

California—State Hy. Dept., Sacramento, plans to relocate and widen 8 mi. Shasta River to Gazelle Rd. and 15 mi. Yreka to Klamath River Rd., gravel surface 17 mi. Gazelle to Yreka Rd., all foregoing Siskiyou Co.; grading and gravel surfacing 10 mi. Bayha-Pollock Rd., Shasta Co. R. M. Morton, state highway engr.

Calif., Mill Valley—Making plans paving Alcatraz, Corte Madera and Gardner Sts., etc. To exceed $25,000. J. C. Oglesby, Cheda Blk., San Rafael, engr.

Calif., Riverside—Riverside Co. rejected bids grading, curbing and surfacing 6.2 mi. Jack Rabbit Trail. New surveys will be made for 18 ft. macadam road. Noted Nov. 22.

Calif., San Luis Obispo—Plans election to vote on $300,000 bonds to finance completion of Cambria Rd. W. J. Black, co. surv.

Calif., San Francisco—Bd. Harbor Comrs., Ferry Bldg., plans paving portions of waterfront. $32,000. F. G. White, ch. engr.

Calif., San Raphael — Marin Co. plans 4,900 ft. causeway, pile construction, 2 or 3 miles of roadway to be shaped. $150,000.

Que., Montreal—City of Montreal, Quebec Bd. Trade, and County Councils of Lotbiniere and Levis, etc., plan roadway on Quebec Bridge. Cost $300,000, more than half to be spent on approaches to bridge.

Ont., Hamilton—Having plans prepared cement pavements on Bowen and Main Sts. from Kenilworth Ave. to city limits. $50,000. Prices wanted on materials. W. L. McFaul, city engr.

Ont., North Bay—Plans 15,000 sq.yd. asphalt or bituminous concrete pavements on concrete with concrete curbs and gutters, on Fisher and Cassells Sts., 1st and Klock Aves. $35,000. W. Mackie, town engr.

Ont., St. Thomas — Will soon prepare plans for asphalt on concrete pavements for 1924. $40,000. Prices wanted on materials. W. C. Miller, city engr.

BIDS DESIRED

Conn., New Britain—Dec. 12, by State Bd. Educ., Hartford, grading and laying concrete walks around new normal school. $30,000. Noted Apr. 26.

N. Y., Brooklyn—Dec. 12, by E. Riegelmann, boro pres., Boro Hall, repaving roadway of Liberty Ave., permanent asphalt on 6 in. concrete.

N. Y., Long Island City—Dec. 10, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt repaving Jackson Ave., etc.

Pa., Ebensburg—Dec. 19, by Comrs. Cambria Co., 12,244 ft. rein.-con. on Ligonier Rd., 16 ft. H. F. Dorr, 419 Trust Bldg., engr.

Pa., Somerset—Dec. 27, by Comrs. Somerset Co., County Court House, reconstructing 2 mi. highway on State Route 50; adv. E. N.-R. Dec. 6.

Fla., Bartow—Dec. 11, by Comrs. Polk Co., grading, curbing and constructing 26,000 sq.yd. pavement, bituminous macadam, asphalt on clay, etc., also one concrete and steel bridge, 160 cu.yd. rein.-con., etc. May be bid on separately. $60,000.

Fla., Lakeland—Dec. 20, by city, grading, curbing, paving, widening, etc., streets, avenues, courts, drives, driveways and alleys. C. C. Brown, city engr.; adv. E. N.-R. Dec. 6.

Fla., Miami—Dec. 11, by City Comn. 11,598 sq.yd. concrete sidewalks, Contr. 25, also 15,486 sq.yd. bituminous macadam and 15,486 sq.yd. gravel, Cont. 49. F. H. Wharton, city mgr.

Alabama—Dec. 27, by State Hy. Dept., Montgomery, concrete bitulithic paving 6.7 mi. highway from Browns Station to Uniontown. $75,000. W. S. Keller, state highway engr.

Louisiana—Dec. 18, by State Hy. Comn., Reymond Bldg., Baton Rouge, constructing 18 mi. State Aid Project 391, Richland Parish. J. M. Fourmy, ch. engr.

Tenn., Lebanon—Schools—Dec. 14, by Bd. Educ., 2 story and basement, brick and rein.-con. school buildings. $150,000. C. K. Colley, 4th and 1st Natl. Bank Bldg., Nashville, archt. Noted Nov. 22.

Tenn., Memphis—Hotel—Dec. 17, by W. Ahlschlager, Inc., archts., 65 East Huron St., Chicago, constructing Hotel Peabody, 12 story, 600 rooms, rein.-con., brick and steel, Union Ave. from South 2nd to South 3rd Sts., here, for Southern Hotel Co., Inc., 257 South Main St. $3,000,000. Noted Nov. 22.

Ohio—Dec. 11, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 7.708 mi. roads in Athens, Columbiana, Geauga and Wyandot Counties. A. V. Donaheys, dir. highways.

Indiana — Dec. 18, by State Hy. Comn., Indianapolis, brick, bituminous concrete and concrete paving 7.511 mi. Dixie Bee Line Rd., Federal Aid 35 Sect. A and Federal Ad 64, Sullivan Co.; 8.309 mi. Lafayette Pike, Federal Aid 40, Sect. B, Boone Co.; 8.788 mi. Sect. A and 8.705 mi. Sect. B Michigan Rd., Federal Aid 45, Marion and Shelby Counties, 6,126 mi. Sect. A, 6.678 mi. Sect. B and 10.39 mi. Sect. C, Bluff Rd., Federal Aid 63, Marion, Morgan and Johnson Counties, 6.208 mi. Dixie Bee Line Rd., Federal Aid 65, Sect. A, Gibson Co., 6.969 mi. Sect. A and 6.847 mi. Sect. B Range Line Rd., Federal Aid 70, Miami Co., 6.299 mi. French Lick Rd., Federal Aid 16, Sect. G. Dubois Co.; gravel base on 5.595 mi. Tell City-English Rd., Federal Aid 19, Sect. B. Perry Co.; grading and structures under 20 ft. span on 3.484 mi. Sect. A and 4.204 mi. Sect. B Salem-Palmyra Rd. Federal Aid 23, Washington Co. J. D. Williams, dir.

Michigan—Jan. 15, by State Hy. Dept., Lansing, grading and surfacing 1 mi. State Trunk Line Rd. 46-25, and 0.992 mi. State Trunk Line Rd. 27-12, Sect. D, Sanilac Co., asphalt, concrete or bituminous concrete.

Ill., Waukegan—Dec. 11, by Lake Co. Road and Bridge Com., improving Sect. Y. Highwood-Halfday Rd. and Sect. 27, Green Bay Rd. C. E. Russell, co. supt. highways; adv. E. N.-R. Dec. 6. Noted Aug. 2

Minn., St. Paul—Dec. 11, by H. W. Austin, city purch. agt., paving Payne Ave. between Jessamine and Maryland Sts. and between Maryland St. and north city limits; grading and paving White Bear Rd. between Payne Ave. and north city limits. G. M. Shepard, city engr.

Kan., Topeka—Dec. 21, by County Clerk grading and surfacing 3.986 mi. Golden Belt Rd., Project 177 Sect. A, 18 ft. wide. A. C. Lagerwall Co., Topeka, engr. Noted Nov. 29.

Streets and Roads (Continued)

Tex., Corpus Christi—Dec. 21, by H. R. Sutherland, judge Neuces Co. highway improvement, incl. 72,000 cu.yd. earth and 36,000 cu.yd. borrow excav., 106,500 sq.yd. concrete, 44,000 lb. reinforcing, etc. $150,000. C. E. Cocke, co. engr.

Tex., Corsicana—Dec. 20, by City Com., paving 5½ blocks 6th and South 9th Sts., warrenite bitulithic, concrete or Uvalde rock asphalt. $25,000. W. W. McClendon, city engr.

Tex., Eastland—Dec. 17, by City Com., 8,613 sq.yd. paving, 4,709 ft. curb and gutter, etc., on Moss St., 3 in. brick on 4 in. macadam and on 5 in. concrete with sand cushion. $45,000. J. A. Wright, city engr.

Tex., Ft. Worth—Comrs. Tarrant Co. taking bids paving 2 mi. Hicks Rd., bituminous macadam. $25,000. D. A. Davis, co. engr.

Tex., Hallettsville—Dec. 20 (change of date) by Comrs. Lavaca Co., grading, etc., 14.23 mi. highways, 94,000 cu.yd. earth and 800 cu.yd. rock excav., 40,000 cu.yd. earth borrow, etc. $175,000. W. K. Koetcher, co. engr. Noted Nov. 29.

Tex., Hemphill—Dec. 22, by W. H. Davidson, judge Sabine Co., grading, gravel surfacing and bridging 14.69 mi. State Highway 8, Federal Aid Project 327 B, 12 ft., (23,005 cu.yd. gravel surfacing to be furnished by county)., $94,793. W. A. French, San Augustine, co. engr.

Tex., Rock Springs—W. E. Simpson Co., engrs., Natl. Bank of Commerce Bldg., San Antonio, taking bids improving 17.13 mi. highway from here to county line, 16 ft., sledged stone base, crushed stone surface, for Edwards Co. $154,000.

Tex., Uvalde—Dec. 21, by Comrs. Uvalde Co., highway improvements incl. 16,000 cu. yd. gravel surfacing and screening, 12,000 cu.yd. gravel surfacing, and 10,000 cu.yd. stripping gravel pits. $30,000. M. B. Hodges, co. engr.

California—Dec. 17, by State Highway Comn., Sacramento, grading 7.3 mi. road between Truckee and Boca. R. M. Morton, state highway engr.

California—Dec. 17, by State Hy. Comn., Sacramento, concrete paving 9 mi. road between Elk Grove and Sacramento. R. M. Morton, state highway engr. Noted Nov. 15.

California—Dec. 18, by State Hy. Dept., Sacramento, grading and surfacing with crushed gravel or broken stone 9.9 mi. road from Bayha to Halfway Creek. R. M. Morton, state highway engr.

Calif., Los Angeles—Western Building & Investment Co., Marsh-Strong Bldg., taking bids improving 108th to 111th Sts., between Vermont Ave. and Hoover St., 6,250 lin.ft. oil and gravel paving, 100,000 sq.ft. sidewalks, 50,000 lin.ft. curbing.

Calif., San Jose—Dec. 17, by Supervs. Santa Clara Co., improving Sect. 1 Santa Clara-Los Gatos Rd., 381,956 sq.ft. cement concrete, asphaltic concrete or oil macadam; Sect. 2, portion of Santa Cruz Ave., in Los Gatos, 52,513 sq.ft. 6 in. concrete; Agnes Rd., 101,840 sq.ft. oil macadam (county will furnish base material, rock and screenings free at county quarry at Saratoga): McLaughlin Ave., 11,408 sq.ft. oil macadam. No bids received under former advertisement. R. Chandler, co. surv. Noted Nov. 8.

Calif., Santa Rosa—Dec. 13, by Supervs. Sonoma Co., grading 38.53 mi. Jenner-Mendocino Co. Highway, 240,000 cu.yd. excav., etc. W. W. Felt, Jr., clk.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Nov. 28, asphalt repaving Throop Ave. and Empire Blvd., from Sicilian Asphalt Paving Co., 41 Park Row, New York, $22,024 and $29,725 respectively. Noted Nov. 22.

N. Y., Buffalo—Dept. Pub. Wks., Nov. 27, paving (1) Leslie St. (2) Woodlawn Ave. (3) Courtland St. (4) Norfolk Ave. (5) Dartmouth St. (6) Devereaux St. (7) Berkshire St. (8) Nicholson Ave. with (a) asphalt (b) brick, from Rock Asphalt & Constr. Co., Morgan Bldg., (1a) $42,673 (8a) $23,916; B. F. Spire, 24 Colonial Circle, (1b) $40,750; H. P. Burgard Co., Fillmore Ave., (2a) $38,000 (3a) $23,900 (4a) $38,000 (5a) $50,300 (6a) $10,000 (7a) $38,200; Erie Contg. Co., Morgan Bldg., (2b) $39,436 (3b) $25,597.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Nov. 26, grading, curbing and laying sidewalks on (1) Alstyne Ave. (2) Pierce Ave. grading, curbing, laying sidewalks and asphalt paving (3) Prospect Ave. (4) Radcliffe St. (5) 76th St. (6) 84th St. (7) 90th St.; sheet asphalt paving (8) 76th St. (9) 89th Ave. (10) 90th Ave., from R. A. Hess, Inc., 14 Queens St., Astoria, (1) $16,165 (2) $8,678 (4) $15,395; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (3) $15,509; C. Kurth, 9519 126th St., Richmond Hill, (5) $8,395; J. J. O'Brien, William St., Jamaica, (6) $5,170 (7) $10,199; Cleveland Trinidad Paving Co., Flushing, (8) $27,440 (9) $23,324 (10) $20,580. Noted Nov. 22.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Fisher Ave., bituminous macadam, from J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $30,560. Noted Nov. 22.

New Jersey—State Hy. Comn., Trenton, rein.-con. paving 19,787 sq.yd. Route 15, Sect. 5, Millville to Menantico Creek, Cumberland Co., from M. Staub, 21 Wildwood St., Pitman, 94% engrs. est. ($152,165). Noted Nov. 8.

Virginia — State Hy. Dept., Richmond, grading, etc., 3 mi. Project S-143-C, Bedford Co., from R. H. Langhorne, Evington, $32,865, 2 mi. Project S-327, Russell Co., from W. H. Meadows, Coeburn, $66,343, 4.6 mi. Project S-245, Wise Co., from V. E. Cornett & Co., Independence, $141,906; grading 2.5 mi. Project F-140-B and C, Augusta Co. and concrete paving 4.9 mi. Project F-166-C, Hanover Co., from Pace Constr. Co., Roanoke, $89,683 and $234,822 respectively; concrete paving 0.81 mi. Project S-335-A, Lunenburg Co., from Ford & Harvey, Lynchburg, $28,873; bituminous macadam paving 2.39 mi. Project S-317-A, Mecklenburg Co., from Tinsley Constr. Co., Inc., Box 317, Roanoke, $70,671; graveling 2.9 mi. Project F-166-A, King William and Hanover Counties, from Hagedorn Constr. Co., Box 619, Greensboro, N. C., $52,743; (a) graveling (b) bituminous macadam surfacing 13.5 mi. Project S-326, Norfolk Co., from C. R. Sanderson Oceana, (a) $209,385, General Constr. Co., 405 Seaboard Bank Bldg., Norfolk, (a) $215,333 (b) $406,823. Noted Nov. 8.

Florida — State Rd. Dept., Tallahassee, excavation, broken stone base course, concrete, gravel base course on 11.33 mi. Project 544-B, from Barber Fortin Co., Jacksonville, $270,054; excavation, broken stone base course, concrete, reinforcing steel 13.596 mi. Project 40-E, from Langston Constr. Co., Titusville, $286,562, and Project 604, Volusia Co., from C. F. Lytle, Jacksonville, $191,432; excavation and crush rock on 21 mi. project 605, Polk Co., from Langston Constr. Co., Titusville, $60,734; excavation, broken stone base course, concrete, reinforcing steel, gravel base course, Project 544-A, Pasco Co., from F. S. Whitney, St. Augustine, $118,255; excavation, mixing and shaping sand and clay surface on 14.73 mi. Project 571, Madison Co., from Hunter & Gladwell, Lake City, $85,901; excavation, broken stone base course, bituminous macadam surface on 12.416 mi. Project 521, Nassau Co., from Morgan Hill Paving Co., Graham Bldg., Jacksonville, $245,406; excavation, crushed rock, marl base, etc., on 5.68 mi. Project 576, Sarasota Co., from S. T. Buchanan & Son, Lakeland, $48,511; clearing, grubbing, embankment, incl. one 20 ft. bridge, 3.2 mi. Project 38-A, Escambia Co., from Hardaway Contg. Co., Columbus, Ga., $513,248. Noted Nov. 15.

Fla., Pensacola—Pensacola Co., grading and paving parking spaces and driveways, along Gulf Beach Highway, will pave parking spaces with clay gravel, driveways with concrete from Speed-Parker, Inc., Pensacola. $55,428.

Alabama—State Hy. Dept., Montgomery, grading and surfacing road from Russellville to Phil Campbell, 18 and 24 ft., Federal Aid Project 135, Sect. A, Franklin Co., from Scott Chambers, West Point, Ga., $71,235; concrete bridge on above road from W. M. Thompson, Lafayette, $17,668. Noted Nov. 1 and Oct. 25.

Michigan — State Hy. Dept., Lansing, grading and surfacing 2.901 mi. State Trunk Line Rd. 23-10, Branch Co., 13,946 cu.yd. excav., 33,978 sq.yd. concrete, from Waterbury & O'Shaughnessy, Coldwater, $67,672. Noted Nov. 22.

Missouri—State Hy. Dept., Jefferson City, Nov. 27, grading roads **(S. P. 3-107 Christian means State Project Route 3, Sect. 107, Christian Co.)**, S. P. 3-107, Christian, also concrete paving 2.917 mi. S. P. 35-4, Jackson and S. P. 35-3, Jackson, from Carterville Constr. Co., Carterville, $9,939, $76,692 and $70,655 respectively; grading 0.094 mi. S. P. 3-115, Taney, from Easley Bros., Aurora, $2,158; 2,939 mi. S. P. 5-3, Putnam, and 3.828 mi. S. P. 5-2, Putnam, from J. L. Simmons, La Plata, $8,094 and $13,764 respectively; 4.04 mi. S. P. 47-1, Lincoln, from W. P. Smith, Troy, $29,211; 2.583 mi. S. P. 35-3, Jackson, 2.917 mi. S. P. 35-4, Jackson, also concrete paving 2.583 mi. S. P. 35-3, Jackson, from F. F. Eberhardt Paving Co., Salina, Kan., $15,635, $14,318 and $70,655; grading 2.426 mi. S. P. 1-6, Atchison, from G. W. Condon, 510 Farnum Bldg., Omaha, Neb., $12,936; 4.207 mi. S. P. 76-8, Taney, from Creich Constr. Co., St. Louis, $35,424; 3.566 mi. S. P. 12-17, Pettis, and oil asphalt macadamizing 3.566 mi. S. P. 12-17, Pettis, from A. A. Davis & Co., 301 West 19th St., Oklahoma City, Okla., $35,036 and $34,668 respectively; refined tar macadamizing 3.566 mi. S. P. 12-17, Pettis Co., from Harrison Constr. Co., Des Moines, Ia., $37,683. Noted Nov. 22.

Missouri—State Hy. Dept., Jefferson City, Nov. 27, improving roads **(S. P. R. 20-11, Lafayette means State Project Route 20, Sect. 11, Lafayette Co.)**, grading 0.729 mi. S. P. R. 20-11, Lafayette, also concrete paving 8,059 sq.yd. S. P. R. 20-11, Lafayette, from Cook & O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, $28,346 and $26,192 respectively; grading 5 mi. S. P. R. 31-3, De Kalb, also 4.779 mi. S. P. R. 1-34, Buchanan, from M. E. Gillioz, Monett, $30,036 and $48,124 respectively; 4.754 mi. S. P. R. 16-52, Howell, and 4.811 mi. S. P. R. 16-53, Howell, from Muskogee Contg. Co., Tulsa, Okla., $20,681 and $15,297 respectively; 1.184 mi. S. P. R. 80-1, Ozark, from Smith & Creech Constr. Co., St. Louis, $11,886; 0.139 mi. S. P. R. 1, Madison, from Riley & Bailey Constr. Co., International Life Bldg., St. Louis, $2,080; 4.104 mi. S. P. R. 3-108, Christian, from Cox & Chaney, Branson, $14,131; 2.483 mi. S. P. R. 7-83, Texas, from Short & Bramer, Monett, $9,777; 1.366 mi. S. P. R. 1-19, Holt, from Allison Dillingham Constr. Co., Oregon, $11,516; 4.916 mi. S. P. R. 21-4A, Washington, from G. S. Wallace, Old Mines, $32,825; 1.572 mi. S. P. R. 12-16, Pettis Co., from C. L. John Constr. Co., Warrensburg, $8,048; 4.034 mi. S. P. R. 15-28, Monroe Co., from Newton Constr. Co., California, $36,970. Noted Nov. 22.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, Nov. 27, grading 32,638 cu.yd. Lilian Ave., also 13,090 cu.yd. Geraldine Ave., from Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., $22,737 and $10,307 respectively; 3,945 cu.yd. McDonald Ave., and 7,310 cu.yd. McCune Ave., from T. E. Cavanagh, 6452 Oakland St., $2,999 and $5,638 respectively.

Tex., Waco—Paving with 2 in. warrenite bitulithic on 5 in. concrete, North 15th St. from West to Vermont Sts. and Vermont St. from 15th to 25th Sts., from Central Bitulithic Co., Praetorian Bldg., Dallas, $77,215. Noted Nov. 1.

Calif., Los Angeles—Bd. Pub. Wks., improving Figueroa St., 786,105 sq.ft. 6 in. concrete and 32,230 sq.ft. 2 in. bituminous pavement, 21,232 lin.ft. concrete curb, 63,746 sq.ft. walks, sanitary sewerage system, etc., from Tyron & Barin, Tajo Bldg., approximately $335,800.

Calif., Lynwood—Improving Beach, Chester, South Beach Sts., etc., 88,300 sq.ft. walks, 28,100 ft. curb, 33,700 sq.ft. gutter, 576,800 sq.ft. grade, 133,900 sq.ft. oiling, 442,900 sq.ft. 4 in. macadam paving, from Hall-Johnson Co., P. O. Box 51, $112,816.

Calif., Santa Ana—Improving (1) West 5th St., 172,100 sq.ft. grading and 7 in. concrete paving, 26,670 sq.ft. 6 in. concrete paving, 2,195 lin.ft. concrete curb, sewers, etc., (2) Wilshire Ave., 530,875 sq.ft. 5 in. concrete paving, 1,797 ft. concrete curb, etc., from Wells & Bressler, Santa Ana, $56,161 and $106,390 respectively. Noted Nov. 1.

CONTRACTS AWARDED

N. Y., Albany — Bd. Contr. & Supply, grading and laying vitr. clay sewers in 3,200 ft. Pinewood Ave. S., to S. B. Easton, 113 Homestead Ave., $19,459; 1,280 ft. Hollywood Ave., to F. Sheehan, 446 Yates St., $15,264. Noted Nov. 22.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, paving Clarkson Ave., asphalt, to Borough Asphalt Co., 1301 Metropolitan Ave., $32,001; repaving 2nd Ave., granite block, to Leonard Paving Co., 233 Bway., New York, $88,262; grading, curbing, flagging, paving and repaving Sheepshead Bay, asphalt, to Cranford Co., 52 9th St., $70,086. Noted Nov. 15.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., paving Buckley St., granite block, to Welsh Bros. Contg. Co., 32 Queens St., Astoria, $13,974, 102nd St., sheet asphalt, to Borough

Streets and Roads (Continued)

Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $54,700; grading sidewalk space and gutters in Caffrey Ave., to R. A. Hess, Inc., 14 Queens St., Astoria, $2,660; grading, curbing, recurbing, flagging, reflagging, etc., 102nd St., to J. J. O'Brien, Jr., William St., Jamaica, $18,124. Noted Nov. 22.

Pa., Pittsburgh—Paving Manchester Ave., to Booth & Flinn Ltd., 1942 Forbes St., $92,776; Bennett St., to M. O'Herron Co., South 1st and McKean Sts., $41,730; Flotilla Way to M. Mannella, 5140 Breedshill St., $11,526.

La., Crowley—See "Waterworks."

Kentucky — State Hy. Dept., Frankfort, grading 2.646 mi. Hazard-Jackson Rd., 24 and 28 ft., State Project 4, Sect. B, Perry Co., to Codell Constr. Co., Winchester, $46,884; 3.996 mi. Hazard-Whitesburg Rd., 24 and 28 ft., State Project 4, Sect. C, Perry Co., to J. C. Williams, Winchester, $77,463; paving 12.6 mi. Winchester-Clay City Rd., 18 ft., State Project 4, Sect. A, Clark Co., waterbound macadam, to E. E. Price Co., 723 Hambrick Ave., Lexington, $360,061. Noted Sept. 6 and 20.

Kentucky — State Hy. Dept., Frankfort, paving various roads **(F. A. P. means Federal Aid Project, S. P. State Project)**, gravel surfacing 14.032 mi. Marion-Princeton Rd., 14 ft., S. P. 10, Sect. C, Caldwell Co., to McQuarry Bros., Hopkinsville, $96,845, 7.212 mi. Marion-Princeton Rd., 14 ft., S. P. 10, Sect. C, Crittenden Co., to Costello Bros., Henson Bldg., Knoxville, Tenn., $54,469, 7.765 mi. Madisonville-Hopkinsville Rd., 18 ft., F. A. P. 111, Christian Co., to Alexander Bros., Cadiz, $169,595, surface treating above roads, to Atlantic Refining & Asphalt Co., Candler Bldg., Atlanta, Ga., $12,928, $6,603 and $9,636 respectively; waterbound macadam surfacing 5.54 mi. London-Mt. Vernon Rd., 18 ft., F. A. P. 29, Sect. E, Laurel Co., to E. A. Chilton, London, $175,208, surface treatment, to Atlantic Refining & Asphalt Co., Candler Bldg., Atlanta, Ga., $8,712, 17.082 mi. Owenton-Georgetown Rd., 14 ft., S. P. 49, Sect. A, Owen Co., to Billiter & Oliver Bros., Covington, $362,327, surface treatment, to F. G. Breslin, 32nd and Market Sts., Louisville, $23,586, 10.155 mi. Scottsville-Glasgow Rd., 18 ft., F. A. P. 112, Allen Co., to Gorrell & Traughber, Russellville, $301,463; grading 10.941 mi. Irvine-Beattyville Rd., 24 and 28 ft., S. P. 29, Sect. B, Estill Co., to Connelly Constr. Co., Somerset, $253,992, 9.498 mi. Richmond-Mt. Vernon Rd. (Boone Gap Route) 26 and 30 ft., F. A. P. 88, Madison and Rockcastle Counties, to Codell Constr. Co., Winchester, $119,456, 9.924 mi. Beattyville-Booneville Rd., 24 and 28 ft., S. P. 31, Sect. A, Lee and Owsley Counties, and 10.898 mi. Richmond-Mt. Vernon Rd., 26 and 30 ft., F. A. P. 88, Madison and Rockcastle Counties, to Ellis, Smeathers & Brantley, Owensboro, $221,417 and $158,421 respectively, 16.558 mi. Somerset-Whitley City Rd., 24 and 28 ft., F. A. P. 110, Pulaski Co., to Ping Bros. Constr. Co., Somerset, $191,440; reinforced concrete surfacing 17.035 mi. Barboursville-Corbin Rd., F. A. P. 61, Sect. C, Knox Co., to G. S. Kreis, Knoxville, Tenn., $561,850. Noted Nov. 15.

Latest advice is that contracts on above projects will be awarded Dec. 10. Above prices, therefore, are merely lowest bids and not contract prices.

Ohio — Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.821 mi. Sect. "B," 2.825 mi. Sect. "E," and 0.521 mi. Sect. "Ohio-City," Van Wert-Rockford Rd., Van Wert Co., first 2 sections bituminous macadam, asphalt, and latter rein.-con., to Putman & Shindeldecker, Van Wert, $60,933, $57,147 and $11,803 respectively. Noted Nov. 22.

O., Akron—W. F. Peters, dir. Pub. Serv., improving North Main St., to T. E. McShaffrey Constr. Co., 171 South Forge St., 26,000 cu.yd. grading $0.60 per cu.yd., 3,400 sq.yd. brick gutter, asphalt filler $2.35, 16,800 sq.yd. asphalt willite pavement Plan B, Trinidad $1.85, etc., total $158,808. Noted Nov. 22.

Michigan — State Hy. Dept., Lansing, grading and surfacing 0.582 mi. State Trunk Line Rd. 53-3, and 1.464 mi. State Trunk Line Rd. 38-7, Sect. B, Sanilac Co., 20-40 ft., to Murray & Fremont, Bad Axe, $18,954 and $49,628 respectively.

Kan., Independence—Montgomery Co., grading and bituminous macadam surfacing 5.141 mi. Chaney Rd., Sect. C, Federal Aid Project 121, 18 ft., to A. G. Sherwood, Independence, $128,783. Noted Nov. 8.

South Dakota—State Hy. Dept., Pierre, gravel and rock surfacing 12 mi. highway from Elk Point to Sioux City, to W. R. Larson, 519 Secy. Natl. Bank Bldg., Sioux Falls, $57,000.

Ark., Little Rock—Improving East 2nd, Cumberland Rock, Byrd, Commerce, Sherman, Ferry, Collins and Rector Sts., in Dist. 356, to P. F. Connelly Constr. Co., Little Rock, 3 in. asphalt top $1.44 sq.yd., 6 in. concrete base $1.35, etc., total $75,085. Noted Nov. 8.

Ark., Mena—Grading and gravel surfacing 16 mi. Mena-Egger Highway, 18 ft., to Western Constr. Co., Little Rock, $90,000.

Ark., Walnut Ridge—Grading and gravel surfacing in Rd. Dist. 8, to C. Hager, Walnut Ridge, $50,000.

Tex., Coleman—Coleman Co. graveling 4 mi. Rockwood-Colorado River Rd., to Austin Bros. Bridge Co., Clarence St., Dallas, $28,551. Noted Oct. 25.

Tex., Jefferson — Marion Co., grading, gravel surfacing, etc., 14.42 mi. State Highway 49, Federal Aid Project 364, 16 ft., to Womack Constr. Co., Sherman, $108,419; 34,716 cu.yd. gravel to be furnished by county. Engrs. est. $148,600. Noted Nov. 29.

Tex., Marlin — Falls Co. grading and gravel surfacing 7.65 mi. State Highway 44, Federal Aid Project 331-B, 16 ft., to H. Popejoy, Marlin, $42,680, 19,949 cu.yd. gravel to be furnished by county $34,400, engrs. est. $84,803; grading, gravel surfacing and bridging 5.68 mi. State Highway 44, Rd. Dist. 3, State Aid Project 410-B, 18 ft. to P. M. Skinner, 5632½ Reiger Ave., Dallas, $61,779, 14,154 cu.yd. gravel to be furnished by county, engrs. est. $101,146. Noted Nov. 22.

Calif., Compton — City, improving Wilmington St., 72,800 sq.ft. grading, 72,800 sq.ft. 5 in. concrete, steel and concrete culverts, curbs and walks, to G. H. Oswald, 366 East 58th St., Los Angeles, $30,500.

Calif., Oakland — Paving 5th St. from Harrison to Oak Sts., to Heafey, Moore & McNair, 2030 High St. 52,500 sq.ft. grading $0.05, 50,400 sq.ft. 2 in. Warrenite bitulithic on 6 in. concrete $0.30, etc.; 75th Ave. from Beck St. northeast, to Hutchinson Co., Hutchinson Bldg., 35,557 sq.ft. grading $0.035, 15,982 sq.ft. oil macadam paving $0.11, 7,022 sq.ft. cement walks $0.16, etc.

Calif., Sausalito — Improving Princess St., to McDonald Improvement Co., Pacific Bldg., San Francisco, $36,380. Noted Nov. 29.

Industrial Works

PROPOSED WORK

Vt., East Dorset—Manchester Marble Co., having plans prepared by Manchester Marble Co., Rutland, 1 story, 170 x 230 ft. mill, steel and timber, plain foundation, Main St., to replace one recently destroyed by fire. $175,000.

Conn., Hartford—Bryant & Chapman, 350 Woodland St., plan 2 story milk plant, brick and steel, plain foundation, Maple Ave. $60,000. Engineer and architect not selected.

Conn., Hartford — Standard Oil Co., Wawarme Ave., plans 1 story garage and service station, Windsor Ave. $50,000. Private plans.

Conn., Putnam—Lowell Needle Co. had plans prepared 2 story, 50 x 100 ft. factory. $45,000. Private plans.

N. Y., Albany—Albany Hardware & Iron Co. plans 7 story, 120 x 200 ft., rein.-con., brick and steel warehouse, concrete pile foundation, Bway. $500,000. Engineer and architect not selected.

N. Y., Binghamton—Globe Grocery Stores, Inc., 68 Jay St., Brooklyn, plans 4 story, 225 x 250 ft. warehouse, Montgomery St., here. Will mature in spring.

N. J., Trenton—Holmes, Inc., 29 Chancery Lane, having plans prepared by F. D. Priory, 11 West State St., 2 story, 56 x 106 ft., battery service station and work shop. $65,000.

Pa., Phila.—Frankford Grocery Co., Penn and Unity Sts., having plans prepared by W. H. Dyer, Land Title Bldg., 4 story, 64 x 89 ft. warehouse and 1 story, 45 x 100 ft. garage, rein.-con. and brick, plain foundation, Penn and Unity Sts. $130,000.

Pa., Scranton—Lackawanna Laundry Co., 308-312 Penn Ave., plans 4 story, 60 x 170 ft. addition to plant. $100,000. Private plans.

Md., Baltimore—General Elevator Co., 400 South Charles St., plans 1 story, 65 x 160 ft., brick and steel factory, plain foundation, Bush, Russell and Ridgely Sts. $50,000. W. S. Austin, 1002 Maryland Trust Bldg., engr.

Md., Baltimore — Reliable Furniture & Mfg. Co., 303 President St., had plans prepared 2 story, 262 x 274 ft. factory, brick, plain foundation, Ridge Rd. and Wittemore Ave. $180,000. Private plans.

W. Va., Dunbar—Carrier Chemical Co. plans new chemical plant. $50,000.

N. C., Burlington—Burlington Mills Inc. plans new mill containing 50,000 sq.ft. floor space. This company formerly Gastonia Mfg. Co. of Gastonia. $100,000. J. S. Love, Gastonia, mgr.

N. C., Gastonia—Manville Jenckes Co., Pawtucket, R. I., purchased High Shoals Cotton Mills, here, and will convert same into gigantic weave mill by addition of new units and equipment. A. Q. Kale, supt.

N. C., Murphy—See "Dams."

La., New Orleans—Checker Cab Co. Inc., plans brick garage, on 60 x 400 ft. site, Poydras St. near South Rampart St. $40,000. J. Bistes, St. Charles Hotel, pres.

Tenn., Bristol—Bristol Ice & Coal Co. plans new plant. $50,000.

Tenn., Nashville — Hooper Grocery Co., 2nd Ave., plans 4 story, brick, concrete and stone warehouse. $75,000.

Ky., Louisville—Highway Iron Products Co., Columbia Bldg., takes bids about Dec. 31, 1 story, 80 x 250 ft., brick factory, 17th and Magnolia Sts. $106,000. Joseph & Joseph, Francis Bldg., archt.

O., Cincinnati—Union Gas & Electric Co., 4th and Plum Sts., plans electrical generating plant, incl. administration and storage buildings, etc., brick and steel, here $15,000,000. Sargent & Lundy, 72 West Adams St., Chicago, engrs.

O., Cleveland—Chicago Pneumatic Tube Co., 1241 East 49th St., plans 3 story and basement, 43 x 126 ft. brick and timber factory addition. $50,000. T. P. Kimman, mgr. Private plans.

O., Cleveland—A. C. Spear, 13931 Kinsman Rd., plans 1 story, brick garage and commercial building, 2612 Prospect Ave. $50,000. Private plans.

O., Cleveland—Forbes Varnish Co. had plans prepared 1 story, 50 x 83 ft., brick and steel factory, 3800 West 143rd St. $40,000. Private plans.

O., Conneaut—New York, Chicago & St. Louis R.R., Columbia Bldg., Cleveland, plans 1 story, brick and steel machine shop and office building, here. $50,000. E. E. Hart, Columbia Bldg., Cleveland, engr.

O., Maple-heights (Worthington P. O.)—Cleveland Roofing Tile Co., East 123rd St. and Erie R.R., plans 1 story, factory, concrete block, Dunham Rd., here. $40,000. Private plans.

O., Toledo—Hickok Producing Co. plans refinery, Bancroft St. $500,000. Will mature in spring. Engineer and architect not announced.

O., West Austintown—Valley Cities Brick Co., Youngstown, plans brick plant, here. N. T. Hurd, 214 Fairgreen Ave., Youngstown, secy. Will mature after Jan. 1.

Ind., Dunkirk—Indiana Glass Co. plans plant. $80,000.

Ind., Terre Haute—Wabash Valley Refining Co. plans first unit of refinery. $45,000.

Ill., Chicago—Acme Garage Co., c/o M. Leviton & Co., archt., 123 West Madison St., having plans prepared 1 story, 120 x 125 ft., garage extension, 921-935 North California Ave. $75,000.

Ill., Elgin—Texas Co., 17 Battery Pl., New York City, having preliminary plans prepared 1 story, 118 x 334 ft. oil storage plant, rein.-con. and brick, Ann St., here. $50,000. Private plans.

Ill., Peoria—Kingan & Co., West Maryland St., Indianapolis, Ind., plans brick packing plant, here. To exceed $40,000.

Wis., Hartland—Hartland Creameries Co., c/o J. P. Haerle, pres., plans 2 story, brick, rein.-con. and steel plant, plain foundation. $50,000. Engineer and architect not selected.

Wis., Madison—A. J. McCance, 204 Meary St., having plans prepared 1 story and basement, 60 x 100 ft., garage and repair shop brick, rein.-con. and steel, plain founda-

Industrial Works (Continued)

tion, Washington St. $40,000. Private plans.

Ia., Council Bluffs—Citizens Gas & Electric Co., 26 Pearl St., plans new gas plant and several miles gas mains. $250,000. A. L. English, mgr.

Ia., Shenandoah—Defeated $175,000 bond issue for electric light and power plant. F. Sanman, clk. Noted June 27.

Ia., Sioux City—Illinois Central R.R. Co., 135 East 11th Pl., Chicago, having plans prepared by W. E. Burke, 518 Nebraska St., brick and concrete shops, round-house and coaling equipment, here. $500,000. F. L. Thompson, ch. engr.

Minn., St. Paul—Willis Motor Co., 50 12th St., having plans prepared by Mather & Fleishbein, 442 Endicott Bldg., 1 story, 100 x 150 ft. garage, brick and concrete, Congress and Robert Sts. $40,000.

Neb., Omaha—Nebraska Power Co., 15th and Farnam Sts., having preliminary plans prepared by F. S. Scott, 216 Kennedy Bldg., 1 story and basement, 114 x 254 ft. rein.-con. and brick warehouse and garage. $150,000.

Mo., Bolivar—Voted $50,000 bonds electric power plant and distribution system. Work involves 2 directed connected oil engines, 400 poles, 35 mi. wire, 100 series street lamps, 10 transformers, etc. Also plans to purchase 2 motor driven centrifugal fire pumps and remote control electrically operated valve. F. W. Graham, 5244A Cote Brilliante Ave., St. Louis, engr.

Mo., St. Louis—Jersey Farm Dairy Co., 1007 Russell Ave., soon takes bids 2 story, 50 x 80 ft., rein.-con. and brick plant, plain foundation, 1009 Russell Ave., $60,000. Larkin Eng. Co., 424 North 3rd St., archts. and engrs. Noted Oct. 25.

Mo., Springfield — Toombs-Fay Sash & Door Co. plans 3 story 90 x 100 ft. factory, 542 West Phelps St.

Tex., Dallas—Texas & Pacific R.R., T & P Bldg., had plans prepared by J. M. Knightlinger, Supt., Union Terminal Bldg., Fort Worth, round house, shops and yard trackage Belt Junction, here. $1,000,000.

Tex., Dallas—Theater Electric Light Co., Queen Theatre Bldg., plans power plant, one 200 hp. or two 100 hp. generator sets, $50,000. L. G. Bissinger, c/o owner, engr.

Tex., Houston—York Eng. & Supply Co., 2201 Texas Ave., plans 4 story, 100 x 150 ft., brick and concrete warehouse, Texas Ave. $80,000.

Tex., Port Arthur—Port Arthur Ice & Refrigerating Co., had plans prepared by Stone & Webster, Milk St., Boston, and York Eng. & Supply Co., Texas Ave., Houston, ice plant, 175 ton daily capacity, Houston St., here. $300,000.

Ont., Orillia—Canada Wood Specialty Co. plans plant, Front and Coldwater Sts. $85,000.

Tex., Dallas—Washington Cotton Oil Co., c/o W. L. Patton, mgr., Maple Ave., plans additions to mill. $50,000. Engineer and architect not announced.

Okla., Ponca City — Burns of Midwest Creamery Co. having plans prepared by Stoddard Eng. Co., 357 Amer. Natl. Bank Bldg., Oklahoma City, 1 story, 50 x 100 ft., brick and steel creamery. $60,000.

N. M., Las Cruces—Elephant Butte Irrigation Dist., La Cruces, and El Paso Water Impvt. Dist., (portion of Rio Grande Project in Texas), plan 18,000 kw. plant at Elephant Butte Dam, with auxiliary dam 20 mi. south of same. Secondary hydro-electric plant will probably be built at dam. Approximately $5,000,000. H. H. Brook, pres. and mgr.

Wash., Bellingham—City Council passed ordinance providing for submission at December election of plan to construct or purchase an electric light and power plant and system. $500,000. C. M. Adams, city engr.

Wash., Seattle—See "Unclassified."

Wash., Wenatchee—Wenatchee Cold Storage Co. plans 5 story, 115 x 350 ft. cold storage plant, brick, Spring and Wenatchee Sts. $400,000.

Ore., Portland—Portland Pulp and Paper Co., R. H. Mills, pres., 815 Bway. Bldg., plans 1 and 2 story, 80 x 300 ft. paper mill, rein.-con. and steel. $1,250,000.

Calif., Alhambra — Jenkins-Wright Co., 2912 Central Ave., Los Angeles, plans 2 story, 50 x 190 ft., also 1 story 175 x 200 ft. factory buildings.

ROAD WORK—OREGON

Following are lowest 3 bids opened by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., Post Office Bldg., Portland, for constructing 7.2 mi. Detroit-Niagara Sect. Santiam Natl. Forest Rd., Marion Co., (A) Payne & Padrick Marshfield; (B) Elliott, Scoggins & Paquet; (C) Morrison-Knutsen. The unit bids were as follows:

	A	B	C
17 acres clearing	$150.00	$250.00	$200.00
12 acres grubbing	300.00	300.00	350.00
83,000 cu.yd. rock excavation	1.00	1.20	1.45
60,000 cu.yd. common excavation	.35	.50	.55
500 cu.yd. structural excavation	1.00	1.00	2.00
1,000 sta. yd. overhaul	.10	.07	.10
7.2 mi. finishing earth road	100.00	100.00	300.00
85 cu.yd. class B concrete	18.00	25.00	32.50
500 cu.yd. cement rubble masonry	10.10	14.00	14.00
500 cu.yd. dry rubble masonry	8.00	10.00	5.00
270 lin.ft. 18 in. corrugated pipe	2.00	2.50	2.75
360 lin.ft. 24 in. corrugated pipe	3.00	3.50	3.50
300 lin.ft. 36 in. corrugated pipe	5.00	6.00	6.50
500 lin.ft. rustic guard rail	1.00	1.00	.80
100 M.ft. b.m. trestle bridge material	60.00	60.00	60.00
12 acres grubbing, using government explosives	150.00	150.00	250.00
83,000 cu.yd. rock excavation using government explosives	.90	1.10	1.40
770 lin.ft. bridge deck	10.00	7.00	7.00
Extended totals furnishing explosives	$139,320	$168,490	$192,215
Extended totals using government explosives	139,220	158,390	186,865

SEWER—CHICAGO, ILL.

Following are lowest 3 bids opened by Sanitary Dist. of Chicago, Nov. 22, for Calumet Intercepting Sewer, Contr. No. 1, and 95th St. Sewage Pumping Sta., Divs. A, B, C, D, E, F and G, (A) T. J. Forschner Contg. Co., 125th St. and Michigan Ave.; (B) W. E. White Co., 130 North Wells St.; (C) A. Brundage, 110 South Dearborn St. The unit bids were as follows:

	A	B	C
Division A			
320 lin.ft. sewer 11 ft. internal width on piles	$77.00	$80.00	$116.50
320 lin.ft. sewer 11 ft. internal width on crosswalls	86.00	90.00	125.00
375 lin.ft. double barrel sewer 11 ft. internal width	140.00	140.00	170.00
180 lin.ft. double barrel sewer N. of pumping station	195.00	210.00	217.00
580 lin.ft. 15 in. vitrified pipe sewer	2.00	3.00	4.75
Junction chamber near 96th St. (lump sum)	6,500.00	8,500.00	11,000.00
30 lin.ft. standard manholes on concrete sewers	7.00	15.00	8.00
60 lin.ft. standard manholes on vitrified pipe sewers	10.00	15.00	8.00
40 lin.ft. pressure manholes	14.00	20.00	8.00
4 catch basins	55.00	100.00	50.00
600,000 lb. reinforcing steel	0.11	0.05	0.05½
5,000 lb. iron castings and miscellaneous metals	0.24	0.15	0.25
1,000 lb. iron pipe	0.15	0.12	0.17
25 cu.yd. brickwork	35.00	50.00	27.50
2,000 lin.ft. piling furnished	0.30	0.30	0.25
2,000 lin.ft. piling driven	1.10	1.00	2.00
5 cu.yd. rock excavation	5.00	5.00	5.00
50 cu.yd. additional earth excavation	2.00	2.00	2.00
10 cu.yd. concrete, class A	24.00	24.00	19.50
50 cu.yd. additional concrete, class B	18.00	18.00	18.00
100 cu.yd. concrete, class C	17.00	12.00	16.50
50 M.ft. B.M. additional sheeting and bracing	40.00	40.00	40.00
Extended totals	$225,000	$196,675	$239,563
Division B			
Excavation P.S. substructure and miscellaneous work (lump sum)	$43,650.00	$22,000.00	$49,000.00
Pumping station connections (lump sum)	45,000.00	41,500.00	48,000.00
Sluice gates (lump sum)	33,500.00	50,000.00	51,000.00
500,000 lb. reinforcing steel	0.11	0.05	0.05½
20,000 lb. iron castings and miscellaneous metals	0.24	0.15	0.23
40,000 lb. iron pipe	0.15	0.12	0.17
5 cu.yd. brickwork	35.00	50.00	27.50
5 cu.yd. rock excavation	5.00	5.00	5.00
50 cu.yd. additional earth excavation	2.00	2.00	2.00
3,800 cu.yd. concrete, class A	24.00	18.00	19.50
50 cu.yd. additional concrete, class B	18.00	18.00	18.00
100 cu.yd. concrete, class C	17.00	12.00	17.00
50 M.ft. B.M. additional sheeting and bracing	40.00	40.00	40.00
Extended totals	$284,050	$219,175	$265,863
Div. C Pumping station superstructure (lump sum)	$120,000.00	$195,000.00	$138,000.00
Div. D Pumps (pump plans of sanitary district) (lump sum)	90,000.00	90,000.00	96,000.00
Div. D Alternative (pump plans of bidder) (lump sum)	160,000.00		
Div. E Electrical equipment (lump sum)	65,000.00	80,000.00	74,500.00
Div. F Switchboard, conduit and wiring (lump sum)	65,000.00	82,000.00	79,000.00
Div. G Erection general equipment, furnishing and erection miscellaneous equipment (lump sum)	120,000.00	110,000.00	109,000.00
Extended grand totals with Div. D. based on pumps made from plans of Sanitary Dist.	$969,050	$972,850	$1,001,925
Alternative total with Div. D. based on pumps made from plans furnished by bidder	$1,039,050		

Calif., Fresno—Service Rock Co., Valley Bank Bldg., plans to build and equip sand and gravel plant, here, incl. 2 gasoline or steam locomotives, dragline, locomotive crane, 3 gyratory crushers, rails, electric motors and gravel plant equipment. $200,000. H. W. Jones, mgr.

Calif., Long Beach—Young & Gresham, c/o A. G. Bailey, Jr., archt., Orpheum Bldg., Los Angeles, having plans prepared 1 story and mezzanine, 90 x 150 ft., brick garage, Anaheim Ave.

Calif., Los Angeles—See "Waterworks."

Calif., Los Angeles — D. Degelman, 626 South Gramcy St., having plans prepared by Morgan, Walls & Clements, Van Nuys Bldg., 4 story and basement, 50 x 150 ft., brick warehouse and loft, 7th St. near Bixel St.

Calif., Los Angeles—W. Leck, 4519 Finley St., having plans prepared by J. J. Frauenfelder, Story Bldg., 1 story, 50 x 150 ft., brick garage, Santa Barbara and Vermont Aves.

Calif., Los Angeles—Ward Heater Co., 1243 South Hope St., having plans prepared by B. J. Bloser, Consolidated Realty Bldg., factory buildings, incl. foundry, assembling plant, warehouses, etc., concrete and brick. $175,000 or more.

Calif., Los Angeles—Western Bedding Co., c/o Meier & Bountheau, archts., Title Insurance Bldg., plans 1 and 2 story, 200 x 350 ft., rein.-con. factory.

Calif., Oakland—Bastian Mfg. Co., 2117 Violet St., Los Angeles, plans factory, here. $40,000 or more.

Industrial Works (Continued)

Calif., Pittsburg—B. P. Morgan, c/o Columbia Café, plans laundry. Cost incl. equipment $65,000.

Calif., San Francisco — Central Finance Co., c/o W. F. Gunnison and H. P. Merritt, archts., 57 Post St., having plans prepared 30 to 40 garages, approximately $25,000 each, in various sections of Bay Dist.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., having plans prepared 2 story, steel and concrete electric sub-station, Commercial and Montgomery Sts. $500,000. Private plans. Noted Mar. 1.

Calif., San Jacinto—See "Buildings."

Calif., Stockton—Star Towel & Laundry Co., 210 South California Ave., having plans prepared by G. Allen, 41 South Sutter St., 2 story, 90 x 115 ft., rein.-con., Lower Sacramento Rd. $40,000 or more.

Que., Temiskaming — L. N. Huard, 129 Commercial St., Levis, takes bids Dec. 15, mill here on Megiscane River. $1,000,000.

Ont., Toronto — Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans 100,000 hp. steam driven electric generating auxiliary power plant, rein.-con. $5,000,000. F. A. Gaby, ch. engr.

BIDS DESIRED

Conn., Hartford—Dec. 1, by F. C. Waltz, archt., Trumbull St., 1 story and basement, 100 x 100 ft. garage, brick and steel, plain foundation, Capitol Ave. $40,000. Owners name withheld. Noted Oct. 25.

Conn., Middletown — M. Klingon, Colchester, taking bids and opens same about Dec. 4, 3 story, 60 x 160 ft. warehouse and grain elevator, brick, plain foundation, Berlin St. $40,000. L. H. Goddard, 86 State St., New London, archt. Noted Oct. 11.

Conn., Waterbury—Dec. 18, by Lockwood Greene & Co., archts. and engrs., 101 Park Ave., New York City, 4 story, 50 x 60 ft. plant, rein.-con. and brick, plain foundation, Printers Court, here, for Waterbury American, Inc., $165,000. Noted Nov. 29.

N. Y., Rome—Dec. 8, by Lockwood-Greene & Co., archts. and engrs., 101 Park Ave., New York City, 1 story, rein.-con. and steel factory, and 2 story, brick and steel warehouse, here, for Rome Mfg. Co. $210,000. Noted Nov. 22.

Pa., Carlisle—Dec. 8, by Lockwood-Greene & Co., archts. and engrs., 101 Park Ave., New York City, 3 story, 250 x 600 ft., rein.-con., brick and steel plant, plain foundation, for C. H. Masland & Sons, Carlisle. Furnishing and erecting structural steel (575 tons) to McClintic-Marshall Co., 50 Church St., New York City. Noted Nov. 22.

O., Cleveland—Christian, Schwarzenberg & Gaeda, archts., 1900 Euclid Ave., taking bids 2 story and basement, 93 x 180 ft., brick and rein.-con. garage, 1841 Prospect Ave., for Private Investment Co., c/o S. Miller, 1822 Central Ave. $150,000.

O., Cleveland—McCauley Storage Battery Co., 1060 St. Clair Ave., taking bids and opens same about Dec. 12, 1 story, 35 x 128 ft., brick and steel factory and warehouse, East 24th St. and Chester Ave. $40,000. Private plans. Noted Nov. 1.

Tex., Ft. Worth—Dec. 21, by E. T. Glasgow, archt., 1st Natl. Bank, 3 story and basement, 100 x 100 ft. concrete, brick and stone garage, 1st and Commerce Sts., for F. H. Jones, 200 Commerce St. $65,000. Noted Nov. 29.

Tex., Lamesa—Texas Power & Light Co., Interurban Bldg., Dallas, purchased Lamesa Light & Ice Co. and is taking bids 15 ton ice plant and power plant additions, etc. $50,000.

New Zealand, Wellington—April 30, by Secretary Pub. Wks. Bd., Sect. 2, power house and plant of Arapuni Electric Power Scheme; adv. E. N.-R. Dec. 6.

CONTRACTS AWARDED

Conn., Bristol—New Departure Mfg. Co., 269 North Main St., 1 story, 130 x 600 ft. factory, brick and steel, plain foundation, to Torrington Bldg. Co., 197 Water St., Torrington. Archts. est. $55,000.

Conn., New Britain—Landers, Frary & Clark, Commercial and Center Sts., 6 story, 65 x 160 ft. factory, brick and steel, plain foundation, Ellis St., to Torrington Bldg. Co., 197 Water St., Torrington. Archts. est. $100,000. Noted Nov. 15.

Conn., Rocky Hill—Belamose Corp., 983 Main St., Hartford, 1, 2 and 3 story, 199 x 584 ft. factory, brick and steel, plain foundation, here, to Dennis O'Brien & Sons Co., 118 Asylum St., Hartford. Archts. est. $1,000,000. Noted Nov. 1.

Conn., Stamford—S. A. Gregory, 2 story, 50 x 150 ft. storage shed, brick and steel, plain foundation, Railroad Ave., to Vuno Constr. Co., Bank Bldg. Archts. est. $45,000.

Conn., Waterbury—Waterbury Farrell Fdry. Co., 2 story, 48 x 52 ft. factory, brick and steel, plain foundation, Bank St., to Immick Co., State St., Meriden. Archts. est. $40,000. Noted Nov. 22.

N. Y., Brooklyn—Aaron Constr. Co., c/o A. Goldberg, archt. and engr., 164 Montague St., will build 1 story, 150 x 200 ft., rein.-con., brick and steel garage, plain foundation, Dean St., by day labor. $60,000.

N. Y., New York—A. J. Schwartzler, c/o S. J. Kessler, archt. and engr., 529 Courtlandt Ave., will build 2 rein.-con., brick and steel garages, plain foundations, Morris Ave., by day labor. $85,000 each.

Pa., Phila.—Henry & Gunkel, Broad and Belfield Sts., sales and service station, Broad and Belfield Sts., to Kessler Constr. Co., 1735 North Mervine St., $40,000.

Pa., Rook—Pittsburgh & West Virginia Ry., Wabash Bldg., Pittsburgh, 1 and 2 story, 50 x 100 ft. power plant, near here, to Dresser-Minton Co., 880 Arcade Bldg., Cleveland, O.

Va., Richmond—W. T. Rawleigh Co., 101 South Liberty Ave., Freeport, Ill., 2 story, 75 x 190 ft. rein.-con., brick and steel warehouse and garage, here, to Graham Constr. Co., Hampton. Archt. est. $75,000. Noted Nov. 1.

N. C., Hamlet—Hamlet Ice Co., ice manufacturing and storage plant, 5,000 lb. daily capacity, to J. A. Jones Constr. Co., Reaity Bldg., Charlotte. $100,000.

Tenn., Memphis—Electric Ice & Coal Co., c/o E. M. Lowrance and M. Burt, Falls Bldg., rein.-con. and brick plant, 430 North Waldran St., to R. B. Howell, Memphis, $40,000.

Ky., Louisville — E. J. Straus Cabinet Wks., Baxter and Hamilton Aves., will build 4 story, brick and steel factory, Baxter Ave., by day labor, under supervision T. Girder, supt. Est. cost $250,000. Noted Nov. 1.

O., Cleveland—Villa Beach Club, c/o F. W. Bail, archt., Hanna Bldg., 2 story, 62 x 98 ft., brick, steel and concrete garage, 15445 Lake Shore Blvd., to F. F. Jeckel Constr. Co., 15316 Lake Shore Blvd. Archts. est. $50,000. Noted Nov. 29.

O., Youngstown — McKay Machine Co., Rayen Ave. and Foster St., plant addition, to Truscon Steel Co., Albert extension, $50,000.

O., Youngstown—Truscon Steel Co., Albert St., will build 1 story plant addition, 100,000 sq.ft. floor space, by day labor. $400,000. J. Kahn, pres.

Ind., Ft. Wayne—Wayne Tank & Pump Co., 1 story, 80 x 220 ft. factory addition, brick and steel, to Indiana Eng. & Constr. Co., Central Bldg. Archts. est. $50,000. Noted Nov. 29.

Wis., Hilbert—Hilbert Canning Co., c/o W. F. Christel, Valders, will build 2 story, brick and timber cannery, plain foundation, by day labor, here. $40,000. Private plans.

Wis., Hilbert—Valders Canning Co., c/o W. F. Christel, Valders, will build 2 story, 60 x 90 ft., brick and tile factory, plain foundation, here, by day labor. $50,000. Private plans.

Wis., Janesville—Chevrolet Motor Co., c/o C. E. Wilson, engr., will build 2 story, 75 x 90 ft., rein.-con., brick and steel addition, plain foundation, by day labor. $75,000. Private plans.

Wis., Madison—G. Ripp, 20 South Bassett St., 2 story, 40 x 60 ft., mill and woodworking shop, rein.-con., brick and tile, plain foundation, to Arthur Swan, 503 Oakridge Ave. Archts. est. $40,000. Noted Nov. 15.

Wis., Milwaukee—Curtis Auto Co., 148 8th St., 3 story and basement, 100 x 126 ft., brick and concrete garage, plain foundation, Bway., to S. M. Siesel Co., 160 Ogden Ave., $200,000.

Wis., Milwaukee — Bayley Heating Supply Co, 131 Sycamore St., 2 story, 60 x 100 ft., brick and timber warehouse, plain foundation, St. Paul Ave., to Klug & Smith Co., 69 Wisconsin St. Engrs. est. $45,000.

Wis., Neillsville—Neillsville Canning Co. will build 2 story, 40 x 80 ft., concrete and tile addition, plain foundation, by day labor. $40,000. Private plans.

Wis., Osseo—Gunem Bros. & Moswick will build 1 story, 48 x 100 ft., brick and concrete garage, plain foundation, by day labor. $40,000. Private plans.

Minn., Minneapolis—Buzza Co., 16 South 8th St., 3 story, 30 x 330 ft. addition to factory and office, rein.-con., brick and tile, Lake St. and Colfax Ave., general contract to J. Leck Co., 316 South 7th St. Total $170,000. Noted Jan. 11.

Neb., Omaha—Nebraska Power Co. 15th and Farnam Sts., will build 3 story and basement, brick and steel power plant, by day labor. $700,000. J. T. Davidson, genl. mgr.

Mo., St. Louis — Forest Spring Real Estate Co., 3710 Forest Park Blvd., 2 story, 75 x 182 ft., rein.-con. and brick factory, Forest Park Blvd., to C. G. Schorieh, Syndicate Trust Bldg. Archts. est. $40,000. Davis Boring Tool Co., 3710 Forest Park Blvd., lessee.

Mo., St. Louis—Perkinson Realty & Investment Co., 3607 North Bway., will build 1 and 2 story, 122 x 227 ft., rein.-con. and brick plant, Penrose Ave., by day labor. $175,000. H. G. Clymer, Wainwright Bldg., archt. Polar Wave Ice & Fuel Co., 3626 Olive St., lessee.

Tex., Houston—Standard San Mfg. Co., 4 story and basement, concrete warehouse, to A. Telepson, 4100 Clay Ave., $172,500.

Okla., Tulsa—Union Carbide Co., 30 East 42nd St., New York City, 3 story, 70 x 140 ft., brick and steel plant, plain foundation, here, structural steel to Muskogee Iron Wks., Muskogee; brick work to Kusa Brick & Tile Co., Kusa; plumbing to Ideal Plumbing & Heating Co., 910 Daniels Bldg., Tulsa. Est. cost $200,000.

Ore., Albina (Portland P. O.)—Truscon Steel Co., 194 North 13th St., Portland, will build 1 and 2 story, 120 x 132 ft. plant, rein.-con. and steel, here. Work will probably be done by day labor. Archts. est $80,000.

Calif., Fresno—Benham Ice Cream Co., H St., 1 story, concrete and brick garage and repair shop, H St., to Trewhitt-Shields Co., Rowell Bldg. $40,000.

Calif., Los Angeles—Bronson Shirt Co., c/o L. Rally, archt., Wright-Callendar Bldg., 4 story, brick factory, 10th and Wall Sts., to Winter Constr. Co., Railway Bldg., $60,000.

Calif., Los Angeles—Coony & Winterbottom, 1400 South Santa Fe Ave., 1 and 2 story, 95 x 140 ft., brick factory, Hunter St., to V. P. Gilbert, 705 Citizens Natl. Bank Bldg. $40,000 or more.

Calif., Los Angeles—C. F. Crawford, 6029 Hollywood Blvd., Hollywood, 2 story, 50 x 150 ft., brick garage, Ottowa St., to V. P. Gilbert, Citizens Natl. Bank Bldg., Los Angeles.

Calif., Los Angeles — C. A. Doody, c/o Walker & Eisen, archts., Pacific Finance Bldg., 4 story and basement, 150 x 150 ft. rein.-con. garage, 6th and Kenmore Sts., to Home Foundation Co., Merchants Natl. Mank Bldg., $280,000.

Calif., Los Angeles — J. A. Hill, 1 story, 100 x 150 ft., brick garage, Crown Hill Ave., to G. La Barr, California Bldg.

Calif., Los Angeles—Home Service Co., 779 Towne St., 1 story, 45 x 140 ft., brick and steel garage, 8th St., to Austin Co., of California, Bartlett Bldg.

Calif., Los Angeles—Pacific Wire Screen Co., 1840 East 15th St., 1 story, (ultimately 2 story), 75 x 250 ft., frame factory, East 15th St., to G. La Barr, California Bldg.

Calif., Los Angeles—R. Rosenberg, 1 story (ultimately 2 story), 100 x 175 ft. brick warehouse, 16th St., to G. La Barr, California Bldg.

Calif., Los Angeles—Southern Pacific Co., Pacific Electric Bldg., locomotive erecting shop, 90 x 500 ft. 52 ft. high, steel frame and concrete, Alhambra Ave., to Fellows Constr. Co., Central Bldg. $200,000. Noted Nov. 15.

Calif., Los Angeles—Theme Hosiery Co., 4 story, rein.-con. factory, San Fernando Rd., to C. L. Peck, H. W. Hellman Bldg., $128,000. Noted June 21.

Calif., San Francisco—J. Allec, Folsom and 18th Sts., 2 story, rein.-con. addition to cleaning and dyeing plant, Folsom St., to Buschke & Brown, 185 Stevenson St., $45,000. Noted Nov. 29.

Calif., Yosemite Valley—See "Buildings."

Buildings

PROPOSED WORK

Conn., Danbury—High School—School Com. plans 3 story, brick, stone and steel, plain foundation $800,000. P. M. Sunderland, 181 West St., member.

Conn., Groton—School—First School Dist. plans 2 story, 100 x 150 ft. brick and steel, plain foundation. $150,000. C. Barnum.

Buildings (Continued)

chn. School Dist. Bilderbeck & Langdon, Inc., Harris Bldg., New London, archts. Noted Nov. 22.

Conn., Hartford—Apartment—H. Shor, 752 Asylum Ave., having plans prepared by Berenson & Moses, 1026 Main St., 3 story, 50 x 120 ft., brick, plain foundation, Capitol Ave. $150,000.

Conn., Norwalk — High School — Dept. Educ., City Hall, plans 2 story. $800,000. Engineer and architect not selected.

Conn., Rockville—Bank, etc.—Peoples Saving Bank having plans prepared by W. B. Chambers, 111 East 40th St., New York City, 3 story, 70 x 120 ft., brick and stone, plain foundation, Park St. $155,000. Noted May 10.

N. Y., Albany—Apartment—L. Miller, and B. Kanzer, 308 Ontario St., had plans prepared by H. Rogers, archt. and engr., 443 Bway., 3 story, 350 x 400 ft., brick, plain foundation, Lake Ave. $300,000.

N. Y., Albany—Sales, Show Room and Office—E. V. Stratton Motors Co., Inc., 25 Washington Ave., having plans prepared by H. Rogers, 443 Bway., 5 story, 92 x 105 ft., rein.-con., brick and steel, plain foundation, 103 Washington Ave. $210,000.

N. Y., Amsterdam—High School—Plans election to vote on $665,000 bonds 4 story, 98 x 140 ft., brick and steel, plain foundation, Vrooman Ave. Engineer and architect not selected.

N. Y., Brooklyn—Synagogue—Congregation Shaari Zedick, c/o S. B. Eisendrach, archt. and engr., 18 East 41st St., New York, soon takes bids synagogue, Park Pl. $150,000.

N. Y., Buffalo—Bank and Office—Liberty Bank soon takes bids 24 story, 60 x 350 ft., rein.-con., brick and steel, Main and Court Sts. $2,000,000. A. C. Bossom, 680 5th Ave., New York City, and Plumer & Mann, 700 Main St., Buffalo, archts. Noted June 14.

N. Y., Eastview—Home—Bd. Supervs. Westchester Co., Court House, White Plains, having plans prepared by Walker & Gillette, archts. and engrs., 126 East 37th St., New York City, 4 story, brick, steel and stone, plain foundation, here. $650,000.

N. Y., Mamaroneck—High School—Bd. Educ. having plans prepared by E. Hahan, 290 Fulton St., Hempstead, 2 story, brick, steel and stone, Boston Post Rd. and Palmer Ave. $475,000. E. E. Seelye, 101 Park Ave., New York City, engr.

N. Y., New York—Loft—S. Kaufman, c/o C. B. Meyer, archt. and engr., 31 Union Sq., had plans prepared brick, steel and stone, plain foundation, 470 7th Ave. $500,000.

N. Y., New York—Loft—Mandel Ehrich Corp., 1 Pershing Sq., having plans prepared by J. Sloan, archt. and engr., 100 East 42nd St., 31 story, 185 x 425 ft., brick, steel and stone, plain foundation, Lexington Ave. and 32nd St. $10,000,000.

N. Y., Niagara Falls—Auditorium—City had tentative plans prepared by Niagara Falls Associated Architects, Niagara Falls, 2 story and basement, 212 x 240 ft. $700,000. Will mature in spring.

N. Y., Niagara Falls—Bank and Office—Power City Bank, 207 Falls St., having plans prepared by A. C. Bossom, archt. and engr., 680 5th Ave., brick, steel and stone, plain foundation. $500,000.

N. Y., Webster—School—Bd. Educ. plans school. $350,000. Engineer and architect not selected. Will mature in spring.

N. Y., White Plains—Municipal—City plans municipal building. $500,000. E. E. Weeks, mayor. Engineer and architect not selected.

N. J., Ocean Grove—School—Neptune Twp. School Bd. plans new school. $237,000. Engineer and architect not selected.

Pa., Clearfield—High School—Bd. Educ. having plans prepared by Howard & Hatcher, Dubois, 2 story and basement, 60 x 120 ft. brick, steel and tile. $150,000.

Pa., Corry — Hotel — Community Hotel Corp. having plans prepared by E. Bailey, Oil City, 85 x 89 ft., Babbitt St. $150,000.

Pa., Fox Chase (Phila. P. O.)—School—St. Cecelia Roman Catholic Church, Rhawn and E Sts., soon takes bids 2 story and basement, 54 x 114 ft. brick and steel, plain foundation. Hoffman-Henon Co., Finance Bldg., Phila., archts.

Pa., Johnstown—High School—Bd. Educ. having revised plans prepared by J. E. Adams, Nemo Bldg., 2 story and basement, 80 x 400 ft. Somerset St. $900,000.

Pa., Phila.—Apartment—Hoffman-Henon Co., archts., Finance Bldg., preparing plans and takes bids about Jan. 1, three 4 story and basement, 46 x 104 ft. brick and steel, plain foundation, City Line. $300,000. Owner's name withheld.

Pa., Phila.—Hotel and Office—Middle City Realty Corp., 1324 Walnut St., takes bids in about 60 days for 40 story, 86 x 116 ft. rein.-con., brick and steel, plain foundation, Broad and Locust Sts. $10,000,000. H. E. Kennedy, 1324 Walnut St., archt.

Pa., Scranton — School — Holy Rosary Church plans new parochial school, William St. $250,000. Engineer and architect not selected.

Md., Baltimore—Synagogue and House—Beth Tfilloh Synagogue, c/o H. T. Kellman, Equitable Bldg., having plans prepared by Stanislaus Russell, 11 East Lexington St., house, 55 x 85 ft., 2 story, 72 x 73 ft. synagogue, and stone, plain foundation, Garrison and Dalrymple Aves. $250,000.

Md., Curtis Bay (Baltimore P. O.)—School—City of Baltimore, Pub. Impvt. Comn., plans 3 story, 65 x 75 ft. addition, concrete and brick, plain foundation, here. $150,000. M. G. Perring, Hearst Tower, ch. engr.

Md., Overlea—School—City of Baltimore, Pub. Impvt. Comn., plans 2 story, concrete and brick, plain foundation, here. $200,000. M. G. Perring, Hearst Tower, ch. engr.

D. C., Wash.—Apartment—B. S. Simmons, archt., 1013 15th St., N. W., takes bids about Dec. 15, 8 story, 32 x 100 ft. apartment, $350,000. Owner's name withheld.

W. Va., Charleston—Market—See "Streets and Roads."

W. Va., Morgantown—Bd. Educ. plans to issue $500,000 bonds for schools.

W. Va., Williamson—Hotel—Williamson Community Hotel Corp., plans hotel. $425,000. Meanor & Handloser, Huntington, archts.

N. C., Chapel Hill—Chemistry—University of North Carolina plans chemistry building. $400,000. Atwood & Nash, Chapel Hill, archts.

N. C., Elon College—Science—Elon College plans 3 story and basement, 64 x 120 ft., on Campus. $175,000. W. A. Harper, pres.

N. C., Hendersonville—High School—School trustees plan high school. $300,000.

N. C., Hickory—Hotel—J. A. Mortez, chn. hotel com., which plans hotel, cost $200,000 or more.

N. C., Raleigh—High School—City having plans prepared high school, 1,200 capacity. $300,000. E. G. Sayre, Raleigh, archt. Noted Oct. 4.

N. C., Raleigh—Orphanage—Bd. Trustees Methodist Orphanage plans administration and other buildings, cost between $300,000 and $350,000. R. N. Page, Biscoe, chn. executive com.

S. C., Charleston—Bank and Office—Kanawha Valley Bank, having preliminary plans prepared by A. C. Bossom, archt. and engr., 680 5th Ave., New York, brick and steel and stone, plain foundation. $1,000,000.

Ga., Decatur—College, etc.—Agnes Scott College had plans prepared by R. G. Cram, Boston, Mass., 12 new units incl. administration, gymnasium, dormitories, science halls, etc. $2,000,000.

Ala., Auburn — Engineering — Alabama Polytechnic Institute having plans prepared by Warren, Knight & Davis, Empire Bldg., Birmingham, and takes bids about Feb. 1, 3 story, 190 x 200 ft., brick and stone. $300,000.

Ala., Birmingham—Church—North Birmingham Baptist Church plans 1 story and balcony, 75 x 190 ft., brick and stone, 15th Ave. and 26th St. $160,000.

Ala., Ensley — Kiwanis Club conducting campaign to raise $150,000 for 3 story, 100 x 190 ft. Y. M. C. A. building.

Ala., Sheffield—Hotel—New company organized, c/o E. J. Henniger, Sheffield, plans hotel. $150,000.

Tenn., Memphis— Commercial — Plough Chemical Co., c/o A. Plough, pres., South 2nd St. and Gayoso Ave., plans commercial building, 125,000 sq.ft. floor space. $600,000.

Tenn., Memphis—Hotel—Calhoun Hotel Co., W. L. Casey, pres., c/o Wiona Hotel, 110 East Calhoun St., had plans prepared by F. G. Stewart, 1030 Superior St., Dayton, O., 8 story, 63 x 150 ft., fireproof, South Main St. $600,000.

Tenn., Nashville—Bank—Fourth & First Bank & Trust Co., 326 Union St., plans bank, 4th Ave. and Union St. Cost to exceed $150,000.

Tenn., Nashville—Business—J. A. Hawkinson, 3830 South Morgan St., Chicago, plans business building, 8th Ave. near Church St., here. To exceed $150,000. Architect not selected.

Tenn., Nashville — Office — Independent Life Insurance Co., Independent Bldg., plans 2 story, steel, concrete and stone addition, 4th and Church Sts. $150,000.

Ky., Louisville—Church—Hope English Lutheran Church, 26th and Bank Sts., having plans prepared by E. T. Hutchings, Columbia Bldg., brick and cut stone. $150,000.

Ky., Louisville — Medical Arts—F. G. Breslin, 32nd and Market Sts., plans 12 story, 100 x 100 ft., brick and steel, 3rd and Bway. $500,000.

O., Alliance—Bank and Office—City Savings Bank & Trust Co. having plans prepared by Simons, Brittain & English, Inc., 336 4th Ave., Pittsburgh, Pa., 8 story, 110 x 200 ft., Main St. $500,000.

O., Cincinnati—Administration—See "Industrial Works."

O., Cleveland — Apartment — L. Cahn, 10615 Grantwood Ave., plans 3 story and basement, brick, on lot 100 x 250 ft., West 110th St. and Lake Ave. $300,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Cleveland—Apartment—F. J. Langer, 1270 Euclid Ave., had plans prepared by L. R. Walker & J. L. Mauer, 1900 Euclid Ave., 3 story and basement, 48 x 56 x 102 ft., brick, East 116th St. and Cromwell Ave. $150,000.

O., Cleveland—Apartment—R. E. Nixon, 2036 East 105th St., having plans prepared by A. A. Drescher, 2036 East 105th St., 3 story and basement, 85 x 120 ft., brick, East 40th St. and St. Clair Ave. $175,000.

O., Cleveland—Apartment — Euclid-Spangler Realty Co., c/o N. M. Berkowitz, 10936 Grantwood Ave., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 40 x 120 ft., brick, 1932 East 73rd St. $150,000.

O., Cleveland—Office and Commercial—L. Abrams, Engineers Bldg., plans brick, steel and concrete, East 9th St. and Superior Ave. To exceed $150,000. Engineer and architect not selected.

O., Cleveland—Store and Apartment—L. Duchon, 3045 Essex Rd., Cleveland Heights, had plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story and basement, 100 x 125 ft., brick, East 40th St., near Perkins Ave., here. $250,000.

O., East Cleveland (Cleveland P. O.)—High School—Bd. Educ. having plans prepared by Cavanaugh & Baer, 2729 Prospect Ave., Cleveland, 3 story and basement, 175 x 450 ft., brick, steel and concrete, Grasmere Ave. $750,000. C. Tilden, Euclid and Prospect Aves., dir. Noted Feb. 8.

O., Newark—School—Francis De Sales School had plans prepared by C. E. Handshy, Zanesville, 3 story and basement, brick and rein.-con. $175,000. A. O'Boylan, pres.

O., New Philadelphia—Office and Theatre—New Philadelphia Amusement Co. having plans prepared by C. J. Marr, New Philadelphia, brick, steel and stone. $250,000. A. V. Abel, pres.

O., Youngstown — Club — St. Brendons Parish, West Side, having plans prepared by R. Zenk, Federal St., and takes bids in about 1 week, 100 x 300 ft. club. $200,000. Noted Oct. 4.

Ind., Evansville—Y. W. C. A. plans new building 3rd and Vine Sts. $300,000. B. Geary, 342 Madison Ave., New York, archt. Noted Sept. 6.

Ind., Indianapolis—Recreation—J. Chartrand, 1347 North Meridian St., having plans prepared by Kopf & Woolling, Pythian Bldg., 2 story and basement, 97 x 180 ft., rein.-con. and brick, North Meridian St. $150,000.

Mich., Detroit—Office—M. J. Gallagher, 230 Washington Blvd., having plans prepared by Donaldson & Meier, 1314 Penobscot Bldg., 8 story and basement, 50 x 120 ft. rein.-con., brick and steel, plain foundation, Washington Blvd. $300,000.

Ill., Harrisburg—Theatre and Office—Local syndicate, c/o Levine & Rupert, archts., 822 West 70th St., Chicago, having plans prepared 2 story, 100 x 165 ft., rein.-con., brick and steel. $275,000.

Wis., Appleton—Church—Trinity English Lutheran Congregation, c/o F. Schreckenberg, pastor, 570 College Ave., having plans prepared by H. C. Haeuser, 445 Milwaukee St., Milwaukee, 2 story, brick and stone, plain foundation, Allen St. $150.000.

Wis., Kimberly—School—School Dist. 7, c/o M. A. Kettenhafen, clk., having plans prepared by Oppenhamer & Obel, Wausau,

Buildings (Continued)

3 story, 60 x 180 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Marinette—School—St. Josephs Congregation, c/o S. Vaissiere, pastor, 1230 Elizabeth Ave., having plans prepared by W. E. Reynolds, Roosevelt St., Green Bay, 2 story and basement, 65 x 120 ft., brick, tile and concrete, plain foundation, here. $150,000.

Wis., Mayville—High School—School Bd., c/o O. D. Naber, chn. building com., soon takes bids 2 story and basement, brick, tile and concrete, plain foundation. $200,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Oshkosh—School—School Bd. having plans prepared by Auler & Jensen, F. R. A. Bldg., 2 story and basement, brick and concrete, plain foundation. $200,000.

Wis., Oshkosh—Temple—Masonic Lodges combined, c/o F. A. Fuller, chn. building com., 50 West Polk St., having plans prepared by Auler & Jensen, F. R. A. Bldg., 2 story and basement, brick and concrete, plain foundation. $250,000.

Wis., Racine—Hotel-Store—Friedman Hotel Corp., 511 Main St., having plans revised by E. B. Funston Co., Janes Blk., 6 story and basement, 82 x 100 ft., brick and concrete, plain foundation, Main St. $650,000.

Minn., Minneapolis—Hospital—Northwestern Hospital, Chicago Ave. and 27th St., c/o W. L. Wolford, Hotel Leamington, Minneapolis, having plans prepared by W. K. Macomber, 608 Lincoln Bank Bldg., 6 story and basement addition to hospital, rein.-con., brick and tile, Chicago Ave. and 27th St. $500,000.

Minn., St. Paul—Schools—City Council authorized $1,000,000 bond issue for school buildings in 1924. L. R. S. Ferguson, comr. Dept. Educ.

Kan., Kansas City—Methodist Episcopal Church having plans prepared by C. E. Keyser, 317 Portsmouth Bldg., 1 story and basement, 96 x 123 ft., rein.-con. and brick. $150,000.

Mo., Kansas City—Schools—Bd. Educ. having plans prepared by C. A. Smith, 800 Finance Bldg., 3 story and basement, 150 x 365 ft., rein.-con., brick and steel, junior high school, $900,000, also 2 story and basement, 60 x 140 ft., rein.-con., brick and steel school addition, $180,000.

Mo., St. Joseph—Church—Zion Evangelical Congregation having plans prepared by Eckel & Aldrich, 1105 Crosby-Force Bldg., for church. $150,000.

Mo., St. Louis—Apartment Hotel—S. Kopler, 5759 Waterman Ave., plans 15 story and basement, 150 x 254 ft., rein.-con. and steel, pile foundation, Union St. $2,000,000. Private plans.

Tex., Cameron—School—Dec. 27, to vote on $150,000 bonds for school. Address Mayor.

Tex., Dallas—Bank and Office—Republic Natl. Bank, Republic Natl. Bank Bldg., had plans prepared by C. D. Hill & Co., Sumpter Bldg., and takes bids early in January, 20 story, basement, and subbasement, 96 x 100 ft., 50 ft. tower, steel brick and stone, Main and Exchange Sts. $1,500,000.

Tex., Dallas—Church—Munger Place Methodist Church, plans church, Bryan St. and Munger Pl.

Tex., Dallas—College—Southern Methodist University takes bids Dec. 16 3 story, stone and concrete, to be known as Kirby Hall. $150,000. Dewitt & Lemmon, S. W. Life Bldg., archts.

Tex., Houston—Club—Knights of Columbus, 820 Crawford St., having plans prepared by M. Sullivan, Carter Bldg., 3 story, brick and concrete. $250,000.

Tex., Houston—Sunday School—First Methodist Church plans 3 story, brick, concrete and stone, Main St. $150,000.

Tex., Jacksonville—High School—City voted $150,000 bonds 3 story, rein.-con., brick and stone, plain foundation.

Tex., Marshall—Schools—Bd. Educ. having plans prepared by W. G. Clarkson, First Natl. Bank Bldg. Ft. Worth, high school and negro school, brick and concrete, $200,000 and $100,000 respectively.

Tex., San Antonio—Apartment—Strauss & Co. will finance construction cf apartment, rein.-con., tapestry, brick and stone, Pecan and Navarro Sts. $600,000. Owners name withheld.

Tex., San Antonio—Office—San Antonic Natl. Bank and San Antonio Loan & Trust Co., plan 6 story, rein.-con., brick, stone and marble. $400,000.

Tex., San Antonio—Theatre—W. J. Lytle, c/o Empire Theatre, making tentative plans theatre, Houston and Travis Sts. $1,000,000.

Tex., San Antonio—Adams & Adams, archts., Gibbs Bldg., takes bids about Jan. 1, 5 story, steel, rein.-con. and tile building, for San Antonio Y. M. C. A. $275,000. W. E. Simpson, Natl. Bank of Commerce Bldg., engrs. Noted Oct. 25.

Wash., Bellingham—Terminal—Puget Sound Power & Light Co. plans 3 story and basement, 125 x 150 ft., terminal building, loading platforms, etc., Elk and Magnolia Sts. $200,000. Private plans.

Wash., Seattle—Apartment—S. Berg, 3402 Woodland Park Ave., having plans prepared by Stuart & Wheatley, Walker Bldg., and takes bids about Dec. 26, 6 story, 108 x 160 ft., steel and concrete, Summit Ave. and John St. $350,000.

Wash., Seattle—Auditorium—Chamber of Commerce having tentative plans prepared by J. Graham, Dexter Horton Bldg., 230 x 360 ft. $2,000,000. Noted Nov. 1.

Wash., Tacoma—High Schools—Bd. Dirs. School Dist. 10 having plans prepared by R. E. Borhek, Puget Sound Bank Bldg., and takes bids about Mar. 1, North Intermediate High School, 2 story, North 28th and Proctor Sts., $280,000, East Intermediate High School, 2 story, McKinley Hill, $280,000; about Feb. 1 for South Central Intermediate High School, 2 story, South 50th St. and Pacific Ave., $340,000; all foregoing concrete and brick veneer, plain foundations. Noted Nov. 1.

Calif., Anaheim—Church—First Presbyterian Church having preliminary plans prepared by H. M. Patterson, O. T. Johnson Bldg., Los Angeles, brick church and Sunday school buildings. $150,000.

Calif., Berkeley—Schools—City to vote on $150,000 or more bonds for schools.

Calif., Berkeley—Store and Hotel—R. Roth, c/o A. G. Headman, archt., Call Bldg., San Francisco, having plans prepared 5 story and basement, concrete, Shattuck Ave. $150,000.

Calif., Elsinore—Club—Southern California Country and Athletic Club, Consolidated Realty Bldg., Los Angeles, having plans prepared by Engineering Service Corp., Washington Bldg., Los Angeles, rein.-con. and hollow tile club buildings. $150,000.

Calif., Lankershim—Hotel—Citizens Com. headed by J. Wilson, pres. Chamber of Commerce, plans 3 story, fireproof. $350,000.

Calif., Long Beach—Apartment—D. B. Carlin, 107 East Ocean Ave., had plans prepared by W. H. Austin, First Natl. Bank Bldg., fireproof, probably rein.-con., 1st St. Will exceed $500,000.

Calif., Long Beach—High School—City to vote on $300,000 bond issue for junior high school.

Calif., Long Beach—Hotel—L. C. Simmel, Markwell Bldg., representing interests which plan 8 story, rein.-con., 1st Pl. and Ocean Blvd. $150,000.

Calif., Los Angeles—Apartment—E. Zaiser, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 12 story, rein.-con., Vine and Zucca Sts. $950,000.

Calif., Los Angeles—Club, Office and Store—Jonathan Club, Pacific Electric Bldg., having preliminary plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 165 x 195 ft., Class A fireproof construction, 6th and Figueroa Sts. $150,000 or more. Noted Oct. 11.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., plans 9 story, approximately 125 x 325 ft., rein. con. and steel, Olive St. E. V. Cobby, 333 Grant Ave., San Francisco, ch. engr.

Calif., Los Angeles—Hotel—L. Chatt, c/o L. L. Jones, archt., Grosse Bldg., had plans prepared 5 story and basement, rein.-con. and brick, Columbia Ave. and Acacia St. $175,000.

Calif., Los Angeles—Loft—S. Goodman, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared 12 story and basement, 50 x 90 ft., rein.-con., 7th and Los Angeles Sts.

Calif., Los Angeles—Store—"Bullocks," 659 South Bway., having plans prepared by Parkinson & Parkinson, Title Insurance Bldg., 30 x 150 ft., approximately 12 story, brick, concrete and steel, Hill St. near 7th St.

Calif., Los Angeles—Store and Loft—Meyer Siegel Co., 617 South Bway., having preliminary plans prepared by Curlett & Beelman, Union Bank Bldg., 150 x 185 ft., approximately 12 story, fireproof, Flower St. near 8th St.

Calif., Los Angeles—Store and Office—P. S. Wright Co., 3981 West 6th St., representing interests which plan 12 story, fireproof.

Calif., Los Angeles—Studio, Store and Office—Platt Music Co., 622 South Bway., having plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 12 story, 60 x 145 ft. fireproof, Hollywood Blvd.

Calif., Oakland—Church—First Congregational Church having plans prepared by J. G. Howard, First Natl. Bank Bldg., San Francisco, Class A construction, Harrison and 26th Sts. $500,000.

Calif., San Francisco—Apartment—McKillop Bros., 235 Montgomery St., plan fireproof construction, Southwest Octavia and Clay Sts. $150,000. Architect not selected.

Calif., San Francisco—Apartment—W. Props, 965 Hyde St., having plans prepared by E. H. Denke, 1317 Hyde St., 5 story and basement, rein.-con., Franklin and Sacramento Sts. $150,000.

Calif., San Francisco—Bank—Hibernia Savings & Loan Society, McAllister and Jones Sts., having preliminary plans prepared by Bakewell & Brown, 251 Kearny St., rein. con. 22nd and Valencia Sts. $150,000. C. H. Snyder, 251 Kearny St., engr.

Calif., San Francisco—Exchange—Pacific Telephone & Telegraph Co., 333 Grant Ave., plans Class A construction exchange, Geary and 9th Aves. $150,000.

Calif., San Francisco—Exchange—Pacific Telephone & Telegraph Co., 333 Grant Ave., had plans prepared by Bliss & Faville, Balboa Bldg., 3 story and basement, Class A construction, Bush and Larkin Sts. $300,000.

Calif., San Francisco—Schools—City and San Francisco Co. having plans prepared by G. A. Lansburgh, 140 Montgomery St., 24 room school, Diamond St. between Jersey and 124th Sts., $225,000 to $300,000; by J. Reid, Jr., First Natl. Bank Bldg., for 24 room school, block bounded by Haight, Waller, Masonic and Central Aves., $250,000 to $300,000; by Bakewell & Brown, 251 Kearny St., for 24 room school, block bounded by 17th, Ford, Sanchez and Noe Sts., $200,000 to $300,000.

Calif., San Jacinto—Hotel, etc.—Soboda Hot Springs, c/o J. J. Frauenfelder, archt., Story Bldg., Los Angeles, having plans prepared resort buildings, incl. hotel, cottages, laundry and power plant, rein.-con. and brick.

Calif., Santa Barbara—Church—Church of Our Lady of Sorrows having plans prepared by J. J. Donnellan, Bryson Bldg., fireproof, probably rein.-con. $200,000 or more.

Calif., Santa Barbara—Lodge Hall—Masonic Hall Assn., c/o C. Werner, archt., Santa Fe Bldg., San Francisco, had plans prepared 3 story and basement, rein.-con. $250,000.

Calif., Venice—Auditorium—City plans auditorium, Florence Ave. $200,000 to $225,000.

Calif., Venice—Schools—City voted $250,000 bond issue for new schools and additions to present buildings.

Ont., Ft. William—Hotel—Canadian Pacific Ry., Windsor Sta., Montreal, Que., plans rein-con., brick and steel, plain foundation. $1,000,000. J. M. R. Fairbairn, ch. engr.

Ont., London—College—Ursuline Sisters, Chatham, having plans prepared by Pennington & Boyde, Bartlett Bldg., Windsor, stone college in northern section of London. $250,000.

Mexico, Emplane—Office—Pacific R.R., Mexico City, plans rein.-con., brick and stone office, here. $250,000. H. B. Titcomb, Mexico City, pres.

BIDS DESIRED

N. Y., Brooklyn—Clubhouse—Dec. 27, by Knights of Columbus, 56 South Portland Ave., 9 story, brick, steel and stone, plain foundation, Prospect Pl. $300,000. R. Thomas Short, 370 Macon St., archt. and engr.

N. Y., Buffalo—Office, etc.—Dec. 18, by E. F. Jaeckle, clk. Bd. Supervs. Erie Co., 29 City and County Hall, 3 story and basement, fireproof, office building and warehouse, West Eagle St. and Terrace. North, Shelgren & Swift, 511 Crosby Bldg., archts. Noted June 28.

N. Y., New York—Apartment—T. B. Rhoades & Co., 342 Madison Ave., will build brick, steel and stone, plain foundation, 51 East 72nd St. $750,000. Work will be done by separate contracts. A. J. Bodker, 62 West 45th St., archt. and engr.

Buildings (Continued)

N. Y., New York—School—Dec. 10, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 36, Black Rock and Castle Hill Aves., Bronx Boro, for Bd. Educ., 500 Park Ave.

N. J., Newark—School—Dec. 20, by Bd. Educ., brick, steel and stone addition to Wilson Ave. School. $250,000. Guilbert & Bettelle, 2 Lombardy St., archts. and engrs.

Pa., Cynwyd—Exchange—Dec. 10, by J. T. Windrim, archt., Commonwealth Bldg., Phila., 2 story and basement, 84 x 86 ft., rein.-con., brick and steel, plain foundation, Levering Mills Rd., here, for Bell Telephone Co., 17th and Parkway Sts., Phila., $150,000.

Md., Baltimore—Church—Dec. 8, by F. J. Heldrich, archt., 1156 Longwood St., 1 and 2 story, 71 x 175 ft., stone, plain foundation, Reistertown Rd. and Elgin Ave., for St. Johns Concordia Evangelical Lutheran Church. $175,000.

D. C., Wash.—School—Dec. 21, by Dist. Comrs., 509 Dist. Bldg., constructing school; adv. E. N.-R. Dec. 6.

N. C., Durham—High School—Dec. 15, by School Bd., constructing high school containing 24 rooms and auditorium, concrete, tile, etc. $200,000. Heister & Co., Durham, archts.

N. C., Elizabeth City—College—Dec. 12, by Building Com. of State Normal and Industrial School, W. O. Saunders, chn., residence for principal, boys dormitory, industrial, home economics and laundry buildings also 3 faculty residences. J. A. Slater, 102 West Hargett St., Raleigh, archt.

N. C., Wilmington—Court House—Dec. 21, by Comrs. New Hanover Co., 4 story, 64 x 118 ft., steel and rein.-con. annex, Princess St. $154,000. L. N. Boney, Murchison Bldg., archt. Noted Nov. 22.

La., New Orleans—Home—Dec. 27, by J. P. Sullivan, chn. Building Com. Elks Home, 3 and 5 story, 62 x 122 ft. tile and stucco building to replace portion of structure destroyed by fire, 121 Elk Pl. $175,000. R. DeBuys, archt., and E. E. Christy, associated archt., 1406 Hibernia Bank Bldg.

O., East Cleveland (Cleveland P. O.)—Apartment—L. A. Katz, 607 Republic Bldg., Cleveland, taking bids and opens same about Dec. 15, 3 story and basement, 88 x 168 ft., brick, 15445 Euclid Ave., here. $200,000. A. F. Janowitz, Prospect Ave., Cleveland, archt.

O., Lakewood (Cleveland P. O.)—Apartment—W. Blusinsky, 508 Ulmer Bldg., Cleveland, taking bids 3 story and basement, 94 x 115 ft., brick, 2021 Atkins Ave., here. $160,000. M. Weis, 617 Union Bldg., Cleveland, archt. Noted Nov. 29.

Ind., Crown Point—Hospital—Dec. 17, by Comrs. Lake Co., 2 story, 34 x 525 ft. and 2 story, 50 x 100 ft. hospitals, 1 story power plant, 2 story childrens building, 2 story negro patients building and 1 ten car garage, rein.-con. and brick, outside city. $350,000. K. D. Norris, Calumet Bldg., East Chicago, archt. Noted Nov. 29.

Ind., Decatur—High School—St. Marys Roman Catholic Church taking bids 2 story and basement, 127 x 175 ft., brick and stone. $200,000. H. Gaul, 111 West Washington St., Chicago, archt. Noted Nov. 29.

Mich., Detroit—Clubhouse—Dec. 10, by Donaldson & Meier, archts., 1314 Penobscot Bldg., 6 story and basement, 95 x 144 ft., rein.-con., brick and steel, plain foundation, Elizabeth and St. Antoine Sts., for Y. M. C. A., c/o archts. $450,000.

Mich., Detroit—Office—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., taking bids and opens same about Dec. 20, 26 story and basement, 120 x 187 ft. rein.-con., brick and steel, Griswold and Congress Sts., for Buhl Land Co., Buhl Blk.

Mich., Detroit—School—Dec. 10, by A. Kahn, archt., 1000 Marquette Bldg., 2 story and basement, 48 ft. high, 54 x 204 ft. rein.-con., brick and steel, plain foundation, Charlevoix and Burns Aves., for Liggett School, Charlevoix Ave.

Ill., Chicago—Apartment—R. F. France, archt., 155 North Clark St., receiving bids 3 story and basement, 100 x 125 ft., Cornelia and Janssen Sts., for A. Henry, c/o archt. $150,000.

Ill., Chicago—Apartment—R. W. Matteson, 541 Diversey Parkway, receiving bids six 3 story apartment buildings, Spaulding Ave. near Wrightwood Ave. $1,000,000. P. F. Olsen, 720 Cass St., archt.

Wis., Milwaukee—Apartment—Peacock & Frank, archts., 445 Milwaukee St., taking bids 3 story, 86 x 100 ft., brick and tile, plain foundation, Lake Dr. $150,000. Owner's name withheld.

WATER MAIN—CLEVELAND, O.

Following are lowest 3 bids opened by Dept. Pub. Utilities, Div. of Water, Nov. 16, for furnishing and laying Woodhill Rd. Main, Contr. No. 32-N, Baldwin-Fairmount Project, (A) Winterbottom-Connelly Co., 2997 Meadowbrook Blvd., Cleveland Heights; (B) D. Lowensohn, 10803 Fairchild Ave.; (C) Joseph Co., 318 Anisfield Bldg. The unit bids were as follows:

	A	B	C
7,500 cu.yd. excavation and backfilling	$5.00	$5.25	$6.95
20 M.ft. B.M. lumber and wooden sheeting, left in place	40.00	50.00	50.00
930 ton furnishing and laying cast iron, straight, bell and spigot pipe	78.00	83.00	84.50
30 ton furnishing and laying cast iron, bell and spigot standard fittings	190.00	220.00	190.00
Setting four 24-in. valves, furnished by the city	100.00	125.00	100.00
Setting two 12-in. valves, furnished by the city	50.00	40.00	30.00
Setting one 10-in. valve, furnished by the city	50.00	25.00	20.00
60 cu.yd. brick masonry	40.00	35.00	28.00
30 cu.yd. concrete masonry	40.00	35.00	28.00
500 lb. steel reinforcement and miscellaneous wrought iron and cast iron	.10	.10	.18
100 lin.ft. furnishing and laying 15-in. d.s. vitrified pipe drains	5.00	4.00	3.00
200 lin.ft. furnishing and laying 12-in. vitrified pipe drains	5.00	3.00	2.75
100 lin.ft. furnishing and laying 10-in. vitrified pipe drains	3.50	2.25	2.50
100 lin.ft. furnishing and laying 8-in. vitrified pipe drains	3.00	2.00	2.20
800 lin.ft. furnishing and laying 6-in. vitrified pipe drains	2.00	1.75	2.00
200 lin.ft. furnishing and laying 4-in. vitrified pipe drains	1.00	1.50	1.20
2,000 sq.ft. furnishing and laying stone flagging	.35	.35	.27
500 sq.ft. furnishing and laying concrete sidewalks	.40	.35	.27
4 sets furnishing and setting 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the city	50.00	50.00	40.00
200 lin.ft. furnishing and laying 2-in. galvanized iron pipe	2.00	1.60	1.25
10 ton furnishing and delivering surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals	$126,690	$132,990	$145,245

Following are lowest 3 bids opened by Dept. Pub. Utilities, Div. of Water, Nov. 16, for furnishing and laying Woodhil Rd. Main, Contr. No. 32-S, Baldwin-Fairmount Project, (A) Winterbottom-Connelly Co., 2997 Meadowbrook Blvd., Cleveland Heights; (B) J. Connelly Constr. Co., 400 Seventy-First Euclid Bldg.; (C) Salem & George Constr. Co., 418 Erie Bldg. The unit bids were as follows:

	A	B	C
8,000 cu.yd. excavation and backfilling	$4.00	$5.00	$5.25
20 M.ft.B.M. lumber and wooden sheeting, left in place	40.00	40.00	45.00
850 ton furnishing and laying cast iron, straight, bell and spigot pipe	78.00	81.00	85.00
30 ton furnishing and laying cast iron, bell and spigot standard fittings	190.00	180.00	200.00
5 ton furnishing and laying cast iron, bell and spigot special fittings	225.00	200.00	200.00
Setting five 24-in. valves, furnished by the city	100.00	75.00	35.00
Setting four 20-in. valves, furnished by the city	90.00	75.00	35.00
Setting two 12-in. valves, furnished by the city	50.00	25.00	20.00
Setting one 10-in. valve, furnished by the city	50.00	25.00	10.00
60 cu.yd. brick masonry	30.00	30.00	45.00
30 cu.yd. concrete masonry	25.00	30.00	15.00
500 lb. steel reinforcement and miscellaneous wrought iron and cast iron	.10	.10	.20
100 lin.ft. furnishing and laying 15-in. d.s. vitrified pipe drains	5.00	2.50	3.50
200 lin.ft. furnishing and laying 12-in. vitrified pipe drains	5.00	2.00	3.00
100 lin.ft. furnishing and laying 10-in. vitrified pipe drains	4.00	1.50	2.50
100 lin.ft. furnishing and laying 8-in. vitrified pipe drains	4.00	1.50	2.00
600 lin.ft. furnishing and laying 6-in. vitrified pipe drains	2.00	1.50	1.00
200 lin.ft. furnishing and laying 4-in. vitrified pipe drains	1.00	.80	.50
4,200 sq.ft. furnishing and laying stone flagging	.30	.30	.25
3,500 sq.ft. furnishing and laying concrete sidewalks	.40	.30	.22
11 sets furnishing and setting eleven 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the city	50.00	50.00	15.00
350 lin.ft. furnishing and laying 2-in. galvanized iron pipe	2.00	1.00	.30
10 ton furnishing and delivering surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals	$117,645	$125,270	$130,455

Wis., Racine—Memorial Auditorium—Dec. 15, by Bd. Pub. Wks., c/o J. Beaugrand, chn., superstructure 1 and 2 story, 182 x 200 ft., brick, stone and concrete, for Memorial Hall Comn., c/o W. Horlick, pres., City Hall. $300,000.

Mo., Kansas City—School—Dec. 10, by E. P. Madorie, archt., 1106 Continental Bldg., 3 story and basement, 160 x 168 ft., stone, rein.-con. and brick, Bway. and Central Ave., for Redemptorist Fathers, 325 Hunter St. $350,000. Noted June 7.

Ark., Ft. Smith—Convent—Dec. 30, by F. W. Redlich, archt., Stillwater, Okla., 3 story and basement, 42 x 178 ft., rein.-con., brick and stone. $200,000. Owner's name withheld.

Tex., Amarillo—Club—Amarillo Masonic Bodies and H. M. Greene Co., archts., North Texas Bldg., Dallas, taking bids 3 story and basement, 80 x 140 ft., brick and concrete, 5th and Filmore Sts. $250,000.

Colo., Denver—School—Dec. 12, by Bd. Educ., W. A. Stutt, secy., constructing Ebert Grade School, 2 story, 75 x 300 ft., brick, terra cotta and concrete, 22nd and Glenarm Sts. $275,000.

Calif., Glendale—Theatre, Store and Office—A. G. Lindley & C. Selkirk, archts., Amer. Bank Bldg., Los Angeles, taking bids rein.-con., Brand Blvd., for J. A. Russell, 208 South Brand Blvd. $150,000. Noted Sept. 13.

Calif., Hermosa Beach—Club—M. Hunt, Hibernian Bldg., Los Angeles, receiving bids 6 story, 85 x 150 ft., rein.-con., for Surf and Sand Club, 1402 Strand Ave. Noted Mar. 29.

Calif., Los Angeles—Convent and Dormitory—A. C. Martin, Higgins Bldg., taking bids 4 story, 55 x 200 ft. rein.-con. and brick, Pico St., for Good Shepherd Convent, 1212 Arlington St. Noted Mar. 22.

Calif., Los Angeles—Lodge Hall—Morgan, Walls & Clements, Van Nuys Bldg., taking bids 3 story and basement, 100 x 175 ft., steel and brick, Oak and Washington Sts., for Odd Fellows Lodge, 218 South Main St. Noted Nov. 2.

Calif., Los Gatos—High School—Trustees of Dist. taking bids 1 and 2 story, rein.-con. $200,000. W. H. Weeks, 369 Pine St., San Francisco, archt.

Calif., Oakland — Hospital — Supervs. Alameda Co. taking bids 4 story rein.-con. and terra cotta administration building, also plastering six 3 story units of county hospital group. $500,000. H. H. Meyers, Kohl Bldg., San Francisco, archt. Noted Jan. 18.

BIDS RECEIVED

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, Nov. 26, P. S. 202, brick, steel and stone, plain foundation, Hegeman and Atkins Aves., here, from G. Colon & Co., 81 East 125th St., New York, $996,400. Noted Nov. 15.

O., Cincinnati — School — Business Manager Bd. Educ., 511 West Court St., Nov. 12, 2 story, 64 x 120 ft., rein.-con., brick and terra cotta, plain foundation, Tremont St., from M. Penker & Sons Co., 123 Valencia St., combination branches 1, 2, 3, 4, 5 and 9, $154,500; David Gordon Building & Constr. Co., Burnet and Northern Sts., Avon, combination branches 1 to 12 inclusive, $269,000. Noted Oct. 25.

Tex., Dallas—High School—Bd. Educ., 3 story and basement, 167 x 238 ft., concrete, brick and stone, Marlborough and Jefferson Sts., from A. J. Rife, 4339 Ervay St., $374,402. Noted Nov. 22.

Calif., Hollywood — Auditorium, etc. — Hollywood High School Dist., 2 story and basement, rein.-con. and brick auditorium

Buildings (Continued)

and boiler house, from Olcester & Kerr, 1528 Ramona Ave., South Pasadena, $254,500. Noted June 7.

Calif., San Francisco—Nurses Home—Mt. Zion Hospital, 6 story and basement, Class A, Sutter St., general contract from Barrett & Hilp, 918 Harrison St., $208,000. Noted Nov. 15.

CONTRACTS AWARDED

Conn., Rockville — School — Rockville School Dept., 3 story, brick and steel, plain foundation, Park St., to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $300,000. Noted Mar. 29.

N. Y., Brooklyn—Theatre—S. Strausberg, 676 Willoughby Ave., brick, steel and stone, plain foundation, Dean St., to Levenson Bros., 4196 Park Ave. Archts. est. $200,000.

N. Y., Hicksville — High School — Bd. Educ., brick, steel and stone, plain foundation, to Zerby Constr. Co., 1133 Bway., New York. Archts. est. $200,000. Noted Oct. 25.

N. Y., Jamaica — Apartment — Loshen Bros., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., Brooklyn, will build 6 story, brick, steel and stone, plain foundation, Shelton Ave., here, by day labor. $350,000. Noted Nov. 22.

N. Y., Long Island City—Bank—Long Island Savings Bank, Bridge Plaza, brick, steel and stone, plain foundation, Grand Ave., to Gillies-Campbell, 101 Park Ave., New York. Archts. est. $150,000.

N. Y., New York—Apartment—S. S. Belkin, c/o D. S. Lang, archt. and engr., 110 West 34th St., will build 6 story, brick, steel and stone, plain foundation, Ft. Washington Ave., by day labor. $400,000.

N. Y., New York—Apartment—M. Bogdanoff, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Townsend Ave., by day labor. $150,000.

N. Y., New York—Apartment—A. D'Antona, c/o R. Candela, archt. and engr., 200 West 72nd St., will build brick, steel and stone, plain foundation, 5th Ave. and 11th St., by day labor. $1,000,000.

N. Y., New York—Apartment—B. L. W. Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, 125 x 132 x 180 ft., brick, steel and stone, plain foundation, Pinehurst Ave. and 176th St., by day labor. $750,000.

N. Y., New York—Apartment—J. Failla, c/o R. Candela, archt. and engr., 200 West 72nd St., will build brick, steel and stone, plain foundation, West 71st St., by day labor. $650,000.

N. Y., New York—Apartment—W. Kempel, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, brick, steel and stone, plain foundation, 203rd St. and Valentine Ave., by day labor. $175,000.

N. Y., New York—Apartment—M. Rothschild, Inc., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build 9 story, brick, steel and stone, plain foundation, 85th St. between Madison and Park Aves., by day labor.

N. Y., New York—Apartment—Turner Associates, Inc., 244 Madison Ave., 9 story, 100 x 110 ft., brick, steel and stone, plain foundation, 49-55 East 66th St., to Turner Constr. Co., 244 Madison Ave. Archts. est. $1,000,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 99, Exterior St., to G. Colon & Co., 81 East 125th St., $1,089,000. Noted Dec. 6.

N. Y., Schenectady—Bank—Schenectady Trust Co., 3 story, 28 x 105 ft., steel, stone and terra cotta, plain foundation, Main St., to Hanrahan Bros., 336 Brandywine Ave. Archts. est. $200,000. Noted Nov. 8.

N. J., Glen Ridge—Nurses School and Dormitory—Mountainside Hospital, 3 story, brick, steel and stone, plain foundation, to Charles Hedden Constr. Co., 783 Broad St., Newark. Archts. est. $250,000.

N. J., Montclair—Apartment—Stanwall Co., c/o F. E. Wallis, archt. and engr., 56 West 45th St., New York City, 4 story, 125 x 170 ft., brick, steel and stone, plain foundation, Fullerton Ave., to J. S. and L. Carlson, Walnut St. Archts. est. $500,000.

N. J., Trenton—J. O. Hunt, archt., 219 East Hanover St., general contract 4 story, 60 x 400 ft., rein.-con., brick and steel building, Montgomery St., for Y. W. C. A., 141 East Hanover St., to C. J. Smith Constr. Co., 204 Academy St., $325,000; heating and plumbing work, to Piperas Bros., 179 Brunswick Ave., $64,800. Noted Oct. 25.

Pa., Bethlehem—Schools—School Bd., 2 story and basement, 63 x 117 ft. rein.-con. and brick, Penn Ave., Goepp and Union Sts., to Friel & McLeister, 1615 Spruce St., $108,333; 2 story and basement, 94 x 167 ft. brick, Jennings and Walter Sts., to H. E. Stoudt, Bethlehem, $170,000; 2 story and basement, 62 x 154 ft. rein.-con. and brick, plain foundation, East 4th St., to C. McCaul Co., 1714 Sansom St., $180,000.

Pa., Phila.—Apartment—P. Mark, c/o F. V. Mark Constr. Co., Commercial Trust Bldg., 3 story and basement, 67 x 83 ft. brick and steel, plain foundation, Arsal and Wissahickon Sts., to F. V. Mark Constr. Co., Commercial Trust Bldg., Archts. est. $150,000.

Pa., Phila.—Office, etc.—Gulf Refining Co., Weidener Bldg., will build 5 story and basement, 102 x 182 ft. rein.-con. and brick office and warehouse, plain foundation, 58th and Penrose Sts., by day labor. $300,000. Private plans.

Pa., Phila.—Parish House—F. L. Watson, archt., 1211 Walnut St., 2 story and basement, 73 x 166 ft., rein.-con., brick and steel, plain foundation, Hancock and Diamond Sts., to W. R. Dougherty, 1613 Sansom St., $250,000, for D. J. Dougherty, 1723 Race St. Noted Nov. 1.

D. C., Wash.—College—George Washington University, college building at 21st and G. Sts., N. W., to H. Wardman, 1430 K St., N. W. archts. est. $250,000. Noted Mar. 29.

D. C., Wash.—Nurses Home—Emergency Hospital, 1711 New York Ave., N. W., 3 story, 58 x 124 ft., brick and concrete, 1727 New York Ave., N. W., to Wardman Constr. Co., 1430 K St., N. W. Archts. est. $250,000.

N. C., Kinston—School—City, 22 room, brick, to Palmer-Spivey Co., Charlotte, $160,000.

Fla., Fort Lauderdale—Hotel—Lauderdale Beach Hotel Co., rein. con. hotel, Lauderdale Beach, to George Jahn, Miami, $175,000.

La., Shreveport—Hospital—L. Abramson and A. A. Herold, rein.-con. and brick hospital, to W. H. Werner, Shreveport. Archts. est. $225,000.

La., Shreveport—Store—Feibleman Co., Magazine St., New Orleans, 5 story, 81 x 150 ft., concrete, steel, brick and stone, here, to W. H. Werner, Shreveport, $312,000.

O., Cleveland—Apartment—I. B. Rabb & Son, Ulmer Bldg., 4 story and basement, 86 x 170 ft., brick and timber, 1620 East 77th St., to Adelovitz & Lenowitz, 3553 East 125th St. Archts. est. $300,000. Noted Sept. 20.

O., Cleveland—Commercial—J. Bassiches & Son, Society for Savings Bldg., 3 story and basement, 48 x 125 ft., brick and rein.-con., 1231 Superior Ave., to Dresser-Minton Co., 881 The Arcade. Archts. est. $150,000.

O., Dayton—School—Bd. Educ., 2 story, rein.-con. and brick, plain foundation, Hickory and Burns Sts., to H. R. Blagg Constr. Co., 1229 East 3rd St., $404,107 Noted Oct. 25.

O., Girard—High School—Bd. Educ., general contract 2 story, brick and steel, East Main St., to Hawkins-Downie & Mason, Youngstown, $226,046; heating and power, to Barnes & Clark, 126 Apple Way, New Castle, Pa., $34,510. Noted Oct. 18.

O., Piqua—High Schools—Bd. Educ., Bennett Jr. High School, 2 story and basement, 61 x 187 ft., brick and rein.-con., also Wilder Jr. High School, 2 story and basement, 76 x 234 ft., brick, stone and terra cotta, Walker and Gill Sts., to Green & Sawyer, Lima. Noted Nov. 8.

O., Toledo—Safety—City, brick and steel contract for building, Jackson, Erie and Ontario Sts., etc., to Moylan & Lasley, Toledo. Archts. est. $600,000.

Ind., Hammond—Apartment—S. Schlesinger, Hyslop Pl., will build 5 story and basement, 47 x 92 ft., brick, steel and rein.-con., Hyslop Pl. by day labor. $150,000. H. L. Newhouse, 4630 Prairie Ave., Chicago, archt.

Ill., Chicago—Apartment—G. L. Arquette, 6718 Ridgeland Ave., 3 story, 108 x 124 ft., Yates and 78th Sts., to Bundo Bros., Inc., 919 East 75th St. Archts. est. $150,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenview St., 3 story and basement, 100 x 140 ft. fireproof, 44th St. and Drexel Blvd., to E. M. Reid, 140 South Dearborn St., $250,000. Noted Nov. 1.

Ill., Chicago—Apartment—E. Peterson, 5045 North Francisco Ave., 3 story and basement, 120 x 150 ft., 1353-59 Carmen Ave., to E. A. Borg, 1338 Eddy St. Archts. est. $150,000.

Wis., Madison—Apartment—M. B. Allison, 119 Monona Ave., will build [illegible] story, 100 x 155 ft. rein.-con., brick, and steel, plain foundation, Monna Ave., by day labor $160,000. R. A. Phillips, Beaver Bldg., archt.

Wis., Madison—Church—Parkside Presbyterian Church, 1418 East Dayton Ave., 2 story, 60 x 150 ft., brick, rein.-con. and stone, plain foundation, to J. H. Findorff & Co., 601 West Wilson St. Noted Sept. 27.

Wis., Reedsburg—Theatre—O. V. Kelly will build 1 story, 50 x 130 ft., brick and rein. con., plain foundation, by day labor. $150,000. E. Tough, Washington Bldg., Madison, archt.

Wis., West Allis—Store and Office—P. H. Rhotigan, 6401 Greenfield Ave., 2 story and basement, 60 x 120 ft., brick and concrete, to Pfeifer Constr. Co., 586 66th Ave., $150,000.

Minn., St. Paul—Office—Citizens Service Corp., 1115 Laurel Ave., 13 story and basement, rein.-con., brick and tile, 6th and Jackson Sts., general contract to Lovering & Longbotham, 312 Endicott Bldg., $600,000. Noted June 14.

Kan., Hutchinson — School — Bd. Educ., Maple St. School, 2 story and basement, 122 x 156 ft., brick and concrete, general contract to L. E. Riggs, Larned, $79,870, Sherman Junior High School, general contract to M. C. Foy, Hutchinson, $73,564. Noted Oct. 11.

Kan., Topeka—Church—Holy Name Catholic Parish, c/o M. G. O'Leary, 900 Clay St., 1 story and basement, 75 x 145 ft., rein.-con., brick and stone, plain foundation, Clay St., to M. J. Green, 1202 Haslin St., Manhattan. Archts. est. $200,000.

Kan., Topeka—Office—Atchison, Topeka & Santa Fe R.R., 903 Jackson Bldg., Chicago, 10 story and basement, 75 x 150 ft., rein.-con., terra cotta and brick, to Swenson Constr. Co., Shubert Bldg., Kansas City, Mo.

Neb., Wymore—High School—Bd. Educ., 2 story and basement, 89 x 153 ft., rein.-con., brick, stone and terra cotta, general contract, to M. J. Green, Manhattan, Kan., $129,000.

Mo., Kansas City—School—Bd. Educ., 2 story and basement, 60 x 140 ft. school, to Patti Moore Constr. Co., Kansas City, $212,000.

Mo., Mount Washington—High School—Bd. Educ., 2 story and basement, brick and rein.-con., to Patti-Moore Constr. Co., Mount Washington, $212,000.

Mo., St. Louis — Apartments — Better Built Home & Mfg. Co., Carleton Bldg., will build six 3 story, 32 x 65 ft., rein.-con., brick and stone, 629-749 Skinker Ave., by day labor. $375,000. Private plans.

Mo., St. Louis—Apartment—W. Goldman, 718 North Kingshighway, 6 story and basement, 70 x 135 ft., rein.-con. and brick, plain foundation, 531 Union Blvd., to P. J. Bradshaw, International Life Bldg. $150,000.

Mo., St. Louis—Apartment Hotel—Ambassador Investment Co., c/o S. Koplar, 1012 International Life Bldg., 10 story and basement, 135 x 234 ft., brick, steel and concrete, Union St., to P. J. Bradshaw, International Life Bldg., $1,500,000.

Mo., St. Louis—High School—H. P. Hess, archt., 4821 Cote Brilliante Ave., general contract William Cullen McBride High School, 3 story and basement, 105 x 210 ft., brick, stone and rein.-con., Kingshighway, to Duffner & Stecker Constr. Co., DeMenil Bldg., for J. J. Glennon, 3810 Lendell Blvd. Archts. est. $300,000. Noted Nov. 1.

Mo., St. Louis—Home—Jewish Orthodox Old Folks Home, 4512 Blair Ave., 6 story, 40 x 150 ft., rein.-con. and brick, plain concrete foundation, to A. Meyer, Central Natl. Bank Bldg. Archts. est. $200,000. Noted June 21.

Wash., Tacoma—High School—Bd. Dirs. Tacoma School Dist. 10, 2 story, concrete, and brick veneer, plain foundation, Division Ave. and Sprague St., general contract to O. F. Larson, California Bldg., $371,628. Noted Nov. 1.

Calif., Culver City — Store, Office and Hotel—H. H. Culver, 6 story and basement, rein.-con. and brick, general contract to Winter Constr. Co., Railway Bldg., Los Angeles. $200,000. Noted Oct. 11.

Calif., Culver City—Theatre, Store and Office—West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, 2 story, brick, to Hall & Sican, 4113 Washington Blvd., Los Angeles. $150,000.

Calif., Long Beach—Apartment—Seaside Holding Co., 4 story and basement, 75 x 100

Buildings **(Continued)**

ft., brick and steel. Seaside and Linden Aves., to Graham Constr. Co., Citizens Natl. Bank Bldg., Los Angeles. $150,000 or more.

Calif., **Los Angeles** — Apartment — S. N. Reiss, 631 North Grammacy St., 4 story and basement, 52 x 134 ft., brick, Serrano St. near Wilshire Blvd., to Richardson Bldg. & Eng. Co., Larchmont Blvd.

Calif., **Los Angeles**—Auditorium and School—City. 3 story, brick, to W. Stacko, 1710 West Adams St. $245,000.

Calif., **Los Angeles**—Apartment—M. B. Worsham, 711 South Rampart Blvd., 4 story, 55 x 140 ft. brick, Rampart Blvd., to Littleton Co., 608 East Colorado St., Pasadena. $150,000.

Calif., **Los Angeles**—Lodge Hall—Independent Order of B'nai B'rith, 711 West 17th St., 2 and 3 story and basement, brick, Union and 9th Aves., to L. R. Armstrong, Hollingworth Bldg., $150,000.

Calif., **Ontario**—Church—First Christian Church will build 75 x 100 ft. brick church, by day labor, under supervision of C. A. Edwards, Ontario.

Calif., **San Francisco**—Nurses Home—Mt. Zion Hospital, 6 story and basement, Class A. Sutter St., general contract to Barrett & Hilp, 918 Harrison St., $208,000. Noted Dec. 6.

Calif., **Yosemite Valley**—Club, etc.—Yosemite Mountain Club, c/o G. S. Underwood, archt., 609 I. W. Hellman Blog., Los Angeles, club, golf course, stables, power house, garage, etc., to Gutleben Bros., 609 I. W. Hellman Bldg., Los Angeles, $300,000.

Federal Government Work

PROPOSED WORK

D. C., Wash.—Conduit Road, etc.—U. S. Engineer, Old Land Office Bldg., preparing plans hydro-electric plant, filtration plant, reservoirs, tunnels and completion of conduits on Conduit Rd., here, and in Maryland. Maj. N. C. Tyler, officer in charge. Noted Aug. 23.

Ala., **Florence** — Steel — U. S. Engineer, plans to purchase structural steel for power house at Wilson Dam, here.

Ky., **Addison**—U. S. Engineer, Louisville, plans to purchase 350 tons steel sheet piling for Dam 45, here.

Ky., **Addison**—Dam—U. S. Engineer, P. O. Box 72, Louisville, plans movable dam at Dam 45, Ohio River, here.

Ky., **Owensboro**—Steel Piling—U. S. Engineer, P. O. Box 72, Louisville, soon receives bids 1,200 ton steel sheet piling for Dam 46, here.

Ky., **Uniontown**—Lock—U. S. Engineer, P. O. Box 72, Louisville, plans lock at Dam 49, Ohio River, 40,000 cu.yd. concrete, etc., near here.

Oregon—Road—U. S. Bureau Pub. Rds., Post Office Bldg., Portland, plans 16.6 mi. Coopers Spur of Mt. Hood Loop Rd., 14 ft., $90,000. C. H. Purcell, dist. engr.

Calif., **Crescent City**—Riprap—U. S. Engineer, Custom House, San Francisco, soon receives bids 80,000 tons riprap for new breakwater, here.

Calif., **Eureka**—Riprap—U. S. Engineer, Custom House, San Francisco, will probably take bids in January, 160,000 tons riprap for breakwater at Humboldt Harbor, here.

Calif., **Oakland**—Dredging—U. S. Engineer, Custom House, San Francisco, making plans dredging in Oakland Harbor, here.

Calif., **Petaluma**—Dredging—U. S. Engineer, Custom House, San Francisco, plans dredging in Petaluma Creek, here.

Calif., **Richmond**—Dredging—U. S. Engineer, Custom House, San Francisco, making plans dredging in Richmond Harbor, here.

Calif., **San Rafael**—Dredging—U. S. Engineer, Custom House, San Francisco, plans dredging in vicinity of San Rafael.

BIDS DESIRED

Vt., **Johnsbury**—Post Office—Dec. 28, by Treas. Dept., Wash., D. C., 1 story, 61 x 69 ft. brick and tile, here. J. A. Wetmore, acting superv. archt.

N. Y., **Poughkeepsie**—Extension—Dec. 26, by Treas. Dept., Wash., D. C., extension to U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Dec. 6.

S. C., **Greenville**—Mailing Vestibule, etc.—Dec. 18 by Treas. Dept., Wash., D. C., new mailing vestibule, and fuel room beneath about 37 x 19 ft., brick exterior wall, nonfireproof interior, etc., in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Ga., **Savannah**—Dredging—Dec. 28, at office U. S. Engineer, dredging about 150,000 cu.yd. material in Harbor, here; adv. E. N.-R. Dec. 6.

Ala., **Mobile**—Remodeling, etc.—Dec. 17, by Treas. Dept., Wash., D. C., remodeling, changes, etc., at U. S. Marine Hospital, here. J. A. Wetmore, acting superv. archt.

Miss., **Vicksburg**—Steel Hulls—Jan. 10, at office U. S. Engineer, 2 steel maneuver boat hulls; adv. E. N.-R. Dec. 6.

Ky., **Addison**—Lock Gates—Jan. 3 at office U. S. Engineer, P. O. Box 72, Louisville, furnishing and erecting 2 mitering lock gates for Dam 45, Ohio River, here; adv. E. N.-R. Dec. 6. Noted Nov. 8.

Ky., **Louisville**—Metal Work—Dec. 29, at office U. S. Engineer, metal work for Dams 44 and 45, Ohio River; adv. E. N.-R. Dec. 6.

Ky., **Owensboro**—Lumber—Dec. 7, at office U. S. Engineer, P. O. Box 72, Louisville, furnishing approximately 150,000 ft. No. 1 common yellow pine, various sizes, here.

Neb., **Omaha**—Changes, etc.—Dec. 28, by Treas. Dept., Wash., D. C., changes in lobby screen and miscellaneous remodeling and repairs in U. S. Court House, Custom House and Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Dec. 6.

Mo., **Liberty**—Post Office—Jan. 2, by Treas. Dept., Wash., D. C., construction, complete incl. mbechanical equipment, U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Dec. 6.

Tex., **Paris**—Post Office and Court House—Dec. 27, by Treas. Dept., Wash., D. C., 1 story and basement, 88 x 109 ft., brick and stone, here. J. A. Wetmore, acting superv. archt.

Washington—Gates—Jan. 3, by Bureau of Recl., Denver, Colo., two 5 x 6 ft. high pressure emergency gates for Tieton Dam, Yakima Project, here. D. W. Davis, comr.

Wash., **Grays Harbor**—Power House—Dec. 11 at office Supt. of Lighthouses, 17th Dist., Portland, Ore., rein.-con. power house and rein.-con. shelter for fog signal at Grays Harbor Light Station, here.

Ore., **Portland**—Stone—Dec. 27, at office U. S. Engineer, stone for jetty at mouth of Umpqua River.

Calif., **Mare Island**—Fuel Oil Storage—Spec. 4717—Jan. 16 (extended date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., two 50,000 bbl. fuel oil tanks, motor driven centrifugal oil pumps, 3 brick pump houses and 1 heater house, etc., at Navy Yard, here. Noted Oct. 25.

BIDS RECEIVED

N. Y., **New York**—Dredging—U. S. Engineer, 2nd Dist., Army Bldg., dredging in Newark Bay, N. J., from G. H. Breymann & Bros., 17 Battery Pl., Area 1, $0.5475; Morris & Cummings Dredging Co., 17 State St., Area 2, $0.25; Atlantic Gulf and Pacific Dredging Co., 13 Park Row, Area 3, $0.2764. Noted Oct. 25.

Conn., **Mystic**—Post Office—Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile Post Office, here, from W. P. Thurston Co., Merchants Natl. Bank Bldg., Richmond, Va., $44,300. Noted Nov. 1.

Pa., **Pittsburgh**—Cement—U. S. Engineer, 103,000 bbl. cement for lock construction on Monongahela River, from Universal Portland Cement Co., Frick Bldg. Engrs. est. $275,000.

Ky., **Louisville**—Barges—U. S. Engineer, sixteen 6½ x 26 x 110 ft. steel barges, with cargo boxes, from Amer. Bridge Co., Ambridge, Pa., $256,550; two 7½ x 36 x 120 ft. steel barges with cargo boxes, from Nashville Bridge Co., foot of Shelby St., Nashville, Tenn., $57,440; two 5 x 25 x 100 ft. steel barges wthout cargo boxes, from C. Hegewald & Co., New Albany, Ind., $30,900. Noted Oct. 25.

O., **Gallipolis**—Post Office—Treas. Dept., Wash., D. C., for U. S. Post Office, here, from C. Weitz Sons Co., 713 Mulberry St., Des Moines, Ia., $50,500. Noted Nov. 1.

Ill., **Great Lakes**—Coal Bunkers, etc.—Spec. 4929—Bureau Yards & Docks, Navy Dept., Wash., D. C., coal bunkers and railroad siding at Naval Training Station, here, (1) work complete, from Newport News Contg. and Eng. Co., Law Bldg., Newport News, Va., (1) $14,480 (2) $10,980 (3) $3,500. Noted Nov. 22.

Porto Rico, San Juan—Quarters—Spec. 4909—Bureau Yards & Docks, Navy Dept., Wash., D. C., double quarters and auxiliary buildings, at Naval Radio Station, here, (1) work complete, from M. Benitiz Rexach, P. O. Box 905, (1) $17,100 (2) $900 (3) $2,500 (4) $2,100 (5) $2,400 (6) $3,000. Noted Nov. 8.

CONTRACTS AWARDED

N. Y., **New Rochelle**—Dredging—U. S. Engineer, Army Bldg., 39 Whitehall St., New York, dredging in Harbor, here, to Bridgeport Dredge and Dock Co., 1024 Main St., Bridgeport, Conn., $33,320. Noted Oct. 4.

Del., **Wilmington**—Dredging—U. S. Engineer, dredging in Tuckerton Creek, New Jersey, to Delaware Dredging Co., 139 South 3rd St., Phila., $5,400.

Va., **Norfolk**—Dredging—U. S. Engineer, dredging 69,000 cu.yd., in eastern branch Elizabeth River, in Harbor, here, to Norfolk Dredging Co., P. O. Box 494, $27,806. Noted Nov. 29.

Ill., **Great Lakes**—Rebuilding Laundry—Spec. 4918—Bureau Yards & Docks, Navy Dept., Wash., D. C., rebuilding laundry at Training Station, here, to G. I. Morgan, 342 Ridgeland Ave., Waukegan, $31,372. Noted Nov. 29.

Wash., **Tacoma**—Dredging—U. S. Engineer, Seattle, dredging 78,000 cu.yd. city waterway in Harbor, here, to Henry & McFee, Northern Life Bldg., Seattle, $21,450. Noted Nov. 1.

H. T., **Pearl Harbor**—Extension—Spec. 4910—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension for battery storage and overhaul, at Submarine Base, here, to A. Pope, 4722 15th St., N. W., Wash., D. C., $48,000 (180 days). Noted Nov. 15.

Unclassified

PROPOSED WORK

Memorial Arch—Middletown, Conn.—Soldiers Memorial Comn. plans memorial arch, Main St. $50,000. S. Mattes, chn.

Piers, Baltimore, Md.—Port Comn. plans 2 rein. con. piers, concrete pile foundation, 1800 ft. long, foot of McComas St. $1,750,000. Western Md. Ry., Standard Oil Bldg., lessee.

Parks—Charleston, W. Va.—See "Streets and Roads."

Steel Tipple and Coal Handling Equipment—Junior, W. Va.—West Virginia Coal & Coke Co., Norton, plans new steel tipple and coal handling equipment, here. $25,000.

Electrolier System—Torrence, W. Va.—City to vote on $75,000 bond issue for electrolier system.

Transmission Line—Murphy, N. C.—See "Dams."

Sea Wall — Biloxi, Miss. — See "Streets and Roads,"

Elimination of Grade Crossing—Jackson, Miss.—See "Streets and Roads."

Golf Course—Louisville, Ky.—Louisville Country Club, Upper River Road, plans new 18 hole golf course. $50,000.

Park—Louisville, Ky.—D. B. G. Rose, c/o Standard Printing Co., 218 1st St., plans amusement park at Fern Grove, near here. $50,000.

Athletic Field—Baraboo, Wis.—Park Bd. plans grading for athletic field. $25,000. H. Grotophorst, pres. Clas, Shepherd & Clas, 445 Milwaukee St., Milwaukee, engrs.

Gas Line—Texas—Brownwood Gas Co., Brownwood, plans 8 in. pipe line, 13 mi. long, from Janellen to Brownwood. $125,000.

Transmission Line—Texas—Texas Power & Light Co., Interurban Bldg., Dallas, plans transmission line from Corsicana to Athens and Tyler. $300,000.

Grandstands—Austin, Tex.—University of Texas making plans grandstands on Clarke Field, 1st unit in stadium to seat 40,000. $30,000. H. M. Greene Co., North Texas Bldg., Dallas, engrs.

Golf Course, etc.—Dallas, Tex.—Dallas Country Club, Beverly Dr., plans improvements to golf course and grounds, incl. drives, walks, etc. $100,000. Engineer not announced.

Park Improvements—Ft. Worth, Tex.—Plans election to vote on $500,000 bonds, park improvements. D. L. Lewis, city engr.

Loading Platform—Bellingham, Wash.—See "Buildings."

Port Development — Everett, Wash. — Voters of Port District will vote Dec. 1 on comprehensive scheme of port development. Tentative plan provides for purchasing 10-

Unclassified (Continued)

acre tract for proposed terminals, securing land for ferry landing, acquisition of 1,800 acres of tidelands outside jetty, and dredging operations on Snohomish River.

Terminals, etc.—Seattle, Wash.—Port of Seattle purchased Skinner & Eddy wartime shipyard site, etc., and will build intercoastal terminals, with 2 large piers and warehouse. G. F. Nicholson, 2727 33rd St. S., ch. engr.

Grade Separation—Yakima, Wash.—City had plans prepared for grade separations on Walnut St., 2 underneath driveways, each 19 ft. wide and 2 sidewalks each 6 ft. wide, with clearance of 10 and 9 ft. respectively below tracks. C. F. Wilson, city engr.

Fill—Alameda, Calif.—Neptune Beach Co., Central and Webster Sts., plans placing 100,000 cu.yd. fill in approximately 16 acres of land projecting into San Francisco Bay from Washington Park to 6th St.

Transmission Lines—Modesto, Calif.—Modesto Irrigation Dist. to vote on $500,000 bond issue for completion Don Pedro power distributing system. H. Storrs, ch. engr. Noted July 12.

Pier, etc.—Oakland, Calif.—See "Excavation, Drainage, Irrigation."

Electrolier Lighting System—Sacramento, Calif.—City plans ornamental electric electrolier lighting system on portions of 12th and I Sts., incl. foundations, lamps, globes, switches, wiring, conduits, etc. $25,000.

Grain Terminal—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., plans grain terminal, Islais Creek. $325,000. F. G. White, ch. engr.

Tunnel—Mexico—See "Bridges."

BIDS DESIRED

Steel Framing and Rolling Doors—New Orleans, La.—Dec. 20, by Bd. Port Comrs., 200 New Court Bldg., structural steel framing for shed and steel rolling doors; adv. E. N.-R. Dec. 6.

Foundation—Rapid City, S. D.—Dec. 12, by State Cement Comn., concrete foundations for 50 x 72 ft. coal mill building, 30 x 72 ft. crusher building, also structural steel and conveyor gallery, 350 ft. long. J. C. Buckbee Co., 1733 First Natl. Bank Bldg., Chicago, engr.

BIDS RECEIVED

Special Work—New York, N. Y.—Transit Comn., 49 Lafayette St., Nov. 30, special work (Order 23) for Lenox Ave. and 148th St. Yard, from Bethlehem Steel Corp., 25 Bway., $12,544. Noted Nov. 22.

Foundation, etc. — Minneapolis, Minn. — Bd. Educ., Nov. 26, foundation and first floor slab for 1 story and basement, 150 x 300 ft. school, rein.-con. and brick, Mississippi River Blvd., from Manly Jackson Constr. Co., 124 South 8th St., $21,600. Total cost $200,000. Noted Nov. 22 under "Buildings."

Sluice Gates—Exchequer, Calif.—Directors Merced Irrigation Dist., Merced, 2 sluice gates, 277 static head operated under 100 ft., 28-30 ft. to discharge, 6 ft. diam. sluiceway, for Exchequer Dam, here, from J. Hendy Iron Wks., 75 Fremont St., San Francisco, (1) sluice gates with equipment $4,390 (2) discharge castings $2,575. Noted Nov. 8.

CONTRACTS AWARDED

Airplant Hangar—Hartford, Conn.—Municipal Aviation Comn., 60 x 120 ft. steel hangar, to Berlin Constr. Co., Berlin. Noted Nov. 1.

Dock, Retaining Wall, etc.—Creighton, Pa. — Pittsburgh Plate Glass Co., Frick Bldg., Pittsburgh, dock retaining wall, etc., here, 7,000 cu.yd. concrete, etc., to Dravo Contg. Co., Diamond Bldg., Pittsburgh. Engrs. est. $75,000.

Retaining Wall—Emsworth, Pa.—Pennsylvania R.R., Penn Sta., Pittsburgh, 700 ft. retaining wall along Ohio River, here, to Vang Constr. Co., Standard Life Bldg., Pittsburgh, $25,000.

Electric Fan and Ventilating System—Phila., Pa.—Phila. & Reading R.R., Reading Terminal, installing electrical fan and ventilating system in Mahanoy Tunnell, to Penn Power & Light Co., Hauto, $100,000.

Banquette Work, etc.—Clarksdale, Miss.—Yazoo-Mississippi Delta D. D., 75,000 cu. yd. banquette work and 10,000 cu.yd. topping, to G. L. Williams, Exch. Bldg., Memphis, Tenn., $0.38 per cu.yd. Noted Oct. 25.

Oil Well—Hammond, La.—Indian Bayou Oil & Gas Co., drilling oil well, 7 mi. from here, to F. Kyle, Shreveport, $25,000.

Dock—Bellaire, O.—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., dock on Ohio River, here, to Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa. Engrs. est. $25,000.

Okla., Blanco — Pittsburgh Co., (McAlester) 140 ft. steel truss with concrete trestle approaches, 165 cu.yd. concrete, 3,800 cu.yd. earth approach and fill, to Campbell Bros., 1838 Walnut St., Kansas City, Mo., $28,635.

Golf Course—Yosemite Valley, Calif.—See "Buildings."

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., will construct 15,721 ft. 4 and 6 in. c.i. gas mains in Chambord, Bourbonniere, Ducharme, Amherst, Bellechasse, Belanger, Lafontaine and St. Columbian Sts., Lasalle and Avenue Rds., 5th, Mariette, 10th, Stuart, Picton, Des Marchais and 2nd Aves., by day labor. $37,936. E. S. Stanton, supt. gas distribution.

Pier—Toronto, Ont.—R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, reconstructing eastern pier of Eastern Harbor, concrete pier on wood piles, to Port Arthur Constr. Co., 36 Toronto St., $48,000.

Materials and Equipment

PROPOSED WORK

Snow Loader, etc. — Hartford, Conn. — Street Dept., Municipal Bldg., plans to purchase snow loader, similar to Barber-Greene type, $6,000; set of bucket loaders to be attached to various equipments, $2,000; catch basin cleaner; scarifier road roller.

Road Working Tools—Brooksville, Fla.—Hernando Co. plans election to vote on $15,000 bonds for road working tools.

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Vernon Co. $7,000 incl. crushing outfit, graders, etc., A. Ristow, Viroqua, comr.; Pierce Co. $20,000 incl. tractor, grader and 2 trucks, C. F. Kenall, Ellsworth, comr.; Kenosha Co. $15,000 incl. 2 trucks, three 3 way drags, one stone crusher, small clam loader, J. F. Herzog, Kenosha, comr.; Shawano Co. $20,000 incl. stone crusher, screening plant and 2 trucks, W. F. Meyer, Shawano, comr.; Green Lake Co. $5,000, D. C. Williams, Green Lake, comr.; Richland Co. $14,000 incl. belt conveyor, 2 trucks, 1 tractor, 8 patrol graders, 12 drags, 1 small air compressor, A. V. Robinson, Richland Center, comr.; Lafayette Co. $11,000, G. H. Priestley, Darlington, comr.; Crawford Co. $8,000, J. N. Campbell, Bell Center, comr.; Winnebago Co. $7,500 incl. truck and tractor, etc., J. Binning, Oshkosh, comr.; Waushara Co. $6,000 incl. gravel crushing machinery, graders, drags, etc., F. Grimm, Wautoma, comr.; Dunn Co. $9,000 incl. patrol graders, F. Stewart, Menomonie, comr.; Pepin Co. $4,000, G. Goss, Durand, comr.; Adams Co. $4,000, J. A. McGregor, Friendship, comr.; Price Co. $14,400 incl. crusher and patrol graders, B. M. Griffin, Phillips, comr.; Oconto Co. $5,000 road machinery, $8,000 crushing plant and $5,000 machine shop, E. W. McAllister, Oconto, comr.; Walworth Co. $5,000, H. J. Peters, Elkhorn, comr.; Marathon Co. $14,000 incl. 12 ft. grader, patrol graders, gravel crusher and screening plant, H. J. Vogt, Wausau, comr.; Bayfield Co. $10,000, J. Friberg, Washburn, comr.; Taylor Co. $9,000, C. Kelnhofer, Medford, comr.; Marquette Co. $7,500 incl. crusher and truck, H. Schmitz, Montello, comr.; Grant Co. $10,000 incl. 15 patrol graders, 6 drags, 6 wheel scrapers, 6 slip scrapers, 6 plows, shop equipment and small tools, H. Mink, Lancaster, comr.; Calumet Co. $16,000 incl. patrol graders, etc., J. A. Gillis, Chilton, comr.; Iowa Co. $3,000, C. Wonn, Dodgeville, comr.; Jackson Co. $4,000 incl. 12 ft. grader, O. Overlien, Black River Falls, comr.; Marinette Co. $18,000, A. Eklund, Marinette, comr.; Chippewa Co. $12,000, P. O. Lodrantz, Chippewa Falls, comr.; Manitowoc Co. $25,000 incl. tractor, crusher, 3 patrol graders, one heavy grader, 5 wheelers and 1 patrol tractor, J. Connell, Manitowoc, comr.; Racine Co., 1 snow plow, W. A. Bechthold, Racine, comr.; Rock Co. $4,000, C. E. Moore, Janesville, comr.

Water Pipe—Eureka, Calif.—See "Waterworks."

Sand and Gravel Plant Equipment — Fresno, Calif.—See "Industrial Works."

Asphalt, Cement, etc.—London, Ont.—W. A. Near, city engr., soon takes bids for 1924 supplies, incl. asphalt, cement, broken stone, c. i. castings, road oil and general supplies.

BIDS DESIRED

Cement—Brooklyn, N. Y.—Dec. 12, by E. Riegelmann, boro pres., Boro Hall, 3,000 bbl. Portland cement.

Dump Cars—Bluefield, W. Va.—H. M. Waugh, in market for ten 12 cu.yd. dump cars.

Graders, etc.—Georgia—Dec. 14, by W. R. Neel, engr., State Hy. Dept., at East Point, twenty-eight 8 ft., nine 10 ft. and six 12 ft. road graders, equal to Adams, Russell, Stockland or better; forty-four 1 ton trucks with gravity dump bodies, equal to Ford 1 ton trucks equipped with Perry-Mattin dump bodies or better, 20 back slopers for 10 ft. graders, 15 back slopers for 12 ft. graders and 16 scarifier attachments for 12 ft. graders, equal to Adams, Russell, Stockland or better; twenty-five 2 ton tractors equal to Holt T-35 or better; twenty 5 ton tractors, equal to Bert. Hult or better; sixty 7 ft. three blade road drags, equal to Adams, Russell or better; twenty complete circles with blade for maintainors, equal to Adams, Russell or better. Give prices f.o.b. Atlanta, Macon, Augusta, Albany, Savannah and Waycross.

Steam Shovel—Gadsden, Ala.—Comrs. Etowah Co. in market for steam shovel.

Steam Shovel—Columbus, O.—Yale Ave. Constr. Co., 146 Yale Ave., in market for one 2½ cu.yd. steam shovel and hoisting equipment. L. Gentile, mgr.

Steam Shovel—New London, O.—E. Biglow Co., in market for 1 steam shovel about 2½ tons capacity.

Crane—Detroit, Mich.—G. J. Finn, comr. Purchases & Supplies, 700 Marquette Bldg., taking bids one 20 ton steam locomotive crane, for Bd. Water Comrs., East Jefferson St.

Posts—Springfield, Ill.—Dec. 10, by Dept. Pub. Wks. and Buildings, Div. Purchases and Supplies, Springfield, 4,825 creosoted Y. P. posts.

Dump Cars, etc.—St. Paul, Minn.—Dec. 11, by H. W. Austin, city purch. agt., 10 steel dump cars, one thousand six hundred and eighty 15 ft. steel tracks, one 4 ton gasoline locomotive, 2 complete turnouts, 2 right hand and 2 left hand switches, 40 tons ferrous sulphate. G. M. Shepard, city engr.

Concrete Mixer—Independence, Kan.—A. G. Sherwood, in market for concrete mixer and grader for road work.

Tractors, etc.—Texas—Dec. 29, by State Hy. Dept., c/o J. W. Francis, equipment engr., Austin, forty 10 ton, thirty 5 ton and two hundred 2 ton tractors; three hundred 3 ton, twenty-five 3 ton, and two hundred seventy-five 1 ton trucks; fifty 4 wheel and twenty-five 2 wheel trailers; 10 water wagons; two hundred one man maintainers with engines; 25 pavement heaters, 25 large and 25 small asphalt heaters; forty 12 ft. graders with back sloper and scarifiers, twenty 10 ft. and two hundred 7 ft. graders with black sloper and extension blade; five hundred 4 ft. fresnos; five hundred 3½ ft. drag slips. State will take over maintenance of all designated State Highways on January 1 and above will be used for that purpose.

Grader—Dallas, Tex.—Dec. 17, by Comrs. Dallas Co., one or more 12 ft. graders with back slope attachments, leaning wheel or extension axle, engine hitch, for Rd. Dist. 1. Nagle Witt & Rollins, Court House, co. engrs.

Shell—Houston, Tex.—Dec. 17, by Comrs. Harris Co., 10,000 cu.yd. shell for road construction. $75,000. Howe & Wise, co. engrs.

Steam Shovel—San Antonio, Tex.—Street Dept. taking bids steam shovel. D. D. Harrigan, city engr.

Insulators—San Francisco, Calif.—See "Waterworks."

Cletrac—San Jose, Calif.—Supervs. Santa Clara Co., receiving bids 1 Cletrac, equipped for road use, f.o.b. Gilroy, for Rd. Dist. 1.

Ties—Montreal, Que.—Canadian Pacific Ry., Windsor St. Sta., taking bids 6,000,000 ties. $4,000,000. T. Walklate, genl. tie agt.

CONTRACTS AWARDED

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th and Bway., steel for bridge work, 800 tons to Virginia Bridge & Iron Co., Roanoke, Va., 300 tons to Amer. Bridge Co., Ambridge, Pa., 150 tons to Louisville Bridge & Iron Co., 11th and Oldham Sts., Louisville, Ky.

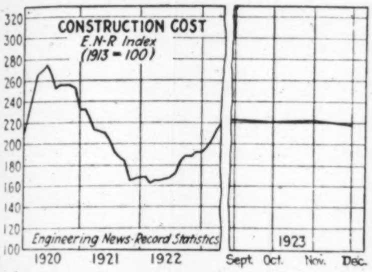
CONSTRUCTION NEWS

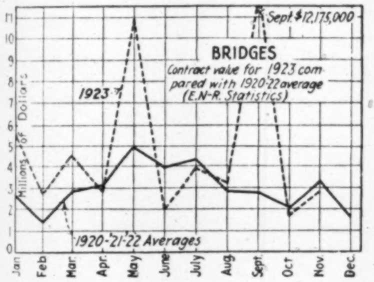
Engineering News-Record, December 13, 1923

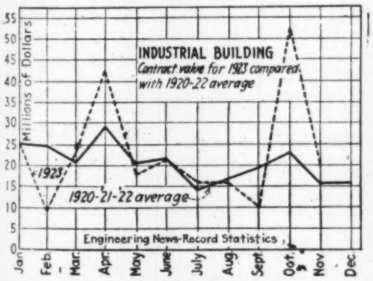
The Construction Barometer

Estimated Value of 1923 Contracts Exceeds Five Billion

THE total value of contracts awarded on large engineering construction projects in the United States, as published in *Engineering News-Record,* reached $1,807,040,000 for the eleven months of 1923. Contracts for the first week in December amounted to $31,102,000. An estimated total for December, 1923, would therefore exceed $124,000,000. The estimated yearly total will probably reach $1,931,448,000 for large projects above the *E. N.-R.* minimum in each class of construction. All construction, exclusive of residential, will probably exceed $3,862,000,000. Residential building alone amounted to $1,587,785,400, according to F. W. Dodge figures for the eleven months of the current year. An estimated total of residential construction would therefore amount to over $1,700,000,000 for the year 1923. This amount, added to the $3,862,000,000 non-residential construction, would make a grand total of about $5,600,000,000 for all classes of construction for the entire year, or an increase of about 25 per cent above the total for 1922.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Nov. 22	$10,461,000	$9,259,000	$19,720,000
Nov. 29	10,298,000	25,020,000	35,318,000
Dec. 6	9,806,000	20,846,000	30,652,000
3 Weeks	$30,565,000	$55,125,000	$85,690,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

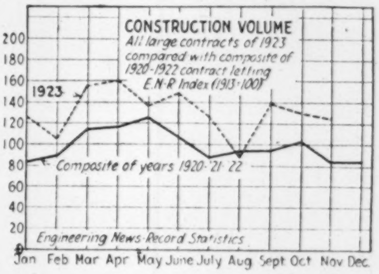
Week Ended	No.	Public Work	No.	Private Work
Nov. 22	10	$2,841,000	21	$5,830,000
Nov. 29	10	2,165,000	30	12,810,000
Dec. 6	20	5,034,000	49	14,770,000
3 Weeks	40	$10,040,000	100	$33,410,000

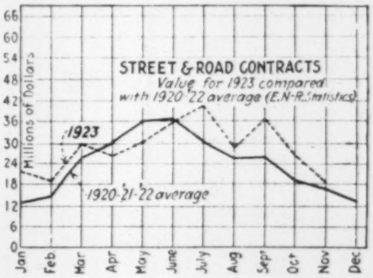
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

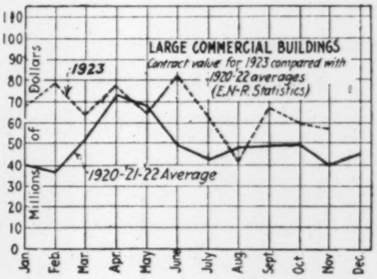
Week Ended	Private	Public			
		All	Streets and Roads	Waterworks and Sewers	All Buildings
Nov. 22	29	185	47	31	61
Nov. 29	30	176	57	36	51
Dec. 6	40	183	58	27	61

BASIC PRICES STEADY DURING LAST TWO WEEKS

	Quoted on Dec. 13, at	Price was	On
Structurals, Pittsburgh, 100 lb......	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N. Y., M.ft....	57.00	61.00	Nov. 29
Fir, San Fran., M.ft..	41.00	42.00	Sept. 27
Common labor, hr...	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Dec. 17	Elizabethtown, Ky.	Nov. 29
Dec. 17	Windsor (New Windsor P. O.), Ill.	Nov. 22
Dec. 17	Richmond, Va.	Dec. 6
Dec. 17	Oakwood (Dayton P. O., O.	Dec. 13
Dec. 17	Madison, S. D.	Dec. 13
Dec. 18	Laurinburg, N. C.	Nov. 22
Dec. 18	Cincinnati, O.	Dec. 13
Dec. 19	San Francisco, Calif.	Dec. 6
Dec. 19	Scituate (North Scituate P. O.), R. I.	Nov. 22
Dec. 19	Denver, Colo.	Dec. 13
Dec. 19	New York, N. Y.	Dec. 13
Dec. 20	Glendale, Calif.	Dec. 13
Dec. 21	Denver, Colo. .... Adv. Dec. 6 and 13.	Dec. 6
Dec. 21	Greensboro, N. C.	Dec. 13
Dec. 22	Carlisle, Ia.	Nov. 29
Dec. 22	Corsicana, Tex.	Dec. 13
Dec. 23	New Holstein, Wis.	Oct. 11
Dec. 27	Ford, Ont. 4............... Adv. Dec. 13.	Dec. 13
Jan. 3	Erie, Pa. .... Adv. Dec. 6 and 13.	Dec. 6

SEWERS

Bids Close		See Eng. News-Record
Dec. 15	Lewistown, Ill.	Dec. 13
Dec. 17	Bloomfield, N. J.	Dec. 13
Dec. 18	Laurinburg, N. C.	Nov. 29
Dec. 18	Toledo, O.	Dec. 6
Dec. 19	New York, N. Y.	Dec. 13
Dec. 19	Brooklyn, N. Y.	Dec. 13
Dec. 20	Los Angeles Calif.	Dec. 13
Dec. 21	Marlow, Okla.	Dec. 13
Dec. 23	New Holstein, Wis.	Oct. 11

BRIDGES

Bids Close		See Eng. News-Record
Dec. 18	Wisconsin	Dec. 13
Dec. 19	Indianapolis, Ind.	Nov. 29
Dec. 19	Delaware	Nov. 29
Dec. 20	Correctionville, Ia.	Nov. 22
Dec. 20	Audubon, Ia.	Dec. 6
Dec. 24	California	Dec. 6
Dec. 26	Trenton, N. J. .... Adv. Dec. 13.	Dec. 13
Dec. 28	New Jersey .... Adv. Dec. 13.	Dec. 13
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Jan. 7	Los Angeles, Calif.	Nov. 29

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Dec. 18	Eureka, Ill.	Dec. 13
Dec. 21	Corpus Christi, Tex.	Dec. 6
Dec. 27	St. Catharines, Ont.	Dec. 13
Dec. 27	Tracy, Calif.	Dec. 13

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 17	East Aurora, N. Y.	Nov. 29
Dec. 17	Grenada, Miss.	Nov. 29
Dec. 17	Marlow, Okla.	Dec. 13
Dec. 18	Indiana	Dec. 6
Dec. 18	Louisiana	Dec. 6
Dec. 18	Rushville, Ind.	Nov. 29
Dec. 18	Angleton, Tex.	Nov. 29
Dec. 18	Michigan	Nov. 29
Dec. 18	Belzoni, Miss.	Nov. 22
Dec. 18	Massachusetts	Dec. 13
Dec. 18	La Porte City, Ia.	Dec. 13
Dec. 18	St. George, N. Y.	Dec. 13
Dec. 19	Sierra Blanca, Tex.	Nov. 29
Dec. 19	Ebensburg, Pa.	Dec. 6
Dec. 19	San Francisco, Calif.	Dec. 13
Dec. 19	Galesburg, Ill.	Dec. 13
Dec. 19	Ebensburg, Pa.	Dec. 13
Dec. 19	Denver, Colo.	Dec. 13
Dec. 19	New York, N. Y.	Dec. 13
Dec. 20	Lakeland, Fla.	Dec. 6
Dec. 20	Hallettsville, Tex.	Dec. 6
Dec. 20	Corsicana, Tex.	Dec. 6
Dec. 20	Connecticut	Dec. 13
	Adv. Dec. 13.	
Dec. 20	Toledo, O.	Dec. 13
Dec. 20	New York, N. Y.	Dec. 13
Dec. 21	Collins, Miss.	Nov. 29
Dec. 21	Topeka, Kan.	Dec. 6
Dec. 21	Corpus Christi, Tex.	Dec. 6
Dec. 21	Uvalde, Tex.	Dec. 6
Dec. 21	Corpus Christi, Tex.	Dec. 13
Dec. 21	La Grange, Tex.	Dec. 13
Dec. 21	Decatur, Tex.	Dec. 13
Dec. 21	Tampa, Fla.	Dec. 13
Dec. 21	Buffalo, N. Y.	Dec. 13
Dec. 22	Hemphill, Tex.	Dec. 6
Dec. 24	San Diego, Calif.	Dec. 13
Dec. 26	St. Louis, Mo.	Nov. 29
Dec. 27	Alabama	Dec. 6
Dec. 27	Somerset, Pa.	Dec. 6
	Adv. Dec. 6 and 13.	
Dec. 27	Beaufort, S. C.	Dec. 13
Dec. 28	Virginia	Dec. 13
	Adv. Dec. 13.	
Dec. 31	California	Dec. 13
Jan. 4	Alabama	Dec. 13
Jan. 7	Vicksburg, Miss.	Dec. 13
Jan. 14	Oilton, Okla.	Dec. 13
Jan. 15	Michigan	Dec. 6
Jan. 15	Michigan	Dec. 13

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Dec. 15	Toledo, O.	Dec. 13
Dec. 15	Crystal Falls, Mich.	Dec. 13
Dec. 18	Palmyra, N. Y.	Nov. 22
	Adv. Nov. 22 to Dec. 13.	
Dec. 18	Waterbury, Conn.	Dec. 6
Dec. 20	Abilene, Tex.	Dec. 13
Dec. 21	Ft. Worth, Tex.	Dec. 6
Dec. 27	Louisville, Ky.	Dec. 13
Apr. 30	Wellington, New Zealand	Dec. 6
	Adv. Dec. 6 and 13.	

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 14	Niagara Falls, N. Y.	Dec. 13
Dec. 15	Durham, N. C.	Dec. 6
Dec. 15	Hightstown, N. J.	Dec. 13
Dec. 15	Detroit, Mich.	Dec. 13
Dec. 16	Indiana, Pa.	Dec. 13
Dec. 17	Crown Point, Ind.	Dec. 6
Dec. 17	Camden, N. J.	Nov. 29
Dec. 17	Wash., D. C.	Nov. 29
Dec. 17	Memphis, Tenn.	Dec. 6
Dec. 17	Camden, N. J.	Dec. 13
Dec. 17	Fultonville, N. Y.	Dec. 13
Dec. 18	Ironwood, Mich.	Nov. 15
Dec. 18	Buffalo, N. Y.	Dec. 6
Dec. 18	Phila., Pa.	Dec. 13
Dec. 18	Manchester, Conn.	Dec. 13
Dec. 19	Falls City, Neb.	Nov. 22
Dec. 19	Reading, Pa.	Dec. 13
Dec. 20	Sioux City, Ia.	Nov. 15
Dec. 20	Duluth, Minn.	Nov. 29
Dec. 20	Newark, N. J.	Dec. 6
Dec. 20	Baltimore, Md.	Dec. 13
Dec. 20	Ann Arbor Mich.	Dec. 13
Dec. 21	Wilmington, N. C.	Dec. 6
Dec. 21	Wash., D. C.	Dec. 6
Dec. 21	New Orleans, La.	Nov. 29
Dec. 21	Charleston, W. Va.	Nov. 15
Dec. 21	East Boston (Boston P. O.), Mass.	Nov. 29
Dec. 21	Mansfield, O.	Dec. 13
Dec. 22	Newport, Ind.	Nov. 29
Dec. 27	Brooklyn, N. Y.	Dec. 6
Dec. 27	New Orleans, La.	Dec. 6
Dec. 27	Buffalo, N. Y.	Dec. 13
Dec. 28	Morgantown, W. Va.	Nov. 15
Dec. 30	Ft. Smith, Ark.	Dec. 6
Dec. 31	Bryn Mawr, Pa.	Dec. 13
Dec. 31	Phila., Pa.	Dec. 13
Jan. 1	Williamson, W. Va.	Nov. 22
Jan. 2	Bloomington, Ind.	Nov. 15
Jan. 3	Columbia, Mo.	Dec. 13
Jan. 9	Denver, Colo.	Dec. 13
Jan. 10	Birmingham, Ala.	Dec. 13
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	Galveston, Tex.	Nov. 29
Jan. 14	Schuylerville, N. Y.	Dec. 13
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 4	Urbana, Ill.	Dec. 13
	Adv. Dec. 13.	

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 14	Dredging, etc.—New York, N. Y	Nov. 15
Dec. 15	Operating Machinery—Louisville, Ky.	Nov. 22
	Adv. Nov. 22 to Dec. 13.	
Dec. 17	Remodeling, etc. — Mobile, Ala.	Dec. 6
Dec. 18	Mailing Vestibule, etc.—Greenville, S. C.	Dec. 6
Dec. 18	Remodeling — Houston, Tex.	Dec. 13
Dec. 19	Dredging — Wilmington, N. C.	Nov. 22
	Adv. Nov. 22 to Dec. 13.	
Dec. 19	Generator, Motor, etc.—Huntington, W. Va.	Nov. 29
Dec. 19	Towboat—Memphis, Tenn.	Nov. 22
	Adv. Nov. 22 to Dec. 13.	
Dec. 19	Bungalows—Wash., D. C.	Nov. 22
Dec. 19	Road—Oregon	Dec. 13
Dec. 26	Extension—Poughkeepsie, N. Y.	Dec. 6
	Adv. Dec. 6 and 13.	
Dec. 27	Post Office, etc.—Paris, Tex.	Dec. 6
Dec. 27	Stone—Portland, Ore.	Dec. 6
Dec. 28	Post Office—St. Johnsbury, Vt.	Dec. 6
Dec. 28	Dredging—Savannah, Ga.	Dec. 6
	Adv. Nov. 29 to Dec. 13.	
Dec. 28	Changes, etc. — Omaha, Neb.	Dec. 6
Dec. 29	Metal Work—Louisville, Ky.	Dec. 6
	Adv. Dec. 6 and 13.	
Dec. 29	Hospital—Livermore, Calif.	Dec. 13
Jan. 2	Post Office—Liberty, Mo.	Dec. 6
	Adv. Dec. 6 and 13.	
Jan. 3	Gates—Washington	Dec. 6
Jan. 3	Lock Gates—Addison, Ky.	Dec. 6
	Adv. Dec. 6 and 13.	
Jan. 3	Post Office and Custom House —Mineral Point, Wis.	Dec. 13
Jan. 10	Steel Hulls — Vicksburg, Miss.	Dec. 6
	Adv. Dec. 6 and 13.	
Jan. 16	Fuel Oil Storage—Mare Island, Calif.	Dec. 6
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15

UNCLASSIFIED

Bids Close		See Eng. News-Record
Dec. 17	Bulkhead—Gresham, Ore.	Dec. 13
Dec. 18	Test Borings—Phila., Pa.	Dec. 13
Dec. 20	Steel Frame and Rolling Doors —New Orleans, La.	Dec. 6
Dec. 20	Pavilions—New York, N. Y.	Nov. 29
Dec. 24	Heating and Ventilating Apparatus—Cincinnati, O.	Nov. 29
Dec. 26	Culverts and Extensions — Waterloo, Ia.	Dec. 13
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 3	Ferry Boats—New Orleans, La.	Dec. 13
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13
	Adv. Dec. 13.	

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Dec. 20	Tractor—Crookston, Minn.	Dec. 13
Dec. 21	Clam Shell Bucket—Los Angeles, Calif.	Dec. 13
Dec. 21	Paving Blocks—New York, N. Y.	Dec. 13
Dec. 29	Tractors, etc.—Texas	Dec. 6

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., La Salle — Plans 100,000 gal. standpipe on Point Ave. $24,000. Will mature in spring.

N. J., Asbury Park—Plans extensions and additions to water system, incl. fittings, valves, hydrants, etc. $17,000. R. Bartley, Jr., Asbury Park, engr.

N. C., Conover—Making plans and takes bids within 30 days water and sewerage system. Spoon & Lewis, Greensboro, consult. engrs.

N. C., Old Fort—See "Industrial Works."

Ky., Morgansfield—Takes bids soon pipe line system to Ohio River for water supply. $100,000. Noted Oct. 18.

Ill., Deerfield—Plans mains in Brier Woods Subdivision. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Mt., Prospect—Plans extension to mains. $30,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Rushville—Voted $37,000 bonds to purchase c.i. pipe, etc.

Wis., Eau Claire — Having preliminary plans prepared 2½-3 mi. 6-8 in. c.i. mains in various streets. $25,000. J. T. Hurd, city engr.

Wis., Portage—C. L. Loomis, city clk., soon takes bids water purification plant, new pumping station, etc. $100,000. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, engrs.

Kan., Olathe—City plans new pump and pipe lines, etc. $25,000. E. T. Archer Eng. Co., 612 New England Bldg., Kansas City, Mo., engrs.

Kan., Topeka — City having preliminary plans prepared 4 mi. 10 to 12 in. c.i. water pipe, approximately 200 tons pipe. Will be laid early in 1924. W. Stanfield, City Hall, Comr.

Mo., Ava—Dec. 21, to vote on $35,000 bonds for reservoir, water tower, distribution mains, etc. Elston, Axon & Russell, 404 McDaniel Bldg., Springfield, archts. Noted Nov. 8.

Mo., Hannibal—Voted $400,000 bonds new pumps and motors, filtration plant, high service reservoir and new mains, etc. D. H. Maury, 304 South Dearborn St., Chicago, engr. Noted Nov. 8.

Ark., Morrilton—Arkansas Light & Power Co., Pine Bluff, plans to clean 25 m.g. natural reservoir, construct rein.-con. coagulating basin with 2 gravity filters, rein.-con. clear well together with necessary pumps and piping incl. about 550 cu.yd. rein.-con. work. Work will probably be done by day labor. Private plans. $50,000.

Tex., Corsicana—Plans 30 x 60 ft. pumping plant, two 150 hp. Fairbanks-Morse centrifugal engines, etc. $15,000. W. W. McClendon, city engr.

Tex., Port Arthur — See "Streets and Roads."

Okla., Okemah—Dec. 18, to vote on $65,000 bonds new filter unit, 6,000 ft. 10 in. c.i. pipe line, marine engine, clear well and reservoir. Holway Eng. Co., 505 Wright Bldg., Tulsa, engrs. Noted Oct. 25.

Okla., Oklahoma City — City voted $1,600,000 bond issue for 350 ft. extension to main dam, new control works, bank widening and gates for control, 60,000 concrete, 150,000 excavation. B. M. Hart, City Hall, engr. Noted Nov. 29.

Wash., Centralia — City Council plans auxiliary pumping and filtration plant on Skookumchuck River, 1,500,000 g.p.d. capacity (ultimately 6 m.g.p.d.). $40,000. N. W. Avery, Centralia, engr. Noted Nov. 22.

Calif., Fresno—See "Streets and Roads."

Calif., Marysville—Yuba Development Co., Hobart Bldg., San Francisco, having plans prepared for Narrows Project on Yuba River, incl. storage dam 150 ft. high above stream bed and 65 ft. below, 825 ft. long on crest, 200 ft. long on bottom, involving 97,000 cu.yd. concrete; 1,700 ft. concrete lined pressure tunnel, 15 in. diam.; 300 ft. steel penstock; power plant to develop 17,000 hp., etc. Constant Angle Arch Dam Co., Hobart Bldg., San Francisco, engrs.

Calif., Napa — City had plans prepared laying approximately 25,000 ft. 14 in. pipe for distribution of water from Milliken

Waterworks (Continued)

Canyon Municipal Water project. A. Kempkey, Hobart Bldg., San Francisco, consult. engr.

BIDS DESIRED

N. Y., New York — Dec. 19, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Edgewater Rd., Coster and Longfellow Sts., Oak Point, Viele, Brinsmade, Calhoun, Miles, Quincy, Revere, Sampson and Swinton Aves. Former bids rejected. Noted Dec. 6.

N. C., Greensboro — Dec. 21, by P. C. Painter, city mgr., trenching, tunneling, laying 36,450 ft. 20-30 in. c.i. pipe, and furnishing all material except c.i. pipe, specials and valves.

O., Cincinnati—Dec. 18, Director Pub. Serv., c.i. pipe and castings for water distribution system in Winton Rd., Froome and Mitchell Aves. $100,000. J. A. Hiller, engr.

O., Oakwood (Dayton P. O.)—Dec. 17, at office of A. O. Davison, clk. Bd. Trustees of Pub. Affairs, of Village of Oakwood, 413 Schwind Bldg., Dayton, standpipe, 70 ft. high, 35 ft. in diameter, incl. necessary pipe connections, alternate bids at same time for tower tank, 65 ft. high, 325,000 gal. capacity; also 2 extensions to water system, 4,025 lin.ft. 6 in. pipe, here. Noted April 19.

Wis., Wisconsin Rapids—Water & Light Comn., c/o C. Gross, chn., 344 2nd Ave., taking bids 100 g.p.m. centrifugal motor driven pump. Private plans.

S. D., Madison—Dec. 17, furnishing 500 lin.ft. 4 in., 1,525 lin.ft. 6 in., 325 lin.ft. 10 in. c.i. pipe, 3,100 lb. fittings, five 4 in. and seven 6 in. valves with street boxes. C. A. Trimmer, city engr.

Tex., Corsicana—Dec. 22, by W. W. McClendon, city engr., spillway incl. 1,800 yd. concrete and 200,000 lb. reinforcing steel. $28,000. Noted Nov. 29.

Colo., Denver—Dec. 19, by Bd. Water Comrs., twenty-two 30-48 in. hub end valves, bids on 3 propositions, (1) hand operated (2) hydraulically operated (3) electrically operated; 1,198 pieces 20-24 in. Class B Bell and Spigot c.i. pipe, etc. $89,082; 2,272 pieces 36-48 in. Class B879I Class B Bell and Spigot c.i. pipe, 122 tons specials 30-48 in., $412,572. B. Lowther, 1509 Cleveland Pl., engr.

Calif., Glendale — Dec. 20, by City Trustees, earth reservoir, 15 m.g. capacity, part plain excavation and part embankment, lined with 6 in. rein.-con. or wire mesh. B. F. Dupuy, city engr.

Calif., Montecito—Trustees Montecito Co. Water Dist. taking bids excavating and laying 15,976 ft. 12 in., 4,550 ft. 10 in., 21,000 ft. 8 in. and 20,150 ft. 6 in. c.i. pipe, and one hundred and seventy-four 4 in. fire hydrants. Leeds & Barnard, Central Bldg., Los Angeles, consult. engrs.

Ont., Ford — Dec. 27, by R. B. Braid, secy. Essex Border Utilities Comn., Heintzman Bldg., Windsor, filter, reservoir, office building, pipe, etc., for water purification plant, here. J. C. Keith, ch. engr.; adv. E. N.-R. Dec. 13.

BIDS RECEIVED

O., Toledo—Director Pub. Serv., Dec. 4, synchronous motor driven centrifugal pump and appurtenances, 35 m.g. daily capacity, from Dravo-Doyle, Leader News Bldg., Cleveland, $25,222. Engrs. est. $18,600. Noted Nov. 22.

Calif., Pasadena—City Water Dept., 12,000 ft. 4 in., 16,000 6 in., 16,000 8 in. and 4,000 ft. 12 in. Class B c.i. pipe, and 25 tons c.i. "D" fittings, from Pacific Pipe & Supply Co., 1002 Santa Fe Ave., Los Angeles, A. W. W. A. pipe $56,482, Pont-A-Mousson $47,901, fittings $2,888; Amer. Cast Iron Pipe Co., 439 East 3rd St., Los Angeles, Class B 16 ft. lengths $55,460, fittings $2,898; Natl. Cast Iron Pipe Co., Los Angeles, Class B 12 ft. lengths $56,216, De Lavaud type $53,411, fittings $2,890.

CONTRACTS AWARDED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Kingshighway and Ave. P, to N. De Stefano, 257 Glenn Ave., Tompkinsville, $20,300. Noted Nov. 29.

N. Y., Grand Island — Bd. City Comrs. water system, to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $10,000. Noted Nov. 15.

Pa., Bethlehem — Rein.-con. reservoir, 2 m.g. capacity, to F. H. Clement Co., Inc., Bethlehem, $80,781. Noted Oct. 18 and Nov. 29.

W. Va., Huntington—Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., water treating plant, here, to Pittsburg-Des Moines Steel Co., Curry Bldg., Pittsburg. Engrs. est. $40,000.

Ky., Russell—Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., water treating plant, here, to Pittsburg-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa. Est. cost $40,000.

Ill., Burnham—Mains in Bakers Subdivision, to Public Constr. Co., Hammond, Ind., $25,000.

Tex., Dallas—Rucker — Jones, Adolphus Hotel, water mains, to W. H. Kramer, Sumpter Bldg., $23,000.

Tex., Ennis—For engine driven belt connected centrifugal pumps, to Smith & Whitney, Kirby Bldg., Dallas, $10,000.

Wash., Seattle—Bd. Pub. Wks., mains, to Coluccio & Erickson, Thompson Bldg., 6,025 ft. 16 in. c.i. mains $5.98, 115 ft. 12 in. $3.60, etc., total $44,108. Engrs. est. $46,780. Noted Dec. 6.

Sewers

PROPOSED WORK

N. Y., Johnson City—Plans election soon to vote on $65,000 bonds rein.-con. and vitr. clay sanitary sewers in streets from Riverside Dr. along tracks of Delaware, Lackawanna & Western R.R. to Willow St. through Willow St. to Grand Ave., Grand to Burbank Aves., Burbank to Farr Aves., Farr to Lincoln Aves., Lincoln Ave. to Division St. F. A. Tillman, Municipal Bldg., engr.

N. J., Lakewood—General Engineering & Management Corp. making plans sewage treatment plant, consisting of clarification and sludge digestion tanks and pumping station, 2 m.g. daily capacity. $35,000. Remington & Vosbury, 601 Market St., Camden, engrs.

N. J., Westmont — Haddon Twp. had plans prepared disposal plant, brick sludge pumping station, concrete septic tank, and 75,000 ft. 5-10 in. terra cotta sewer in French Estates, Burrwood tract, etc. $60,000. Remington & Vosburg, 601 Market St., Camden, engrs.

N. C., Conover—See "Waterworks."

N. C., Old Fort—See "Industrial Works."

Ga., Bainbridge—Plans extensions to sewerage system. $100,000. O. H. Lang, Moultrie, engr.

Tenn., McKenzie—Sold $85,000 bonds for sewerage system. H. C. Bryant, city clk.

O., Canton—Soon takes bids enlarging disposal plant. $500,000. McClaskey & Reese, Renkert Bldg., engrs. Noted May 24.

O., Lima—Plans 3,500 ft. 22-42 in. sanitary sewers in East Eureka St. $92,000. C. A. Bingham, city mgr. Engineer's name withheld.

O., Wadsworth—Making plans sewage treatment plant. $125,000. R. E. Garvin, Davis & Farley Bldg., Cleveland, engrs. Noted May 10.

Ill., Burr Oak (Chicago P. O.) — Plans sewers in various streets. $40,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Deerfield—Plans sewerage system in Brier Woods Subdivision. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Galesburg—Plans storm and sanitary sewers and disposal plant. $1,000,000. Pearse, Greeley & Hansen, 39 West Adams St., Chiago, engrs.

Ill., Niles Center—Plans sewers in Main St. $300,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engr.

Wis., Eau Claire—Making plans 1½ mi. concrete or vitr. sewers. $25,000. J. T. Hurd, City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv. and Citizens Bond Issue Supervising Com. approved $392,000 bonds reconstructing sewers, $1,310,000 bonds new sewers, incl. North Baden Sewer, Ohio Montrose Sewer and Rocky Branch Sewers 1 and 2. W. W. Horner, city engr.

Mo., St. Louis—See "Excavation, Drainage, Irrigation."

Mo., St. Louis—Soon takes bids 31,015 ft. 8-24 in. vitr. clay and 2 975 ft. 30-39 in. segmental block or brick sewer in Wherry Ave. Dist. Sewers 1 and 2, $176,000; 5,835 ft. 6-12 ft. rein.-con. and 9,940 ft. 36-69 in. segmental block or brick, (vitr. elay pipe will also be considered), in Sects. 1 and 2 Wherry Ave. Joint Sewer, $477,000; 11,860 ft. 8-27 in vitr. clay and 1,725 ft. 36-66 in. brick or segmental block sewer in Glaise Creek Sewer Dists. 15, 19 and 24, $63,500; 505 ft. 10-12 in. vitr. clay sewer in Clifton Heights Dist. Sewer 4, $3,500; 3,455 ft. 12-33 in. vitr. clay and 6,440 ft. 36-78 in. brick or segmental block sewer in Union-Bircher Joint Sewer Dist., $160,000; 4,065 ft. 39-72 in. segmental block or brick sewer in Loughborough Ave. Joint Dist., $65,000. W. W. Horner, City Hall, engr.

Tex., Corsicana — Had tentative plans prepared extending sewerage system to west end of city and West 2nd Ave. $40,000. W. W. McClendon, city engr.

Tex., Dallas—Having revised plans prepared and will readvertise disposal plant along Trinity River, incl. 12 Imhoff tanks, sewers, etc. $150,000. Former bids rejected. E. A. Kingsley, city engr. Noted Nov. 22.

Tex., Dallas—Rick & Hurt, Trust Bldg., making plans sanitary sewers for new addition, North Henderson Ave., etc. $25,000. Myers & Noyes, Mercantile Bank Bldg., engrs.

Tex., Lubbock—Voted $200,000 bonds for storm sewer. M. S. Ruby, city mgr.

Tex., Port Arthur — See "Streets and Roads."

Tex., San Antonio—Voted $100,000 bonds sanitary sewers, also $250,000 bonds for storm sewers. I. Ewig, city engr. Noted Nov. 22.

Tex., Waco—Dec. 29, to vote on $350,000 bonds sewage disposal plant. $75,000 bonds sanitary sewers. V. G. Koch, city engr. Noted Oct. 4.

Calif., Fresno—See "Streets and Roads."

Calif., Glendale—Jan. 8, to vote on $1,000,000 bonds sewers.

Ont., Hamilton—Jan. 1 to vote on $260,000 bonds extending sewers in Birch Ave. Dist. W. L. McFaul, city engr.

BIDS DESIRED

N. Y., Brooklyn—Dec. 19, by E. Riegelmann, boro pres., Boro Hall, temporary sanitary sewers in Clarendon Rd., East 38th and East 39th Sts.; East 37th St. between Clarendon Rd. and Ave. D with temporary connection at East 37th St. and Ave. D.

N. Y., New York—Dec. 19, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Erickson Pl., Melville St., Zulette, Wellman, Findlay, Van Nest, Rhinelander, Yates and Wilson Aves., Mayflower Ave. from Wellman to Maitland Aves., Mayflower Ave. from Roebling to Zulette Aves., Mayflower Ave. from Zulette to Wellman Aves.

N. Y., St. George — See "Streets and Roads."

N. J., Bloomfield—Dec. 17, at office of J. C. Johnson, town clk., 4,640 lin.ft. 12-27 in. concrete sewer in portions of Glenwood and Linden Aves., 2nd and Thomas Sts. E. Baechlin, Bloomfield Natl. Bank Bldg., town engr.

Pa., Castle Shannon—Dec. 11, by Boro. Council, sewers in Dist. 1, incl. 17,800 lin.ft. 8 in., 1,325 lin.ft. 10 in., 2,018 lin.ft. 12 in. and 50 lin.ft. 24 in. terra cotta pipe. Douglass & McKnight, 912 Columbia Bank Bldg., Pittsburgh, boro engrs. Noted Oct. 18.

O., Cleveland—Dec. 13, East 185th St. sewer from Lake Erie to Nottingham Rd. To exceed $25,000. R. Hoffman, City Hall, engr.

Ill., Lewistown—Dec. 15, by R. Brown, city clk., 13,000 ft. 8 in. vitr. sewers, sewage disposal tank, sludge bed, etc., $25,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs. Noted Nov. 15.

Tex., Houston — City Com. taking bids storm sewers in Waugh Dr. $25,000. J. C. McVea, city engr.

Tex., Park Place (Harrisburg P. O.)—Taking bids disposal plant, 10 mi. 6-15 in. sewer, 250 G H P motor driven pump, etc. $40,000. C. C. Gordon, 210½ Main St., Houston, engr. Noted Oct. 4.

Okla., Marlow—Dec. 21, by G. L. Orr, city clk., 13,700 ft. 8 to 10 in. vitr. clay sanitary lateral sewers and submains, 7,000 cu.yd. earth trenching, 4 flush tanks, etc. $26,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 15.

Calif., Los Angeles — Dec. 20, by Bd. Pub. Wks., construction 3 units outfall sewer, concrete pipe with vitr. clay block lining of approximately 100 sq.ft. cross sections, Sect. 6 15,600 lin.ft., Sect. 8 11,596 lin.ft., Sect. 9, 6.267 lin.ft.

Calif., Morgan Hill—Town Trustees taking bids sewerage system; 25,606 lin.ft. 6-10 in. vitr. pipe, 63 brick and concrete manholes; water mains; 2,000 lin.ft. 4 in. c.i. pipe, 1,400 lin.ft. 2 in. galvanized w.i. pipe; treatment plant; 940 cu.yd. excav., 7,600 cu.ft. concrete, 15,100 lb. reinforcing. 600 cu.yd. crushed rock for filter and sludge beds, also filters, sprinklers, valves, etc.;

Sewers (Continued)

pump house; two 4 in. pumps, 16 to 21 ft. head, 1,000 ft. r. w. lumber for baffles and troughs. C. C. Kennedy, Call Bldg., San Francisco, consult. engr. Noted Nov. 1.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Dec. 5, sewers in (1) Fort Hamilton Parkway, engrs. est. $17,100 (2) Ferris St. $4,217 (3) 80th St. $3,398 (4) East 28th St. $1,867 (5) Fort Hamilton Parkway between 83rd and 84th Sts. $1,813 (6) Fort Hamilton Parkway between Bay Ridge Ave. and 68th St. $1,625 (7) Fort Hamilton Parkway between 72nd and 73rd Sts. $1,542 (8) Douglass St. $1,200 (9) Ave. N. $800, from C. F. Vacharas, 645 40th St., (1) 78% engrs. est. (3) 90% (4) 98.7%; Tomassetti & Co., 1133 60th St. (2) 98%; Nazzarro & Querriero, (5) 101.99% (6) 98% (7) 97.97%; R. Iovino, (8) 84% (9) 84%.

Md., Baltimore—Bd. Awards, Dec. 5, 13,500 ft. 6-48 in. sewers and drains, Contr. 207, from Adams & Marino Co., 216 St. Paul St., $59,236. Noted Nov. 29.

Calif., Los Angeles—Bd. Pub. Wks., Sect. 4 north outfall sewer, between Playa del Rey and Hyperion, 11,050 lin.ft. semi-elliptical concrete sewer, 10 ft. 6 in. in height, from Ross Constr. Co., Oschner Bldg., Sacramento, $237,400. Noted Nov. 15.

CONTRACTS AWARDED

Conn., Hartford—Street Dept., sewers in Cornwall, Thomaston and Plainfield Sts., to A. DiMarco, 61 East Main St., Plainville. Engrs. est. $26,000. Noted Apr. 4.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Forest St. to J. Gallo, 203 Division St., Brooklyn, $1,011; 45th Ave., to Kennedy & Smith, 93 Amity St., Flushing, $13,939; 99th and 108th Sts., also 134th St. from Wyoming to Liberty Aves., to Gross Contg. Co., 233 Bway., New York, $757, $3,189 and $2,096 respectively; 134th St. from 101st to Liberty Aves., to J. F. Clancy, Inc., 460 Lockwood St., Astoria, $3,532. Noted Nov. 29.

Ill., Niles Center—Sewerage system in College Hill Subdivision, to Cannell-Conrad Constr. Co., Brook and Avery Sts., Louisville, Ky., $77,895. Noted June 27.

Ill., Palatine—Sewerage system to Seig Constr. Co., Waterloo, Ia., $141,335. Noted June 27.

Ont., Hamilton—Will lay 8, 10 and 12 in. sewers in Fairfield and Alexander Sts., by day labor. $42,000. W. L. McFaul, city engr.

Waste Disposal

PROPOSED WORK

N. Y., Woodhaven—City of New York, Boro Hall, Long Island City, having plans prepared 2 story rein.-con., brick and steel incinerator, plain foundation, Stanley Ave., here. $289,000.

Ont., Sarnia—Election in January to vote on $25,000 bonds for remodeling incinerator and installing new furnaces. M. D. Stewart, city engr.

CONTRACTS AWARDED

Miss., Lumberton—Hines Yellow Pine Co., 60 x 100 ft. refuse burner, together with 11 Dutch ovens, boiler, etc., concrete, steel and brick, to J. V. and R. T. Burkes, Carondelet Bldg., New Orleans, La.

Tex., San Antonio—For brick incinerator, 40 ton capacity, Roosevelt Ave., to Superior Incinerator Co., Dallas, $36,250. Noted Nov. 22.

Bridges

PROPOSED WORK

N. Y., Schenectady—New York Central R.R., Grand Central Terminal, New York City, plans 2 span bridge (one 130 ft. and other very small pony trust) 9 mi. east of here. $150,000. G. W. Kittredge, ch. engr.

Fla., Jacksonville — Duval Co. rejected bids on bridge over McGirts Creek, also bridge over Trout Creek. Plans to be revised and work readvertised. C. S. Coe, Jacksonville, co. engr. Noted Oct. 25.

Ky., Carrolton—See "Streets and Roads."

Wisconsin—See "Streets and Roads."

Wis., Washburn—Bayfield Co. voted $30,000 bonds bridge across Sioux River. L. Tranmal, co. clk.

Tex., San Antonio—Voted $100,000 bonds for bridge program. . I. Ewig, city engr. Noted Nov. 15.

Okla., Elk City—See "Streets and Roads."

Okla., Oklahoma City—City having plans prepared and soon takes bids rein.-con. and steel viaduct. $250,000 bonds voted. B. M. Hart, City Hall, engr.

Okla., Oklahoma City — Oklahoma Co. voted $500,000 bonds for 19 steel and concrete bridges to replace those recently destroyed by flood. R. S. James, Court House, engr.

Okla., Oklahoma City—City and Oklahoma Co. voted $400,000 bonds for 1,800 ft. steel viaduct, Walker Ave. R. S. James, Court House, engr. Noted Nov. 8.

Calif., Riverside — Riverside Co. had plans prepared 3 timber pile trestle bridges on Temecula Rd., Dripping Springs Bridge, 93 ft. long, Tripp Bridge, 162 ft., Pauha Bridge, 231 ft. A. C. Fulmore, co. surv.

BIDS DESIRED

Conn., Southbury — See "Streets and Roads" under Connecticut.

New Jersey—Dec. 28, by State Hy. Dept., Trenton, 73 ft. span bridge, steel encased in concrete, incl. removal of existing bridge, etc., over Passaic River, M. P. 32.2, State Highway Route 16, in municipalities of Bernard and Passaic, Somerset and Morris Counties. J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Dec. 13.

N. J., Trenton—Dec. 26, by Mercer Co., Court House, steel and concrete bridge over Sanhican Creek, Lee Ave. H. F. Harris, Court House, co. engr.; adv. E. N.-R. Dec. 13.

Kentucky—Jan. 8, by State Hy. Dept., Frankfort, 300 ft. rein.-con. and steel bridge with two 150 ft. spans, also 240 ft. rein.-con. and steel span bridge, both over Cumberland River, on Harlan-Pineville Rd., Harlan Co. J. S. Boggs, state highway engr.

Wisconsin—Dec. 18, by State Hy. Comn., at div. office 1, 149 East Wilson St., Madison, bridge with one 70 ft., two 61 ft., and two 55 ft. rein.-con. arch spans at Sta. 94-A plus 13.5 on Watertown-Hubbleton-Waterloo Rd., Federal Aid Project 316, Dodge and Jefferson Counties. A. R. Hirst, Madison, highway engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, Dec. 10, 80 ft. single leaf overhead counterweight bascule highway span, 30 ft. roadway, concrete piers, etc., over Cedar Bonnet, Manahawken Bay, on road between Manahawken and Beach Haven, in municipality of Stafford, Ocean Co., from Krellwitz Constr. Co., Kinney Bldg., Newark, 116.9% engrs. est. ($79,509). Noted Nov. 22.

N. J., Rochelle Park — State Hy. Dept., Trenton, Dec. 5, concrete encased I-beam bridge, incl. removing existing bridge over Saddle River, Route 10, M. P. 2.9, Bergen Co., here, from P. A. Hennessy & Sowell, Hightstown, $28,356. Noted Nov. 22.

North Carolina — See "Streets and Roads."

North Carolina—State Hy. Comn., Raleigh, bridging (**S. P. means State Project**) rein.-con. bridges and culverts on S. P. 791-A, Yadkin Co., from Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $39,225, on S. P. 237-A, Johnston Co., from H. M. Beasley, Lumberton, $56,725, on S. P. 513, Caswell Co., from R. W. Curtis, Lynchburg, Va., $69,157, on S. P. 912, Cherokee Co., from W. T. Moore, Andrews, $100,270; rein.-con. and structural steel bridge over Chowan River on S. P. 148, Hertford and Gates Counties, from Roanoke Iron & Bridge Co., Roanoke, Va., $134,648. Noted Nov. 15 under "Streets and Roads."

S. C., Georgetown—Comrs. Georgetown Co., 440 ft. rein.-con. and steel bridge over Black River, on State Route 40, Federal Aid Project 223, from Atlantic Bridge Co., Roanoke, Va., $34,700. Noted Nov. 22.

Wis., Milwaukee—Park Bd., City Hall, piling for Mason St. viaduct, wood piling from W. F. Tubising Co., 373 Bway., $76,500; concrete piling, from Simplex Pile Foundation Co., Keystone Bldg., Pittsburgh, Pa., $113,300. Noted Nov. 22.

Kan., Winfield—Crowley Co., East Madison Bridge over Walnut River, steel truss, two 130 ft. spans, from Maxwell Constr. Co., Columbus, O., $49,305. Noted Aug. 23.

Tex., Canadian—Hemphill Co., 620 ft. steel extension to present bridge over Canadian River, 4 spans, (a) pile head bars in trusses, (b) die forged bars in trusses, from Austin Bridge Co., Coombs St., Dallas, (a) $45,692, (b) $47,042; Pioneer Constr. Co., 101 New York Life Bldg., Kansas City, Mo., (a) $45,393, (b) $47,393. Noted Nov. 15.

Tex., Jasper—See "Streets and Roads."

CONTRACTS AWARDED

New Jersey—State Hy. Comn., Trenton, bridge over Raritan River between Perth Amboy and South Amboy, Federal Aid Project 20, incl. 5,536 lin.ft. earth fill approaches, 1,077 lin.ft. rein.-con. viaduct and main bridge consisting of 1,536 lin.ft. steel plate girder spans carried on concrete piers supported on pile and faced with granite, and 360 ft. span, etc., to Stillman Delehanty, Ferris Co., 1 Exchange Pl., Jersey City, $3,702,992. Noted Dec. 6.

N. J., Freehold—Monmouth Co., Bridge H1-48, one 70 ft. plate girder encased in concrete on Squankum-Lakewood Rd., to S. S. Thompson & Co., Herbert St., Red Bank, $29,580. Noted Nov. 15.

Ala., Jasper—Walker Co., several concrete culverts on highways, to Cochran & Mayers, Gadsden, $25,000.

Kan., Arkansas City—Crowley Co., (Winfield), Madison Ave. Bridge here, 130 ft. steel truss span, concrete floor and rein.-con. abutment on Federal Aid Project 163, to Maxwell Contg. Co., Columbus, $49,305. Noted Dec. 6.

Ia., Jefferson—Greene Co., 19 culverts and extensions to Kramme & Benson, Ft. Dodge, $6,251; widening 5 span concrete arch bridge, to Lundgren-Reis Co., 65 College St., Des Moines, $14,379 1 I beam and 1 culvert extension, to C. J. Kramme & Co., Ft. Dodge, $5,413. Noted Nov. 15.

N. D., Pembina—States of North Dakota and Minnesota, Pembina Co. and Kittson Co., bridge over Red River on Federal Aid Project 300, two 344 ft. spans, to Linton Constr. Co., Linton, $175,000. Noted Nov. 22.

Dams

PROPOSED WORK

Conn., Winchester—Torrington Light Co., Torrington, making plans 20 x 600 ft. dam, here. W. C. Smith, Waterbury, engr. Noted Nov. 11.

Tex., San Antonio—Voted $1,800,000 bonds retention dam, north end of city, earth and rein.-con. I. Ewig, city engr. Noted Nov. 15 under Unclassified.

Okla., Altus—See "Waterworks."

Ariz., Holbrook — Woodruff Irrigation Dist., plans election to vote on $40,000 bonds for diversion dam in Little Colorado River.

Calif., Marysville—See "Waterworks."

Railways

PROPOSED WORK

New York—See "Streets and Roads under "Albany, N. Y."

Texas—Jefferson Northwestern R.R., Jefferson, making surveys 40 mi. extension from Marietta to Clarksville. H. B. Montgomery, Jefferson, ch. engr.

Texas — Stamford & Northwestern Ry. subsidiary of Chicago, Burlington & Quincy Ry., 547 West Jackson Blvd., Chicago, plans extension from Spur to Plainview. $300,000 initial cost. A. Q. Newton, ch. engr. Chicago, Burlington & Quincy Ry.

California—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans to repair pavements and rebuild railway tracks on portions of T St. in Sacramento. $25,000 or more. Private plans.

CONTRACTS AWARDED

Connecticut—International Silver Co., 48 State St., Meriden, 2,000 ft. track, incl. all accessories, in Meriden, to L. Suzio Constr. Co., State and Brooks Sts., Meriden. Engrs. est. $25,000.

Kentucky — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, second tracking 18.3 mi. from Ft. Estill to Conway, to Brooks, Calloway Co., Walton Bldg., Atlanta, Ga., Codell Constr. Co., Winchester, and Boxley Bros. Co., Orange, Va. Est. cost $500,000. Noted June 14.

Excavation, Drainage, Irrigation

PROPOSED WORK

New York—J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York City, rejected bids Nov. 30, dredging channel, constructing dikes, placing fill on West Island in connection with improvement of Jamaica Bay, Queens Boro. Will readvertise. Noted Dec. 6.

Wis., Milwaukee—Plans dredging 3 rivers during 1924. $50,000 available. J. Schwada, city engr.

Mo., Oregon—Holt Co. plans ditches, drainage and reclamation work. Election later to vote on $325,000-$350,000 bonds. C. E. Jacoby Eng. Co., Shukert Bldg., Kansas City, engrs.

Mo., St. Louis—Bd. Pub. Serv. and Citizens Bond Issue Supervising Com. approved $500,000 bonds for open channel from

Excavation, Drainage, Irrigation (Continued)

Southwest Ave. to Knox St., River Des Peres Project. W. W. Horner, city engr.

Calif., Dixon — East Dixon Irrigation Dist. having preliminary plans completed irrigation district comprising 30,000 acres in Solano Co., near Dixon, incl. installation of pumping plants, canals, etc. $1,000,000 or more. F. C. Herrmann, Merchants Exch. Bldg., San Francisco, consult. engr.

Calif., Karlo—Private irrigation company headed by R. Krims, Yeon Bldg., Portland, Ore., having surveys made to irrigate approximately 8,000 acres land. Project includes earth and rock fill dam, 33 ft. high, 2,800 ft. long on top, 1,200 ft. on bottom, 12 ft. wide on top, 18,000 ft. 18½ ft. canal, etc. Cope, Means & Rand, 58 Sutter St., San Francisco, engrs.

Calif., Madera—San Joaquin River Water Storage Dist. to vote on bond issue for system to irrigate approximately 552,000 acres in San Joaquin Valley. Engineer not selected. A. L. Cowell, Merced, and E. F. Treadwell, California Commercial Union Bldg., San Francisco, attorneys representing interests in project.

Calif., Ravendale—Red Rock Creek Irrigation Dist., to vote on $950,000 bond issue for irrigation 23,500 acres, incl. construction 3 new dams and enlargement 2 existing dams, 50 mi. canals. T. H. Means, 58 Sutter St., San Francisco, consult. engr. Noted June 28.

Calif., Ventura—Ventura Co. D. D. 2, having surveys completed for drainage system to reclaim 2,000 acres. C. W. Petit, Ventura, consulting engr.

BIDS DESIRED

Ill., Eureka—Dec. 18, by Comrs. Rome View Drainage and Levee Dist., at office Woodford Co. Clerk, (Eureka), Sect. 1, 1,457,358 cu.yd. floater work; Sect. 2, 243,215 cu.yd. dry land work; Sect. 3, 207,530 cu.yd. internal drainage floater work. C. H. Kreiling, Havana, engr.

Calif., Tracy—Dec. 27, by G. M. Hench, Secy. of Tracy-Clover Irrigation Dist., deepening main ditches from 1 to 2 ft., yardage not less than 2,500 cu.yd., but district reserves right to increase to 10,000 cu.yd., construction 1 main r.w. headgate for main canal No. 2, seven 4 ft. r.w. headgates at points designated by Superintendent of District.

Ont., St. Catharines—Dec. 27, by J. W. Pugsley, secy. Dept. Rys. & Canals, constructing Sect. 8, Welland Ship Canal. Noted Nov. 22.

BIDS RECEIVED

Calif., Blythe—Palo Verde D. D., constructing West Side Drain, from D. A. Foley, Van Nuys Hotel, Los Angeles, 300,000 cu.yd. earth excav. $0.18 yd.; 75 acres clearing $50; 1,800 lin.ft. piling, bridges, $3.30 ft.; 46,000 ft. lumber, $110 per M.; 200 ft. piling in flumes $5.40 ft.; 4,000 ft. lumber in flumes $125 per M; 25 cu.yd. concrete $55 yd., etc. Noted Nov. 15.

Calif., Knights Landing (Grafton P. O.)—Meek Estate c/o F. H. Tibbetts, engr., Alaska Commercial Bldg., San Francisco, (a) constructing irrigation and drainage ditches, 7,500 ft. lateral 2, 5,800 cu.yd. earthwork, 4,600 ft. upper main canal 7,875 cu.yd. excav., 5,100 ft. lower main canal 2,350 cu.yd. excav., 1,400 ft. drain H, 1,575 cu.yd. excav. (b) 10,000 ft. main drainage canal to be cleaned, etc., from D. McDonald, P. O. Box 170, Sacramento, (a) $0.16 per cu.yd.; J. Phillips, Sacramento, (b) $0.12. Noted Nov. 29.

CONTRACTS AWARDED

Ia., Carroll—Carroll and Greene Counties, Joint D.D. 86 in Carroll Co. and 150 in Greene Co., 8,600 lin.ft. open ditch, 40,000 cu.yd. excav., 76,370 lin.ft. 6-36 in. tile, labor to Jacobsen & Martinson, Nevada, tile material to Lake View Tile Co., Lake View.

Streets and Roads

PROPOSED WORK

N. Y., Albany—Takes bids after Jan. 1, constructing 3 mi. Hackett Blvd., 90 ft., asphalt or concrete, $500,000; laying trolley track, curbing, sidewalks and 18 ft. paving 1 mi. Western Ave., 35 ft., asphalt or concrete, $50,000; grading, opening and paving 2.5 mi. North Pearl St., 62 ft., vitr. brick, granite block, asphalt or concrete, $250,000; laying sidewalks, curbing, lights and paving 2.9 mi. Madison Ave., 68 ft., asphalt or concrete, $300,000. J. G. Brennan, City Hall, engr.

N. Y., Albion — Orleans Co. plans constructing 1½ mi. road from Millville to Brick Schoolhouse Corners, $35,000, 2¼ mi. road from West Barre to Maple St., 18 ft., $75,000; 2 mi. road from Village of Clarendon to Dowds Corners, 16 ft., $65,000; 1¾ mi. road in town of Yates, $35,000; 1½ mi. road from Carlton to Gaines, $45,000. H. Waldo, Albion, co. engr.

N. Y., Waterloo—Plans paving 11 streets, ¾ mi. bituminous macadam, various widths. $28,000. Will mature in spring. Engineer's name withheld.

Pa., Greensburg—Westmoreland Co. Bd. Comrs., plans 5,000 ft. concrete surface on Mt. Pleasant-Iron Bridge Rd., 16 ft. $30,000. N. M. Muse Eng. Co., Court House, engrs.

Pa., Hastings—Cambria Co. (Ebensburg) soon takes bids constructing 2,000 ft. 4th Ave., 20 ft., here, brick on concrete. $30,000. H. F. Dorr, Trust Bldg., Ebensburg, engr.

Pa., New Castle—Having plans prepared grading, curbing and paving 3,000 ft. Lutton St., 20 ft. brick on concrete. $45,000. F. F. Miller, City Hall, engr.

N. C., Old Fort—See "Industrial Works."

Fla., Fort Lauderdale—Plans election to vote on $100,000 bonds street improvements, etc. H. C. Davis, Fort Lauderdale, engr.

Miss., Greenwood — Making preliminary plans grading, surfacing, etc., Church, Mississippi, George and Market Sts.. $135,000. W. S. Hawkins, city engr.

Miss., Vicksburg—Warren Co. sold $300,000 bonds to complete county highways.

La., Monroe — Making preliminary surveys for 150 mi. paving in Morehouse Parish, to be paid for with State and Federal Aid funds, as well as local assesments. L. White, Monroe, engr.

Ky., Carrolton—Carroll Co. sold $51,000 bonds for road work and bridges.

O., Cincinnati—Hamilton Co. plans grading and paving 19,300 sq.yd. Mullen Rd., waterbound macadam. $31,726. E. A. Gast, Court House, co. surv.

O., Youngstown — Plans paving 1½ mi. Glenwood, 2nd, Imperial, East Silliman and Rosedale Sts., brick and asphalt, $44,643; repaving and resurfacing 1¾ mi. Chapel Pl., Market, Champion, Holmes and Caledonia Sts., $26,500. Will mature in spring. G. F. Turner, City Bldg., engr.

Mich., Detroit—Plans being prepared paving with 3½ in. sheet asphalt on 8 in. concrete 5,660 sq.yd. Savannah Ave. $28,330, 1,930 sq.yd. LeMay Ave. $9,800, 1,660 sq.yd. Lelans St. $8,280, 9,800 sq.yd. Log Cabin Ave. $49,020; grading and paving with one course 6 in. concrete 4,080 sq.yd. (3 alleys) $10,190. G. Jerome, city engr.

Ill., Cicero—Plans grading and surfacing with concrete or brick, 5,300 ft. 50th Ave. $52,000 L. Mongrieg, city engr.

Ill., Deerfield—Plans macadam paving in Brier Wood Subdivision. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Elizabeth—Plans concrete paving. $40,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Farmington — Making plans paving various streets, vibrolithic and brick. F. M. Connolly, 432 Peoples Trust Bldg., Galesburg, engr.

Ill., Palatine — Takes bids in January concrete paving Chicago and Colfax Sts. $130,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Park Ridge—Plans concrete paving North Park Ave. $25,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Park Ridge—Takes bids in January concrete paving in Mackentosh Subdivision. $170,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Urbana—Takes bids in about 60 days 7 in. concrete paving Church, Busey, Orchard and Hill Sts., 26 ft., $40,000; in 3 or 4 months for Poplar St., $30,000; next spring for West Main St., 32-35 ft., $30,000, and Walnut St., 24 ft., $20,000.

Wisconsin—Following are county appropriations for road work during 1924. Polk Co. $97,791, C. W. Nystrom, Balsam Lake, comr.; Waupaca Co. $144,250, J. Huffcut, Waupaca, comr.; Washburn Co. $30,558, J. R. Spooner, Shell Lake, comr.; Sheboygan Co. $150,000 for concrete pavement to be met with Federal aid on Trunk Highway 17, G. W. Ubbelohde, Sheboygan, comr.; Douglas Co. $152,505, C. Hanson, Superior, comr.

Wisconsin—Following are county appropriations for road construction during 1924. Trempealeau Co. $194,747, E. F. Rotering, Arcadia, comr.; Fond du Lac Co. $699,620, G. Treleven, Fond du Lac, comr.; Portage Co. $71,592, T. E. Cauley, Stevens Point, comr.

Wisconsin—Following are county appropriations for road work, etc., during 1924. Barron Co. $214,920 incl. graveling roads and machinery, E. Gleason, Barron, comr.; Vernon Co. $156,322, A. Ristow, Viroqua, comr.; Pierce Co. $92,185, C. F. Kenall, Ellsworth, comr.; Kenosha Co. $164,147, J. F. Herzog, Kenosha, comr.; Shawano Co. $200,966, W F. Meyer, Shawano, comr.; Green Lake Co. $157,985, D. C. Williams, Green Lake, comr.; Richland Co. $149,077, A. V. Robinson, Richland Center, comr.; Lafayette Co. $164,773, G. H. Priestley, Darlington, comr.; Milwaukee Co. $431,751, W. F. Cavanaugh, Milwaukee, comr.; Crawford Co. $92,678, J. N. Campbell, Bell Center, comr.; Winnebago Co. $343,185, J. Binning, Oshkosh, comr.; Wuashara Co. $34,175, F. Grimm, Wautoma, comr.; Dunn Co. $88,896, F. Stewart, Menomonie, comr.; Pepin Co. $50,221, G. Goss, Durand, comr.; Adams Co. $25,098, J. A. McGregor, Friendship, comr.; Price Co. $87,792, B. M. Griffin, Phillips, comr.; Oconto Co. $138,247, E. W. McAllister, Oconto, comr.; Walworth Co. $433,332, H. J. Peters, Elkhorn, comr.; Marathon Co. $144,062, J. H. Vogt, Wausau, comr.; Bayfield Co. $58,471, J. Friberg, Washburn, comr.; Taylor Co. $83,052, C. Kelnhofer, Medford, comr.; Marquette Co. $35,500, H. Schmitz, Montello, comr.; Grant Co. $229,057, H. Mink, Lancaster, comr.; Calumet Co. $67,638, J. A. Gillis, Chilton, comr.; Iowa Co. $70,768, C. Wonn, Dodgeville, comr.; Jackson Co. $115,015, O. Overlien, Black River Falls, comr.; Marinette Co. $171,817, incl. state aid road and bridge construction, A. Eklund, Marinette, comr.; Dane Co. $100,000 gravel road surface treatment with tar, J. R. Caldwell, Madison, comr.; Chippewa Co. $178,672, P. O. Lokrantz, Chippewa Falls, comr.; Manitowoc Co. $130,401, J. Connell, Manitowoc, comr.; Racine Co. $364,728, W. A. Bechthold, Racine, comr.; Rock Co. $247,347, C. E. Moore, Janesville, comr.; Ozaukee Co. $255,000 construction 8 mi. road from Milwaukee Co. line on Highway 57 to north end of city of Cedarburg, also $100,000 for gravel roads through Thiensville, Belgium, Lake Church, Holy Cross, Waubeka and Decada connecting with Trunk Highways 57 and 17, J. Ubbink, Port Washington, comr.; Portage Co. $21,000 for trunk highways and aiding local units of government in this work, also $24,000 to aid construction of two federal aid projects, T. E. Cauley, Stevens Point, comr.; Monroe Co. $368,206, C. Millard, Sparta, comr.; Clark Co. $125,262, O. J. Weyhmiller, Neillsville, comr.; Lincoln Co. $141,301, H. H. Kuehling, Merrill, comr.; Sauk Co. $194,613, W. Halbersleben, Baraboo, comr.

Wisconsin — State Hy. Comn., Madison, selected following federal aid projects for construction during 1924. Div. 1—graveling Portage-Kilbourn Rd., $200,000, Columbia Co., grading and culverting 1 mi. Sumpter Hill, $30,000, grading, etc., 1 mi. Pointer Rock, $25,000, Sauk Co., grading and culverting 6 mi. road on Green-Dane Co. line, $40,000, A. L. Hambrecht, Madison, div. engr.; Div. 2—grading and culverting 9½ mi. Lisbon-Pewaukee Rd., $75,000, Waukesha Co., grading and building structures preparatory to widening narrow concrete road Trunk Highway 15, Fond du Lac Co., grading and paving 1½ mi. North Fond du Lac Rd. to Washington Co. line, $55,000, Waukesha Co., grading and culverting 3 mi. Menomonee Falls-Milwaukee Co. line Rd. on South Fond du Lac Rd., $35,000, C. R. Weymouth, 208 Stephenson Bldg., Milwaukee, div. engr.; Div. 3—McCarty's Crossing separation, $68,000, Outagamie Co., O. C. Rollman, Green Bay, div. engr.; Div. 5—grading Project 340 from end of Winona Bridge to Junction with Highway 25, $85,000, T. M. Reynolds, La Crosse, div. engr.; Div. 6—grading and surfacing Menomonie-Knap Rd., $80,000, Dunn Co., grading and gravel surfacing Trunk Highway 16, in Chippewa Co. $65,000, Dunn Co., $50,000, H. W. Vroman, Eau Claire, div. engr.; Div. 7—grading and surfacing Pelican-Monico Rd., Oneida Co., $20,000, 2 mi. gravel surfacing near Woodruff, $60,000, F. M. Sergeant, Rhinelander div. engr.; Div. 8—grading, culverting and graveling road north of Spooner, $75,000, Washburn Co., opening road from Ino as far easterly toward Ashland Co. line as possible, also taking in relocation from Beloit north to said east and west road, J. R. McLean, Superior, div. engr.; Div. 9—grading and gravel surfacing 4 mi. road through Leslie from Graebers Hill toward Platteville, Grant Co., grading new road east and west of Gratiot, $30,000, Lafayette Co. T. W. Reilly, Lancaster, div. engr.

Wis., Eau Claire — Having preliminary plans prepared concrete paving 2 mi. various streets. $50,000. J. T. Hurd, city engr.

Wis., Milwaukee — Milwaukee Co. has $390,000 available for rein.-con. roadwork during 1924. Wisconsin Hy. Comn., Madison, engrs.

Streets and Roads (Continued)

Ia., Shenandoah—Plans 48 blocks additional paving during 1924. $125,000. J. E. Lewis, clk.

Mo., St. Louis—Bd. Pub. Serv. and Citizens Bond Issue Supervisory Com. approved $25,000 bonds for surveys street widenings, $270,000 bonds paving and repaving general thoroughfares, incl. paving Watson Rd., repaving Lindell Blvd. and Easton Ave. W. W. Horner, city engr.

Mo., St. Louis—Soon takes bids grading, curbing, guttering and surfacing 4,050 sq.yd. Gasconade and Wyoming Sts., bitulithic on concrete, $22,500; 1,325 sq.yd. Spring St., willite or bitulithic, $10,000; 7,120 sq.yd. 10th and Loughborough Sts., willite on concrete, $35,350. W. W. Horner, 300 City Hall, engr. for above projects; grading and surfacing 13,000 sq.yd. rein.-con. roads at Training School for Feeble Minded, Scott Farm, $45,250, L. R. Bowen, 301 City Hall, engr.

Tex., Alpine—Brewster Co. soon takes bids grading, gravel surfacing and bridging 15.5 mi. road between Altida and Marathon, 16 ft. $87,000. A. L. White, co. engr.

Tex., Anderson—Grimes Co. election Dec. 22, to vote on $200,000 bonds for roads in Iola Rd. Dist. and $175,000 bonds Bedias Rd. Dist. R. M. West. co. judge.

Tex., Crockett—Houston Co. election Dec. 28, to vote on $250,000 bonds, grading and gravel surfacing Grapeland Rd. Dist. C. H. Milburn, co. engr.

Tex., Decatur—Wise Co. voted $75,000 bonds grading and gravel surfacing Bridgeport-Sandy Creek Rd., Dist. 3, 16 ft. H. R. Smith, co. engr. Noted Nov. 15.

Tex., Harrold — Harrold Precinct, Wilbarger Co., plans election soon to vote on $150,000 bonds for 8 mi. Colorado Gulf Highway from here to Electra. J. B. Nabors, Vernon, co. engr.

Tex., La Grange—Fayette Co. rejected bids grading, gravel surfacing, etc. 5.84 mi. State Highway 3-B, Federal Aid Project 285. $99,822. Will readvertise C. A. Schlafli, co. engr. Noted Nov. 8.

Tex., Port Arthur — Voted $1,000,000 bonds, paving, water improvements, sewers, etc. M. C. Erwin, city engr. Noted Nov. 1.

Tex., Rosebud Falls — Plans election middle December to vote on $50,000 bonds paving Ave. C in business section, brick, concrete or bituminous. Address J. Malcek, Rosebud. Engineer not announced.

Tex., San Antonio—Voted $450,000 bonds permanent street paving, also $350,000 widening certain streets. I. Ewig, city engr. Noted Oct. 11.

Tex., Seguin—Quadalupe Co. election Dec. 18, to vote on $24,000 bonds surfacing road already graded and gravelled with bituminous topping 15.2 mi. State Highway 3, 18 ft. Total cost $100,000. State and Federal Aid granted.

Tex., Seymour—Baylor Co. election Dec. 28, to vote on $500,000 bonds hard surfacing State Highways 28 and 30 and lateral roads. Total cost $1,250,000. E. Tibbetts, co. judge.

Tex., Taylor—Williamson Co. voted $300,000 bonds hard surfacing in Precinct 4. Address County Judge. Engineer not selected. Noted Nov. 8.

Okla., Elk City—Beekman Co., election Dec. 20, to vote on $300,000 bonds for roads and bridges.

Okla., Lindsay — Surveys being made grading and paving 6 blocks Main St., 75 ft. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Ponca City — Plans grading and paving 5 blocks South 2nd Ave., 5,060 sq.yd. vertical fibre brick. 3,100 lin.ft. curbing, 3,100 lin.ft. guttering, et. $26,000. E. A. Jones, Ponca City, engr.

Okla., Ponca — City plans grading and paving 5 blocks Highland Ave., 5,200 sq.yd. vertical fibre brick, 3,180 lin.ft. curbing, 3,180 lin.ft. curbing, 1,050 cu.yd. excav. $28,000. E. A. Jones, Ponca City, engr.

Okla., Sapulpa—Creek Co. election Jan. 4, to vote on $700,000 bonds hard surfacing roads.

Wash., Davenport—Plans concrete paving Morgan St. from 4th to 8th Sts. $25,118.

Wash., Seattle — Comrs. King Co. plan paving 2 mi. Kent-Des Moines Rd., 7 in. concrete. $60,000. T R. Beeman, co. engr.

California—State Hy. Dept., Sacramento, plans regrading and resurfacing with crushed rock, 11 mi. road between Sportsmans Hall and American River Crossing at Riverton, El Dorado Co.; widening to 20 ft., laying 5 or 6 in. cement concrete on pavement on present 15 ft. slab, 16 mi. road from south boundary of Ventura Co. to Camarillo; 20 mi. road from north boundary of San Mateo Co. to Redwood City, $15,000 appropriated for survey, paving 2 mi. road from south boundary of Sacramento Co. to railroad crossing at Galt; widening to 20 ft., laying 5 or 6 in. concrete pavement on present 15 slab on 11.65 mi. road between Sherman Blvd. and Russell Ranch, Los Angeles Co.; construct 7 mi. road between Placerville City limits and Sportsmans Hall, El Dorado Co. R. M. Morton, state highway engr.

Calif., Fresno—W. F. Chandler, c/o A. Jensen, engr. Rowell Bldg., having plans prepared paving sewers and water mains, etc., in Chandler Residential Tract. To exceed $75,000.

Calif., Los Angeles — Plans improving Vernon Ave., 166,477 sq.ft. 6 in. concrete paving; Lahme Ave. 173,988 sq.ft. asphaltic concrete, 30,362 sq.ft. walks, etc. A. C. Hauser, city engr.

Calif. Los Angeles—Los Angeles Co. had plans prepared improving 1st Ave. between College and Crawford St., Co. Rd. Impvt. No. 46, 8.855 sq.ft. walks 6,095 sq.ft. gutter, 6,402 sq.yd. concrete pavement, etc.

Calif., Oakland—City had plans prepared improving Castro St. between 1st and 7th Sts., 62,936 sq.ft. grading, 2,054 lin.ft .concrete curbing, 60,317 sq.ft. 6 in. Portland cement concrete base, 2 in. Warrenite bitulithic surface. W. W. Harmon, city engr.

Calif., Riverside—Riverside Co. had plans prepared for north and south connections between State Highway and County highways about ½ mi. west of Whitewater station, 57,050 sq.ft. gravel base, 6 in. thick, 57,050 sq.ft. asphaltic surfacing, etc. A. C. Fulmore, co. surv.

Calif., Sacramento—See "Railways."

Calif., San Francisco—Plans paving Piers No. 19 and No. 25. $50,000. F. G. White, c/o State Bd. Harbor Comrs., Ferry Bldg., ch. engr.

Calif., San Francisco—Plans grading and paving Van Ness Ave. from Market to Howard Sts., $200,000. M. M. O'Shaughnessy, city engr.

Calif., San Francisco — City had plans prepared improving Balou Ave. between Phelps and Rankin Sts., 5,300 cu.yd. cut, 2,700 lin.ft. concrete curb, 2,375 sq.ft. artificial stone walks, 72,900 sq.ft. asphaltic concrete. $30,225. M. M. O'Shaughnessy, city engr.

Calif., San Luis Obispo—City plans paving Higuera, Marsh and Ida Sts., 3½ in. asphaltic concrete base with 1½ in. Warrenite surface. $25,000 or more. W. B. Roselip, city engr.

Calif., San Luis Obispo—San Luis Obispo Co. having plans prepared grading and graveling Avila Rd. between Paso Robles and State Highway. To exceed $25,000. W. Black, co. surv.

Calif., San Rafael — Marin Co. appropriated $25,000 to widen Willow Camp Rd., (Stinson Beach Grade), from Big Lagoon to Stinson Beach.

Calif., Visalia—Tulare Co. having surveys made 8½ mi. road from Doyle Springs to Mountain-Summer Home Resort. $35,000 to $40,000. L. A. Moye, co. surv.

BIDS DESIRED

Massachusetts—Dec. 18, by Dept. Pub. Wks., Div. of Highways, rein.-con., paving 15,770 ft. highway, in Norwood and Walpole, to exceed $200,000, 12,712 ft. in Lenox, to exceed $160,000; bituminous macadam paving 5,000 ft. in Plymouth, to exceed $40,000, widening (portion) and resurfacing with bituminous concrete, 34,237 ft. in Nantucket, to exceed $125,000. W. F. Williams, ch. engr.

Connecticut—Dec. 20, by State Hy. Comn., Hartford, paving highways in Cornwall and Kent, Groton and Stonington, Mansfield, Pomeret, Sharon, Shelton, Southbury and Suffield, rein.-con., waterbound macadam and bituminous macadam; also 93 ft. 4 in. steel truss bridge over Pomeraug River in Southbury. J. A. Macdonald, comr.; adv. E. N.-R. Dec. 13.

N. Y., Buffalo—Dec. 21, by Commissioner Pub. Wks., Municipal Bldg., paving Barnard St., Stockbridge Ave., Wilbury and Darien Places, vitr. brick or asphalt on 6 in. concrete. To exceed $25.000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., New York—Dec. 18, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repaving 1st Ave. and West Bway., granite block on concrete.

N. Y., New York—Dec. 19, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on Reservoir Pl.; grading for width of 60 ft. centrally located, etc., Neill Ave. from Bronxdale to Matthews Aves., and for its full width from Matthews to Paulding Aves.; grading, etc., Tyndall Ave.; sheet asphalt repaving East 188th St.

N. Y., New York — Dec. 20, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., reconstructing pavement, curbs and headers on south clearance roadway alongside Manhattan approach of Williamsburg bridge.

N. Y., St. George — Dec. 18, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Scribner Ave., napped granite block; Winter Ave., bituminous macadam; temporary sanitary sewer in Perry Ave.

Pa., Ebensburg—Dec. 19, by Comrs. Cambria Co., reconstructing 15,000 ft. Blandburg Rd., Reade Twp., vitr. brick block on concrete, or one course rein.-con. A. B. Curry, 908-909 Johnstown Trust Bldg., Johnstown, engr.

Virginia—Dec. 28, at office State Hy. Dept., Richmond, 413 North 10th St., bituminous macadam surfacing 3 mi. Project S-146-C, Montgomery Co.; concrete surfacing 12.6 mi. Project S-279, Norfolk Co.; grading, etc. 1.16 mi. Project S-293-C Giles Co.; concrete surfacing (alternate 4 in. gravel) 5.18 mi. Project F-295-C. Henrico Co.; gravel surfacing 13 mi. Project S-322, New Kent Co. H. G. Shirley, chn.; adv. E. N.-R. Dec. 13.

W. Va., Wheeling—Dec. 28, by Comrs. Greene Co., reconstructing 12,781, 5.950, and 11,050 lin. ft. roads, rein.-con. or broken stone base with asphalt top cement wearing surface, 16 ft. wide, in Center Twp. T. P. Dinsmore, co. engr.

S. C., Beaufort—Dec. 27, by Beaufort Co., Court House, constructing (exclusive of surfacing) 7.02 mi. State Route 1, Federal Aid Project 200, 70,600 cu.yd. excav., etc. W. C. Cathey, Scovil Bldg., Orangeburg, engr.

Fla., Tampa—Dec. 21, by Comrs. Hillsborough Co. for 20,250, 13.000, and 11,400 sq.yd. 2½ in. asphalt paving blocks, $50,000, $30,000 and $28,000 respectively.

Alabama — Jan. 4, by Highway Comn., Montgomery, grading and bitulithic paving 12 mi. Birmingham-Decatur Highway, 20 ft., $100,000. State Highway Dept., engrs.

Miss., Vicksburg—Jan. 7, by Mayor and Bd. Aldermen, for curbing and 61,000 sq.yd. paving. Grading will be done by City. Total est. cost $225,000. F. M. Garvey, city engr.

Kentucky — Jan. 8, by State Hy. Dept., Frankfort, improving various roads, **(F. A. P. means Federal Aid Project, S. P. State Project)**, grading and surfacing with rein.-con., bituminous concrete (concrete base) or rock asphalt (concrete base) 3.747 mi. Louisville-Bardstown Rd., 20 ft., F. A. P. 50, Sect. B, Jefferson Co.; with gravel, waterbound macadam, or waterbound macadam treated 15.13 mi. Owenton-Georgetown Rd., 16 ft., S. P. 49, Sect. A. Scott Co.; with waterbound macadam, creek gravel or waterbound macadam surface treated 7.623 mi. Owingsville-Carlisle Rd., 14 ft., S. P. 61, Sect. A, Bath Co.; surfacing with bituminous macadam, waterbound macadam or waterbound macadam surface treated 5.809 mi. Williamsburg-Jellico Rd., 16 ft., F. A. P. 23, Sect. D, Whitley Co., also grading ½ mi. same road; with brick, rein.-con. or sheet asphalt on concrete base 1.972 mi., 20 and 38 ft., S. P. 17, Sect. A. Franklin Co.; grading 3.167 mi. Harlin-Pineville Rd., 24 and 28 ft., S. P. 6, Sect. C, Harlan Co. J. S. Boggs, state highway engr. Noted Dec. 6.

O., Toledo—Dec. 20, by Lucas Co., Court House, grading, curbing and concrete paving 1.08 mi. Washington Twp. Stone Rd., Impvt. 223, Washington Twp.; paving 1.5 mi. Howard Rd., Jerusalem Twp., bituminous macadam and concrete; curbing and rein.-con. paving 630 ft. Evans St., Washington Twp.; rein.-con. paving 0.68 mi. Richards Rd., Adams Twp.; curbing and concrete paving 645 ft. Macomber St., Washington Twp. A. E. Schmitt, clk.

Michigan—Jan. 15, by State Hy. Dept., Lansing, improving 0.508 mi. State Trunk Line Rd. 46-26, Port Sanilac, 6,254 sq.yd. asphalt, concrete or bituminous concrete, etc. F. F. Rogers, comr.

Ill., Galesburg — Dec. 19, by Bd. Local Impvts., grading, curbing, paving, etc., Grand Ave., 7,620 cu.yd. grading, 10,198 lin.ft. concrete curb and gutter, 18,004 sq. yd. brick pavement on 4 in. concrete with asphalt filler, etc. A. L. Richey, City Hall, engr.

Ia., La Porte City—Dec. 18 curbing, paving, etc., 23 blocks. H. R. Green Co., Bever Bldg., Cedar Rapids, engrs.

Tex., Corpus Christi—Dec. 21, by H. R. Sutherland, judge Nueces Co. grading and concrete surfacing 10.09 mi. State Highway 12, Federal Aid Project 340, 18 ft. $335,000. C. E. Cocke, co. engr. Noted Nov. 15.

Streets and Roads (Continued)

Tex., Decatur—Dec. 21, by S. M. Ward, judge Wise Co., hauling and placing 33,125 cu.yd. gravel surfacing on State Highway 2. $52,000. Gravel to be furnished by county $26,500. H. R. Smith, co. engr.

Tex., La Grange—Dec. 21, by J. P. Ehlinger, judge Fayette Co. grading and gravel surfacing 5.84 mi. State Highway 3 B, Federal Aid Project 285, 18 ft. $99,822. A. Schlafli, co. engr.

Tex., Tyler—Smith Co. taking bids grading road from Sabine River Bridge to Van Zandt Co. line, 6½ acres clearing, 4 acres grubbing, 12,000 yd. road excav., 1,200 yd. borrow, 4,000 lb. rein.-con. steel. $28,000. Gravel surfacing will be done later. D. K. Caldwell, Tyler, co. engr.

Okla., Marlow—Dec. 17, by G. L. Orr, city clk., grading and paving Bway. Ave., 10,800 sq.yd. concrete, 4,000 cu.yd. excav. $72,300. Former bids rejected. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 22.

Calif., Los Angeles—Supervs. Los Angeles Co. taking bids improving Ricker Ave., 9,997 sq.ft. concrete gutter, 4,752 lin.ft. curbing, 17,243 sq.ft. walks, 62,700 sq.ft. oil and screenings surface, including shaping.

Calif., San Bruno—City Trustees taking bids grading, paving, sewers, etc., Elm, Acacia, Cypress, etc., in Huntington Park, 120,000 sq.ft. asphaltic concrete base with Warrenite surface. G. A. Kneese, Courthouse, Redwood City, engr. Noted Nov. 15.

Calif., San Francisco—Dec. 19, by Bd. Pub. Wks., improving Wilde Ave. between Delta and San Bruno Aves., 7,100 cu.yd. cut, 1,035 cu.yd. fill, 500 lin.ft. 10 in. culverts, 4,388 lin.ft. concrete curbing, 19,200 sq.ft. concrete and 71,225 sq.ft. asphalt concrete pavement. To exceed $35,000. M. M. O'Shaughnessy, city engr. Noted Oct. 4.

Calif., San Diego — Dec. 24, by A. H. Wright, city clk., improving 1st, 2nd and 3rd Sts., 31,200 sq.ft. 4 in. Portland cement concrete base, 1 in. binder and 1½ in. asphalt wearing surface, 173,086 sq.ft. 3 in. bituminous base, 1½ asphaltic concrete wearing surface, 99,451 sq.ft. 2½ in. bituminous base, 1½ in. asphaltic concrete wearing surface, etc. F. A. Rhodes, city engr. Noted Sept. 20.

Calif., Sonoma — Dec. 31, by State Hy. Dept., Sacramento, improving road between Beltane and Schellville, surfacing 7.2 mi. with gravel or broken stone, paving 4.3 mi. with Portland cement concrete, and grading entire project. G. M. Morton, state highway engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Dec. 5, paving and repaving Glenwood Rd. and 87th St., asphalt, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $34,051 and $9,508 respectively. Noted Nov. 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Dec. 3, curbing, laying sidewalks, etc., (1) Howland St.; paving with permanent sheet asphalt (2) Howland St. (3) Darvall St. (4) 87th Ave. (5) 90th Rd.; grading, curbing, laying sidewalks, etc. (6) Darvall St. (7) Rene Pl. (8) 85th Dr. (9) 87th Ave. (10) 90th Rd.; regrading (11) North Jane St.; grading, curbing, paving and laying sidewalks (12) 87th Rd.; receiving basins and asphalt paving (13) 44th St.; grading, curbing, flagging, paving, etc., (14) 132nd St. from Welsh Bros. Contg. Co., 32 Queens St., Astoria, (1) $6,505 (11) $14,597; Sicilian Asphalt Paving Co., 41 Park Row, New York, (2) $26,180 (3) $12,623 (4) $6,663 (5) $16,458 (7) $9,394 (8) $12,387 (13) $29,915 (14) $865; R. A. Hess, Inc., 14 Queens St., Astoria, (6) $6,309; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (9) $3,610 (10) $5,127; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (12) $7,655. Noted Nov. 29.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt repaving Jackson Ave., from W. J. Fitzgerald, 547 West 45th St., New York City, $347,719. Noted Dec. 6.

New Jersey — State Hy. Dept., Trenton, Dec. 5, improving 33,985 sq.yd. Netcong Canal Culvert, Morris Co., concrete, 11,388 lin.ft. rein.-con. and vitr. clay drains, concrete curbs, etc., from Crilly & Cannon, Phillipsburg, 92.18% engrs. est. ($226,717); 31,001 cu.yd. Route 16, Sect. 6 A, Bernardsville-Passaic River Rd., Morris and Somerset Counties, concrete, from D. Klockner, 1601 Nottingham Way, Trenton, 95.9% ($174,388). Noted Nov. 22.

Pa., Ebensburg — Cambria Co., Dec. 5, improving 2.104 mi. Nicktown Rd. between Belsano and Cover, Barr Twp., rein.-con. and Hillside vitr. brick, from L. Swartz, Spangler, $123,041. Noted Nov. 29.

Pa., Wilkes-Barre—F. H. Gates, city clk., paving 2,300 ft. Dagobert, Hillard, Beaumont and Reichard Sts., 24-30 ft. from Goeringer Constr. Co., Wilkes-Barre, asphalt $4.50, brick $6, curb $1.75. Noted Nov. 29.

North Carolina — State Hy. Comn., Raleigh, improving roads **(S. P. means State Project)** grading and asphaltic paving 4.65 mi. S. P. 666, Richmond, Co., from G. R. Martin & Co., Salisbury, $150,038; grading and concrete or asphaltic paving 7.32 mi. S. P. 457-B, Orange Co., from L. L. Tindall, Waterford, Wis., $230,338; concrete or asphaltic paving 5.6 mi. S. P. 852, McDowell Co., from A. J. Wardrep, Holsten Bank Bldg., Knoxville, Tenn., $200,949, 8.13 mi. S. P. 318, Brunswick Co., from F. J. McGuire, Paul-Gale-G. Bldg., Norfolk, Va., $98,997, 2.01 mi. S. P. 557, Montgomery Co., from W. F. Bowe, Jr., 541 Broad St., Augusta, Ga., $63,187; grading and sand clay surfacing 16.34 mi. S. P. 513, Caswell Co., from N. L. Teer, Durham $115,552; grading and sand asphalt paving 13.12 mi. S. P. 275, Sampson Co., from Highway Eng. & Constr. Co., Selbyville, Del., $266,038; grading 5.03 mi. S. P. 648-A, Lincoln Co., from G. Ginn, Inc., Gastonia, $27,580; paving with sand asphalt 4.95 mi. S. P. 571, Moore Co., from West Constr. Co., Vol. Life Bldg., Chattanooga, Tenn., $81,679; grading and bringing 7.02 mi. S. P. 952-B, Jackson Co., from Piedmont Constr. Co., Selica, $60,031; grading and topsoiling 6.83 mi. S. P. 750-B, Stokes Co. and grading 9.88 mi. S. P. 646-A, Lincoln Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $111,128 and $32,416 respectively; grading and topsoiling 16.97 mi. S. P. 912, Cherokee Co. and grading 13.4 mi. S. P. 791-A, Yadkin Co., from W. E. Graham, Mt. Ulla, $399,048 and $76,366 respectively. Noted Nov. 15.

Tex., Dallas — Paving following streets 9,300 sq.yd. Waverly, 15,500 sq.yd. Walter, 14,500 sq.yd. Henderson, from McMillan to Willis, and 5,880 sq.yd. Henderson, from Junius to East Side, 7,620 sq.yd. Alamo, 14,120 sq.yd. Cockrell, 12,110 sq.yd. 8th, 2,720 sq.yd. Colonial, 415 sq.yd. Hord, 4,350 sq.yd. 4th, 8,200 sq.yd. Oram, 6,170 sq.yd. 2nd, 1,750 sq.yd. McKinney, 17,497 sq.yd. Oakland, 14,300 sq.yd. 9th, 4,635 sq.yd. Madison and 11,850 sq.yd. Fitzhugh, from Smith Bros., Sumpter Bldg., asphalt $2.95 per sq.yd., brick, $3.30; Central Bitulithic Co., Praetorian Bldg., bitulithic $2.95, brick $3.70; Uvalde Paving Co., Insurance Bldg., Uvalde rock asphalt $3.04, lower grade rock asphalt $2.89; Fuller Constr. Co., Amer. Exch. Natl. Bank Bldg., willite $3.02.

Tex., Jasper—Jasper Co. grading, gravel surfacing and bridging 6.4 mi. State Highway 63, 12 ft. and gravel surfacing 4.24 mi. State Highway 36, Federal Aid Project 93, 12 ft., from R. B. Suarks, Gaston Bldg., $47,353 and $9,381 respectively. Gravel on both to be furnished by county. Noted Nov. 8.

Tex., Vernon—Wilbarger Co. rein.-con. surfacing 38,255 sq.yd. State Highway 5, etc., from J. P. Foty, Vernon, $105,508. Noted Nov. 15.

Okla., Oilton—Grading and paving Main St., 14,165 sq.yd. 6 in. concrete, from H. L. Cannody Co., Tulsa, $58,855. Noted Oct. 25.

Wash., Seattle—Bd. Pub. Wks., Nov. 30, grading and paving Youngstown Pl. et al., from Goetz & Brennan, Seaboard Bldg., 30,815 sq.yd. 8 in. concrete $2.38, 18,730 sq. yd. 7 in. concrete $2.13, 1,224 lin.ft. asphaltic concrete curbing $0.65, 12,800 lin. ft. concrete curbing $0.35, 13,600 ft. special concrete curbing $0.30, etc., total $320,004 (clay) and $319,525 (concrete).

California—State Hy. Comn., Sacramento, grading and gravel surfacing, 3.93 mi. Federal Aid Project 137, between Westmoreland and a point 4 mi. west, Sect. A, Route 26, Div. 8, Imperial Co., from Pioneer Transfer Co., Calexico, 16,000 cu.yd. embankment, $0.45, 7,000 cu.yd. gravel or stone surfacing $4.40, total $38,000. Engrs. est. $38,800. Noted Nov. 15.

California—State Hy. Comn., Sacramento concrete paving 9.95 mi. Redding-Bayha Rd., Shasta Co., Federal Aid Project 140 69,000 cu.yd. embankment, 33,000 cu.yd. overhaul, 52,150 lin.ft subgrade 22,220 cu.yd. Class A concrete pavement, etc., from Frederickson & Shannon, Cory Bldg., Fresno, 398,808. Noted Nov. 22.

Calif., Colton — Improving streets, from Hall-Johnson, Box 51, Lynwood, C St., 191,000 sq.ft. 2 in. course Willite pavement $0.224, 1,752 ft. curb $0.56, 1,450 sq.ft. walks $0.18; South 8th St., 84,500 4 in. Willite pavement $0.222, 3,630 ft. 5 in. Willite pavement $0.253, 26.538 ft. 2 in. Willite pavement $0.125, 1,500 sq.ft. walks $0.18, etc.

Calif., Hawthorne—Improving Raymond and Hawthorne Aves., 96,000 sq.ft. 2½ in. asphalt base with 1½ in. Willite surface, 310,000 sq.ft. 4 in. asphalt base, 2 in. Willite surface, grading, curbs, gutters, etc., from Oswald Bros., 366 East 58th St., Los Angeles, $213,500.

Calif., Los Angeles — Los Angeles Co. concrete pavement, 22 ft. wide, 6 in. to 8 in. thick, etc., from G. H. Oswald, 366 East 58th St., Los Angeles, $41,000. Noted Nov. 15.

Que., Montreal—Grading Sherbrooke St. from Duquesne to Viau Sts., from F. Lapan, 601 Lacordaire St., $87,960; 6,500 sq.yd. 3 in. asphalt pavements on Marquette St. from Des Carrieres Rd. to Drucourt St., from Quinlan, Robertson & Janin Ltd., 50 Notre Dame St. $33,805; concrete sidewalks on Rosemount Blvd. from Papineau to 1st Aves., and on Jarry St. from Lajeunesse to St. Dominique Sts., from Toussaint Bros., 2353 St. Denis St., $5,246 and $6,496 respectively.

CONTRACTS AWARDED

N Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Alstyne and Pierce Aves., grading, curbing, laying sidewalks and asphalt paving Radcliffe St., to R. A. Hess, Inc., 14 Queens St., Astoria, $16,165, $8,678 and $15,395 respectively; grading, curbing, laying sidewalks and asphalt paving Prospect Ave., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $15,500; 76th St., to C. Kurth, 9519 126th St., Richmond Hill, $8,395; 84th and 90th Sts., to J. J. O'Brien, William St., Jamaica, $5,170 and $10,199 respectively; sheet asphalt paving 76th St., 89th and 90th Aves., to Cleveland Trinidad Paving Co., Flushing $27,440, $23,324 and $20,580 respectively. Noted Dec. 6.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Fisher Ave., bituminous macadam, to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, $30,560. Noted Dec. 6.

N. Y., Troy—Bd. Contr. & Supply, paving 2nd Ave., granite block, to Troy Paving Co., 418 Gay Blvd. St., $216,332; Eaton Rd. and Sage Ave., warrenite bitulithic, to Fitzgerald Bros. Constr. Co., Inc., Proctor Bldg., $59,856. Noted Nov. 29.

Pa., Ebensburg—Comrs. Cambria Co., rein.-con. paving 12,800 lin.ft. Loretto-Chest Springs Rd., Allegheny Twp., to Owen & Plummer, Inc., Otto Bldg., Johnstown, $122,910. Noted Nov. 22.

Fla., Tavares—Lake Co., steel surfacing 10 mi. section of Rd. H. from Paisley to Crows Bluff, South Lake Special Road & Bridge Dist., to M. Lindsay, Cocoa, Fla. $25,250. Noted Nov. 15.

Fla., West Palm Beach—Palm Beach Co., paving 2 Tropical Farms, Kerns and Mapp Rds., to R. Tomasella, West Palm Beach, $28,500.

Fla., West Palm Beach—Palm Beach Co., grading, paving and oiling 8 mi. Rd. 283, "The Gap," Stuart Anne Rd. to Holpaticken, Special Road and Bridge Dist. 16, to McVey Lindsay, West Palm Beach, $30,167; Stuart Annie Rd. from Ferry to Lake Okeechobee to M. F. Myers, West Palm Beach, $32,500. Noted Oct. 18.

Alabama—State Hy. Comn., Montgomery, grading and graveling 6.04 mi. Phil Campbell and Russellville highway, 20 ft., Federal Aid Project 135 Sect. A, Monroe Co., to Scott, Chambers & Co., West Point, Ga., $71,235; new bridge on above road, to W. M. Thompson & Co., Fayette, $17,668. Noted Dec. 6.

Ala., Birmingham—City Comrs., asphaltic concrete paving following streets: 3 blocks 8th Court St., to Morgan Hill Paving Co., Empire Bldg., $4,069; 7 blocks Bush Blvd. and 24th St., from 7th to 8th Aves., to H. N. Bowdry, 3426 Norwood Bldg., $36,529, and $10,598 respectively; 1 block 8th Ave., to Birmingham Railway Light & Power Co., $1,300.

Miss., Ashland — Graveling Federal Aid Project 90, to A. M. Perdue, Pine Bluff, Ark., 12,040 cu.yd. gravel 1 mi. haul $0.79, 99,790 units gravel ½ mi. overhaul $0.16, etc., total $26,478. Engrs. est. $25,102. Noted Nov. 22.

La., Oak Grove—Grading and graveling 6 mi. Terry-Oak Grove Rd., to A. E. Perry Highway Co., Monroe, $39,500.

Tenn., Nashville—City will construct approaches and roadway to Meridian St. Viaduct, grading, earth fills, etc., $26,000. Work will be done by city forces. W. W. Southgate, city engr.

Michigan — State Hy. Dept., Lansing, grading 9.939 mi. Federal Aid Project 82, Sect. B, Washtenaw Co., to Carpenter & Orr, Adrian, 74,113 cu.yd. earth excav., $0.55, 467 cu.yd. 1-2-4 concrete $20, 602.4

Streets and Roads (Continued)

cu.yd. 1-3-6 concrete $19, etc., total $69,811; 7.711 mi. State Trunk Line Rd. 16-3, to T. Stevenson, Saginaw, 85,951 sq.yd. sheet asphalt on black base $2.05, etc., total $180,272. Noted Nov. 22.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.901 mi. State Trunk Line Rd. 23-10, Sects. A and B, Branch Co., to Waterbury & O'Shaughnessy, Coldwater, 13,946 cu.yd. excav. $0.65, 33,978 sq.yd. 8 in. rein.-con. pavement $1.55, etc., total $65,507. Noted Dec. 6.

Ia., Clinton—Clinton Co., to McCarthy Impvt. Co., Kahl Bldg., Davenport, grading and paving 1.301 mi. Clinton-Comanche Rd., 1,718 cu.yd. excav. $0.50, 13,733 sq.yd. concrete $2.42, etc.; 14.53 mi. Lyons-Charlotte Rd., 38,370 cu.yd. excav. $0.50, 159,738 sq.yd. concrete $2.58, 36 single special and 5 double special intakes, $75 and $95 respectively. Noted Nov. 22.

Mo., Kennett—Grading and concrete surfacing 30,000 sq.yd. various streets to Regenhardt Constr. Co., Cape Girardeau, $105,000. Noted Oct. 4.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, improving Lilian Ave., 32,638 cu.yd. grading, 14,100 cu.ft. cinders and 1,000 cu.ft. macadam, etc., also Geraldine Ave., 13,090 cu.yd. grading, 7,380 cu.ft. cinders, and 500 cu.ft. macadam ,to Fruin-Colnon Constr. Co., Merchants Laclede Bldg., $22,737 and $13,168 respectively; McDonald Ave., 3,945 cu.yd. grading, 2,845 cu.ft. cinders and 500 cu.ft. macadam, also McCune Ave., 7,310 cu.yd. grading, 500 cu.ft. macadam, 8,240 cu.ft. cinders, to T. E. Cavanaugh, 6452 Oakland St., $2,999 and $5,638 respectively. Noted Dec. 6.

Tex., Denton—Paving 3 streets around Teachers College Campus, bituminous macadam, to W. M. Jagoe Co., Denton, $40,000; 4,000 ft. Boliver St., bituminous macadam, to H. Trimble, Denton, $25,000.

Okla., Fairfax—Grading and paving 9 blocks 4th St. and Maple Ave., 12,800 sq.yd. vertical fibre brick, 7,200 lin. ft. curbing, 5,000 cu.yd. earth and 150 cu.yd. rock excav., to L. R. Moran, Okmulgee, $81,282. Noted Nov. 29.

Okla., Wewoka—Grading and paving 18 blocks Okfuskey, Mikosukey and Plum Sts., 27,450 sq.yd. vertical fibre brick, 13,500 lin.ft. curbing, 10,000 cu.yd. earth and 3,000 cu.yd. rock excav., to E. E. Park, Box 622, Okmulgee, $148,277. Noted Nov. 29.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 2.5 mi. State Rd. 4, from Wilbur Hill to Clark, Lincoln Co., to M. A. Degerstrom, Payton Bldg., Spokane, $36,975. Engrs. est. $36,000. Noted Nov. 22.

Oregon—State Hy. Comn., Salem, grading 9.87 mi., Tyge Valley Dufer Sect., The Dalles, California Highway, 60 ft., to Greenwood & Dann, 500 Front St., Portland, 75,000 cu.yd. common excav. $0.37, 35,000 cu.yd. solid rock excav. $1.15. 2.170 lin.ft. 12 in. corrugated galvanized iron pipe $1.25, 840 lin ft. 18 in. $2.35 and 270 lin.ft. 24 in. $3, 20 cu.yd. Class A concrete $30, 36 cu.yd. Class B $30 and 95 cu.yd. Class C $25, etc. total $86,466. Above contract awarded subject to approval of U. S. Bureau of Pub. Rds.

Calif., El Centro—Imperial Co. grading and gravel surfacing 3 mi. road between Westmoreland and point 4 mi. west, to Pioneer Transfer Co., Calexico, $38,000.

Calif., Los Angeles—Bd. Pub. Wks., improving Figueroa St. between Manchester Ave. and 120th St., to Tryon & Brain, Tajo Bldg., $334,862. Noted Dec. 6.

Calif., Los Angeles—Supervs. Los Angeles Co., improving Slauson Ave. between Los Angeles city limits and point 5,270 ft. westerly, 15,365 cu.yd. excav., shaping 5,270 lin. ft. roadbed, 12 882 sq.yd. concrete paving, etc., to G. H. Oswald, 366 East 58th St., Los Angeles, approximately $41,000. Noted Dec. 13.

Calif., San Diego—Common Council, improving Hawthorn St. from 5th to Atlantic Sts., to California Constr. Co., Union Bldg., 102,956 sq.ft. 1½ in asphaltic concrete on 2½ bituminous $0.167, etc., total. $34,828. Noted Oct. 18.

Calif., San Diego — Improving Robinson and Pennsylvania Aves., 7th and 8th Sts., 150,387 sq.ft. 1½ in asphaltic concrete on 3 in. bituminous, etc., to Griffith Co., 25 14th St., $27,900. Noted Sept. 20.

Industrial Works

PROPOSED WORK

Mass., Worcester—Boston & Maine R.R., North Sta., Boston, plans 1 story powerhouse, concrete, at yards, here. $75,000. A. B. Corthell, ch. engr.

Conn., Hartford—Eastern Provision Co., State St., plans 2 story storage plant, etc., brick and steel, plain foundation, State St. $40,000. Golden-Storrs & Co., 1047 Main St., archts.

Conn., South Manchester — W. Dougan plans 2 story and basement dye house, brick and steel, plain foundation, Harrison St. $40,000. Engineer and architect not selected.

N. Y., Albany—Rochester Packing Co., 900 Maple St., Rochester, had plans prepared by Henschien & McLaren, 1637 Prairie Ave., Chicago, 5 story, 200 x 300 ft., rein.-con. and steel plant, plain foundation, Exchange St., here. $500:000.

N. Y., Gouverneur — Plans power plant, concrete dam, hydraulic and electric equipment, two 1,200 gal. centrifugal pumps, etc. $60,000. L. Reynolds, Geneva, engr.

Pa., Phila.—Crescent Color & Ink Co., 408 Vine St., having plans prepared by P. S. Tyre, 1511 Arch St., and takes bids about Dec. 16, 1 story and basement, 60 x 90 ft., and 2 story and basement, 30 x 60 ft. factory, rein.-con. and brick, plain foundation, 5th and Hamilton Sts.

Pa., Phila.—King Bedding Co., 21st and Ontario St., having plans prepared by P. S. Tyre, 1511 Arch St., and takes bids about Dec. 16, 2 story and basement, 50 x 80 ft. factory, rein.-con. and concrete, plain foundation, 21st and Ontario Sts. $40,000.

Pa., Phila—Packard Inc., 319 North Broad St., plans large service and sales build, Alleghany and Broad Sts. P. S. Tyre, 1511 Arch St., archt.

Pa., Pittsburgh—Rosenbaum Co., 6th and Penn Aves., having plans prepared by W. E. Snaman, Empire Bldg., 4 story and basement, 159 x 291 ft. warehouse addition, Beaver Ave. $500,000.

Pa., Williamsport — Vallamont Planing Mill Co., 1009 Market St., plans 3 or 4 story and part basement, 120 x 160 ft., steel and concrete mill, Market St. $150,000.

Md., Baltimore—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., having plans prepared by S. Deischer & Sons, engrs., Farmers Bank Bldg., Pittsburgh, Pa., 2 story, 171 x 350 ft. warehouse, 154 x 345 ft. enamel shop, 102 x 197 ft. cleaning house, 97 x 589 ft. foundry, 100 x 250 ft. machine shop, 107 x 132 ft. powerhouse, 100 x 120 ft. enamel power mill 5th Ave. from 7th St. to Camp Holabird, here. $2,000,000. Noted Nov. 29, under "Unclassified."

N. C., Old Fort — Bancroft & Sons Co., Rockford St., Wilmington, Del., purchased 500 acres here and plan to erect large bleachery to care for output of 40-50 mills, several hundred houses, and factory town incl. streets, water, sewer, etc. $30,000,000. Q. E. Sirrine & Co., Greenville, S. C., engrs.

Fla., Tampa—Swann Terminal Co., 314 Madison St., had plans prepared by Lockwood, Green & Co., Healey Bldg., Atlanta, Ga., 3 story, 140 x 600 ft., steel warehouse, also 5 story, 140 x 600 ft. concrete and brick mill building, incl. cold storage plant, offices, etc., at Swann Terminal on Estuary St. $750,000. Noted June 21.

Ky., Ashland—Person Slagtex Co. plans new plant. $40,000.

Ky., Louisville—H. Fischer Packing Co., 1806 Mellwood Ave., plans 3 story, 37 x 205 ft. brick factory. To exceed $40,000.

Ky., Sebree—G. T. Carnal plans 3 story and basement mill to replace one destroyed by fire. $40,000.

O., Cincinnati—Queen City Oil Co., 128 Water St., plans gasoline and oil storage plant, Colerain Ave. $60,000.

O., Cleveland—Acetylene Stove Mfg. Co., 1265 West 2nd St., had plans prepared by W. J. Wefel, 3327 Yorkshire Rd., Cleveland Heights, 1 story, 60 x 160 ft. brick and steel factory, East 59th St. and Park Ave. $50,000.

O., Cleveland—L. Blanshield, 3322 East 119th St., had plans prepared by L. Skolnik, 6th—St. Clair Bldg., 1 and 2 story, 43 x 149 ft., brick garage, 12100 Kinsman Rd. $50,000.

O., Cleveland—Ohio Confection Co., 5305 Sweeny Ave., plans 3 or 4 story, 120 x 330 ft., brick, steel and concrete factory and office building addition, Warner Rd. along tracks of Pittsburgh & Lake Erie R.R. $200,000. Engineer and architect not selected.

O., Cleveland—J. Spielman, Ulmer Bldg., had plans prepared 1 and 2 story, 43 x 129 x 141 ft. brick garage, East 121st. and Kinsman Rd. $50,000. Private plans.

O., Middletown—W. B. Oglesby Paper Co., having plans prepared 2 story, 100 x 100 ft. concrete, brick and steel, addition to factory. $185,000. Private plans.

O., Portsmouth—Carlyle—Labold Co. having plans prepared 1 story, brick factory. $75,000 to $100,000. Private plans.

O., Reading (branch of Cincinnati)—General Match Co., 1626 Hamer St., Cincinnati, plans several brick, steel and concrete buildings, here. $250,000. Engineer and architects names withheld

Ind., Michigan City—Michigan City Lumber & Coal Co. plans 1 story mill, garage and office buildings, brick and timber, Washington and 2nd Sts. $40,000. Nicol, Scholer & Hoffman, Ross Bldg., Lafayette, archts.

Mich., Detroit—Peerless Portland Cement Co., 2408 First Natl. Bank Bldg., having plans prepared by A. Kahn, 1000 Marquette Bldg., rein.-con. and steel plant, plain foundation, 1,500 bbl. daily capacity, West Jefferson Ave. $1,500,000.

Mich., Detroit—Weston & Ellington, archts., 1507 Stroh Bldg., preparing plans, 1 story and basement, 100 x 250 ft. rein.-con. and brick factory, plain foundation, Scotten Ave. $100,000. Owner's name withheld.

Ill., Chicago — Francisco & Jacobus, archts., 39 South La Salle St.,' take bids about Dec. 15, 3 story factory, fireproof, Grand St. near Kenton St., for Continental Can Co., 111 West Washington St. $500,000.

Ill., Freeport—W. T. Rawleigh Co., 101 South Liberty St., having plans prepared by J. R. and E. J. Law, 1st Central Bank Bldg., Madison, Wis., 6 story and basement, 120 x 300 ft., rein.-con., brick and stone, printing plant, Spring St., here. $400,000.

Wis., Delavan—A. H. Schumacher, rejected bids 2 story, 40 x 68 ft. and 20 x 62 ft., brick and concrete garage, plain foundation. Will readvertise later. H. C. Hengels, 445 Milwaukee St., archt. Noted Oct. 18.

Wis., Eau Claire—Wisconsin-Minnesota Light & Power Co., 2 South Barstow St., plans 2 story, warehouse and garage, brick and concrete, plain foundation, Railroad St. $50,000. Engineer and architect not selected.

Wis., Oshkosh—Morgan Co., 6th and Oregon Sts., plans to rebuild 3 story, brick and timber or brick and concrete warehouse, plain foundation, recently destroyed by fire. $60,000. Engineer or architect not selected.

Wis., Randolph — J. E. Hennen, archt., North Main St., Fond du Lac, soon takes bids 2 and 3 story, 42 x 80 ft. main building, 2 story, 60 x 120 ft. warehouse, 1 story, 38 x 40 ft. boiler house, 30 x 72 ft. viner building and 30 x 32 ft. minor building, brick and timber, plain foundation, for Friesland Canning Co., c/o W. Jones, pres. $75,000. Noted Nov. 1.

Ia., Bedford—Plans electric lighting plant incl. oil engine and dynamo, $40,000; distribution system $25,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, Neb., engrs.

Ia., Dubuque—Belsky Motor Co., 6th and Iowa Sts., soon receives bids 2 story and basement, 50 x 125 ft. garage, brick and stone, $50,000. Koenigsberg & Weifeld, 155 Clark St., Chicago, archts.

Kan., Ft. Scott—City plans new electric light and power plant. $200,000. Architect not selected.

Mo., Moberly—Polar Wave Ice & Fuel Co., 3628 Olive St., St. Louis, having preliminary plans prepared by H. G. Clymer, Wainwright Bldg., St. Louis, 2 story, 100 x 200 ft., brick and rein.-con. plant, here. $150,000.

Mo., Mountain Grove—Defeated $40,000 bonds electric light plant. Noted Nov. 22.

Mo., St. Louis—Bd. Pub. Serv. and Citizens Bond Issue Supervisory Com. approved $500,000 bonds power plant.

Ark., Harrison — C. C. Utility Co., Eureka, purchased Harrison Electric Co. and plans to rebuild same, also erect ice and cold storage plant. $150,000.

Tex., Dallas—Trinity Portland Cement Co., Commonwealth Bldg., plans rebuilding cement mill recently destroyed by fire. $50,000 to $75,000. Private plans.

Tex., Ft. Worth—Ft. Worth Elevators Co., 1510 East 1st St., plans bag factory, concrete and brick, East Ireland St. $300,000. Engineer and architect not announced.

Tex., Raymondville — S. Butler, Kingsville, had plans prepared ice plant, etc., here. $40,000. Engineer and architect not announced.

Tex., Rockdale — City plans gas plant, using crude oil. $80,000. C. W. Arlitt, Littlefield Bldg., Austin, interested.

Okla., Ponca City—C. C. Woodruff, Reynolds Bldg., Ft. Worth, Texas, plans 2 story and basement, 45 x 140 ft., brick, concrete and tile, plant. $40,000 to $50,000.

Industrial Works (Continued)

Okla., Sand Springs—San Springs Cotton Mills having plans prepared Southwestern Eng. Co., 910 North Elwood St., Tulsa, 2 story and basement 200 x 240 ft. bleachery, rein.-con. and brick. $150,000.

Okla. Tulsa—Tulsa Cotton Mills Corp., 408 Atlas Bldg., plans 1 story rein.-con. mill, 175,000 sq.ft. floor space. $250,000. Standard Southwestern Eng. Co., 910 North Elwood St., structural engrs.

Ariz., Patagonia — Arizona Kuenzel Smelting Co., Nogales, having plans prepared for smelter plant, here, 25 tons daily capacity. Private plans.

Wash., Bellingham—Defeated $500,000 bonds for municipal hydro-electric power plant. Noted Dec. 6.

Wash., Seattle—Shell Oil Co., Westlake St. N. and Highland Dr., plans large oil terminal on 8-acre tract, Harbor Island, fronting East Waterway.

Wash., Seattle—Ford Motor Co., Highland Park, Mich., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story, 30 ft. high, 50 x 311 ft. factory and car delivery building, rein.-con., plain foundation, Roy St., here.

Ore., Eugene—Central Stage and Terminal Co., soon receives bids 3 story, 68 x 120 ft. garage, bus depot and hotel, rein.-con., Willamette St. $75,000.

Ore., Verona—Oregon Amer. Lumber Co., 1017 Yeon Bldg., Portland, having plans prepared 1 and 2 story, 92 x 292 ft. saw mill, here. $40,000-$50,000. C. W. McGregor, mgr. Work will be done by company forces.

Calif., Hayward—Dohner & Galbraith, 1036 A St., plans 1 story concrete garage and auto salesrooms, A St. $40,000.

Calif., Huntington Beach — California-Pacific Textiles Inc., c/o J. W. Purinton, engr., 304 San Fernando Bldg., Los Angeles, having preliminary plans prepared, 100 x 300 ft. factory, 4 story storage building, boiler house, shipping building, transformer station, etc., rein.-con. and brick.

Calif., Los Angeles—Los Angeles Concrete Tile Co, I. W. Hellman Bldg., plan 1 story 75 x 200 ft. factory and 1 story 75 x 150 ft. curing sheds, probably hollow tile construction, Mission Rd.

Calif., National City—Schiefer & Sons, 372 8th St., San Diego, purchased 4 acre site, and plans plant, main building to be 170 x 200 ft., here. $100,000.

Calif., San Ysidro—The San Diego Smelter Co., San Diego, plans smelter plant, here. $300,000. A. Samson, genl. mgr. and vice-pres.

BIDS DESIRED

Tenn., Etowah — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, Ky., taking bids and opens same about Dec. 31, brick and steel shop, here. $50,000.

Ky., Louisville—Dec. 27, by Joseph & Joseph, archts. Francis Bldg., 1 story, 120 x 200 ft., factory, 17th and Magnolia Sts., for Highway Iron Products Co. Columbia Bldg. $106,000.

O., Cleveland—Natl. Biscuit Co., 85 9th Ave., New York City, taking bids and opens same about Dec. 13, 1 story, 64 x 450 ft., brick and steel warehouse, East 83rd St. and Woodland Ave., here. $200,000. A. Zimmerman, c/o owner, constr. engr. Private plans.

O., Toledo — Dec. 15, by Libby-Owens Sheet Glass Co., Nichols Bldg., 1 story, 187 x 1,000 ft., brick and steel plant, along tracks of New York Central R.R. $1,000,000. Devore & Co., 808 Nichols Bldg., archts. Noted June 28.

Ind., Indianapolis — Rubush & Hunter, archts., 428 Amer. Central Life Bldg., taking bids 3 story and basement, 61 x 209 ft., brick factory, 13th and Senate Sts., for Indianapolis Glove Co., Liberty and Michigan Sts.

Mich., Crystal Falls—Dec. 15 (extended date) by F. E. Parmelee & Son, archts., Iron Montain, 1 story, 52 x 100 ft., concrete and brick garage, plain foundation, for Webb Garage Co., $50,000. Noted Nov. 22.

Wis., Madison — A. J. McCance, 204 Meirey St., taking bids 1 story, 60 x 100 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $50,000. Private plans. Noted Dec. 6.

Wis., Milwaukee—M. J. Goodnetter, 384 22nd St., taking bids 1 story, 40 x 120 ft., concrete garage, plain foundation, North Ave. $40,000. Private plans.

Wis., Milwaukee — Hummel & Downing Co., 324 Thomas St., taking bids 1 story, 100 x 100 ft. storage plant, steel, plain foundation, Newhall St. $50,000. Private plans.

Mo., St. Louis—W. P. McMahon, archt., Title Guaranty Bldg., taking bids and opens same about Dec. 15, 4 story and basement, 37 x 155 ft. rein.-con., brick, stone and tile service building, Locust St., for Mendenhahl Motor Co., 2317 Locust St. $100,000. Noted Nov. 1.

Tex., Abilene—Dec. 20, by J. M. Radford, Radford Bldg., 2 story, 50 x 135 ft., brick and stone warehouse, Oak and Pecan Sts. $50,000. D. S. Castle Co., Radford Bldg., archts.

Calif., Los Angeles — Walker & Eisen, archts., Pacific Finance Bldg., taking bids 1 story, 360 x 800 ft., brick factory, Slauson and South Park Aves., for Weber Showcase Co., 316 South Los Angeles St. To exceed $125,000. Noted Nov. 15.

CONTRACTS AWARDED

R. I., Providence—Davol Rubber Co., 69 Point St., plant, brick, wood pile foundation, Smith St., to O. D. Purinton Co., Industrial Trust Bldg., $100,000. Noted Sept. 20.

Conn., East Hartford — New York, New Haven & Hartford R.R., boiler house and oil storage house, brick and steel, plain foundation, to H. R. Kent & Co., 5 Erie Ave., Rutherford, N. J. Archts. est. $45,000.

Conn., Hartford—Standard Mattress Co., 711 North St., 4 story, 40 x 52 ft. factory, rein.-con. and brick, plain foundation, North St., to Southern New England Contg. Co., 703 Main St. Archts. est. $40,000. Noted May 31.

Conn., Wallingford—International Silver Co., Center St., three 1 story, 45 x 125 ft. factory buildings, brick and steel, plain foundation, to C. F. Wooding Co., Wallace St. Archts. est. $60,000.

Conn., Waterbury — Waterbury Rolling Mills, Inc., Watertown Ave., 1 story factory, brick and steel, plain foundation, to Tracy Bros. Co., Benedict St. Archts. est. $50,000.

N. Y., Binghamton—Cutler Ice Co., 310 Front St., ice plant, to York Mfg. Co., York, Pa., $49,000. Archts. est. $50,000. Noted Oct. 18.

N. Y., Cohoes—Mohawk Paper Makers, Inc., 1 story, 46 x 90 ft., concrete, brick and steel power house, plain foundation, Saratoga Ave., to T. Neary, Cohoes. Est. $95,000.

N. Y., New York—H. Cahn, c/o J. DeHart, archt. and engr., 1041 Fox St., will build 2 story, 100 x 175 ft., rein.-con., brick, steel and stone garage, 69th St. and Ave. A, by day labor. $200,000.

Pa., Holmesburg (Phila. P.O.)—Wilmington Bleachery Co., Market and Race Sts., Wilmington, Del., 1 story, 60 x 60 x 60 x 200 x 240 x 300 ft. plant, and 1 story, 30 x 40 ft. boiler house, here, to Latta Armstrong Co., 1923 Sansom St., Phila., $125,000.

Pa., Phila.—Brandle & Smith, 8th and Dauphin Sts., 2 story, 207 x 329 ft. rein.-con., brick and steel factory, plain foundation, 8th and Dauphin Sts., to W. Steele & Sons Co., 219 North Broad St., $624,000.

Md., Amcelle (Cumberland P. O.)—Amer. Cellulose & Chemical Co., Ltd., Cumberland, 9 units of plant, here, to Austin Co., Jefferson Bldg., Phila., $2,000,000. Noted Nov. 29.

Tenn., Nashville—Hooper Grocery Co., 2nd Ave., 4 story, rein.-con. and steel warehouse, to E. G. Holliday Co., 151 4th Ave. North. $60,000. Noted Dec. 6.

Ky., Hazel—Dark Tobacco Growers' Cooperative Assn., Owensboro, 1 story, 100 x 350 ft. brick warehouse, to J. Cole, Paducah, Archts. est. $40,000.

O., Cleveland—Cleveland Tanning Co., Denison Ave. and Baltimore & Ohio R.R., 1 story, concrete and brick factory, Denison Ave., to S. W. Emerson Co., Union Bldg. Archts. est. $40,000.

O., Cleveland — Pennsylvania Warehouse Co., c/o G. E. Peterson, 1011 Schofield Bldg., altering 3 and 5 story, 87 x 216 ft. factory, 2163 Ashland Rd., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $150,000.

O., Steubenville — F. Scott (Studebaker Agency), 2 story and basement, brick and rein.-con., service and sales building, to Ingstrom & Co., Wheeling, W. Va. Archts. est. $150,000. Noted Oct. 25.

O., Toledo—See "Buildings."

Ind., Indianapolis — Kentucky & Oliver Realty Co., 517 South Delaware St., brick, concrete and steel warehouse, Oliver and Kentucky Aves., to Moynahan Constr. Co., North Senate Ave. Archts. est. $100,000.

Ill., Chicago—S. D. Jonas, 133 West Washington St., 1 story, garage, fireproof, Lake and Homan Sts., to A. T. Herlin, 6117 Evans Ave. Archts. est. $40,000.

Ill., Rockford — Rockford Cabinet Co., 12th St. and 19th Ave., 4 story and basement, 100 x 225 ft., brick, stone and steel factory, to Holmquist-Peterson Constr. Co., Swedish Amer. Bank Bldg. Archts. est. $225,000.

Wis., Durham (Hales Corners P. O.)—G. Bosch, 2 story, 67 x 70 ft., brick and tile warehouse, plain foundation, to O. Hagenson, Burlington. Archts. est. $40,000. Noted Nov. 8.

Wis., Eau Claire—Dells Paper & Pulp Co., Dells Dam, will remodel 2 story pulp mill, brick and steel, by day labor. $500,000. L. A. De Guere, Wood Blk., Wisconsin Rapids, engr. and archt. Noted July 28.

Wis., Milwaukee—Main Express Co., 116 Oneida St., 1 story, 60 x 100 ft., brick and concrete garage, plain foundation, Market St., to J. Leenhouts, 1614 Lloyd St. Archts. est. $40,000.

Wis., Kenosha — Amer. Brass Co., 570 Elizabeth St., superstructure 2 story, 220 x 540 ft. copper wire mill, brick and steel, to P. Riesens Sons, 1018 Humboldt Ave., Milwaukee. $300,000. Noted Oct. 25.

Kan., Kansas City—City, one 12,500 kva. turbo generating unit and 20,000 sq.ft. surface condenser, to Westinghouse Electric & Mfg. Co., Orear-Leslie Bldg., Kansas City, Mo., $267,400.

Ark., Little Rock—N. O. Nelson Mfg. Co., 10th and Chestnut Sts., St. Louis, Mo., warehouse and office building, here to Herman & McCain Constr. Co., Riegler Bldg. Archts. est. $100,000.

Tex., Eastland—Lone Star Gas Co., Amer. Exch. Bank Bldg., Dallas, will build 1 story, 31 x 200 ft. gas plant by day labor. $50,000.

Tex., Houston—Southwestern Bell Telephone Co., Capitol Ave., 8 story, brick and concrete shop, etc., to J. Antill, Milwaukee Bldg., $100,000. Noted Dec. 12.

Tex., Houston—White Co., P. E. Seamans, mgr., Leeland & La Branch, 1 story, 100 x 100 ft., brick and tile garage, Leeland St., to J. Statler, Austin St., $40,000.

Tex., Port Arthur—Port Arthur Ice & Refrigerating Co., ice plant, to York Eng. & Supply Co., Texas Ave., Houston, $300,000. Noted Dec. 6.

Tex., San Antonio—E. Friedrich, 802 East Commerce St., will build 140 x 230 ft. frame factory, concrete foundation, Paso Hondo St., by day labor. $40,000. Private plans.

Calif., Long Beach—Southern Service Co., Bway. and Mitchell Sts., 1 story, 80 x 120 ft. addition to main laundry building, and 2 story, 40 x 80 ft. addition to shop department, brick, to McGrew & Sons, 1345 West Ocean Ave., on percentage basis. Noted Oct. 25.

Calif., Oakland—R. McGahie and S. P. Palmer, Mills Bldg., San Francisco, 1 story concrete garage, Piedmont Ave., to J. Martinelli, 180 Jessie St., San Francisco, $42,000.

Calif., San Francisco — Amer. Can Co., Mills Bldg., 1 story garage and 1 story oil storage building, brick, steel and concrete, 20th and Illinois Sts., to Lindgren & Swinerton, Standard Oil Bldg., $42,000.

Calif., San Francisco—Bothin Real Estate Co., 604 Mission St., 2 story, 78 x 128 ft. rein.-con. warehouse and office, Brannan and Ritch Sts., to Buschke & Brown, 185 Stevenson St., $40,000. Bowser Co., 612 Howard St., lessee.

Buildings

PROPOSED WORK

Conn., Hartford—Apartment—Ferrante & Guarnaccia, 122 Brown St., having plans prepared by Dunkelberger & Gelman, 721 Main St., 3 story, 80 x 150 ft., brick, plain foundation, Farmington Ave. $150,000.

Conn., Hartford—Office—D. A. Dunham, 119 North Beacon St., plans 48 x 100 ft., brick, stone and steel, plain foundation, Lewis St. $200,000.

Conn., Suffield—School—School Bd. plans 2 story. $150,000. S. H. Graham, member. Engineer and architect not selected.

N. Y., Albany—High School—Bd. Educ. plans 4 story, 180 x 220 ft., brick and steel, plain foundation, $1,000,000. E. C. Jones, supt. schools. Private plans.

N. Y., Binghamton—Hospital—Plans election soon to vote on $400,000 bonds (1st unit of 5 unit hospital), incl. 3 story unit for contagious diseases, 5 story building for dispensary clinic and wards, 4 story service building, Park and Mitchell Aves. Total cost $1,500,000.

N. Y., Brooklyn—Nurses Training School —United Israel Zion Hospital, c/o B. W. Dorfman, archt. and engr., 26 Court St.,

Buildings (Continued)

having plans prepared 4 story, 90 x 110 ft., brick, steel and stone, plain foundation, 10th Ave. and 48th St. $500,000.

N. Y., Dolgeville—School—Dec. 27, to vote on $180,000 bonds for school, South Main St. Will mature in spring. Tooker & Marsh, 101 Park Ave., New York City, archts.

N. Y., New York—Apartment—M. Silverman, 1819 Bway., plans brick, steel and stone, plain foundation, West 79th St. $2,000,000. Engineer and architect not selected.

N. Y., New York—Hotel—F. Pettit, 2 Wall St., plans 22 story, 200 x 400 ft., brick and stone, plain foundation, 7th Ave. and 58th St. Engineer and architect not selected.

N. Y., Ozone Park (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, 5 story, brick, steel and stone, plain foundation, 109th Ave., here. $750,000.

N. Y., Portchester—Y. M. C. A., 2 West 45th St., New York City, having plans prepared by J. F. Jackson, archt. and engr., 137 East 45th St., New York City, brick, steel and stone, plain foundation, Pearl St., here. $225,000. Noted June 28.

N. Y., Utica—Temple and Office—Masonic Order of Utica, c/o F. A. Schmidt, 3 Otsego St., Ilion, having plans prepared by Clinton & Russell 100 Maiden Lane, New York City, temple and office building, Genesee St., here. $800,000.

N. J., Bordentown—School—Bd. Educ., having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., Newark, brick, steel and stone, plain foundation. $200,000.

N. J., Newark—Industrial School—Bd. Educ., City Hall, having plans prepared by Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., brick, steel and stone, plain foundation, near Weequahic Park. $250,000.

Pa. Lewistown — Church — Lewistown Methodist Episcopal Church, plans 1 story and basement, 96 x 198 ft., rein.-con., steel and stone, South Main St. $150,000. G. B. Keim, supt.

Pa., Phila.—Apartment and Store—Frank & Sedar, 11th and Chestnut Sts., plan 12 story, 75 x 200 ft., 11th and Market Sts. $3,000,000. Architect not announced.

Pa., Phila.—Bank—Natl. Bank of Commerce, 713 Chestnut St., plans addition and alterations to present building. Engineer and architect not selected.

Pa., Tyrone—Store—J. H. McCrory Five and Ten Cent Stores Co., plans 3 story and basement, 106 x 107 ft., rein.-con., brick and steel, Penna. Ave. and West 10th St. $150,000. Will mature in spring.

Pa., West Chester—Hospital—Chester Co. Hospital having plans prepared by York & Sawyer, archts., 100 East 42nd St., New York City, 2 story, 50 x 2[illegible] ft. concrete, brick, steel and stone, plain foundation. $200,000.

Md., Baltimore—Store—Hochschild, Kohn & Co., Lexington and Howard Sts., plans store, probably 10 story, rein.-con. and brick, Lexington and Howard Sts. $3,500,000. Engineer and architect not selected.

Md., Hagerstown—Bank and Office—Maryland Surety & Trust Co., 83 West Washington St., soon takes bids brick, steel and stone, plain foundation, Court Pl. $200,000. A. C. Bossom, 680 5th Ave., New York City, archt. and engr. Noted Nov. 8.

W. Va., Martinsburg — Church — First Baptist Church, plans new church, Wiley St. $200,000.

N. C., Raleigh—Orphanage—Bd. Trustees Methodist Orphanage plans administration and other buildings, cost between $300,000 and $350,000. R. N. Page, Biscoe, chn. executive com.

Fla., Tampa — Office — See "Industrial Works."

Ala., Birmingham — Church — Fifth Ave. Presbyterian Church plans stone church, 6th Ave. and 18th St. $250,000. Engineer and architect not selected.

Ala., Opelika — Station — Central of Georgia R.R. Co., 288 West Broad St. Savannah, Ga., and Western of Alabama R.R. Co., Atlanta, Ga., plans station, brick, here. $150,000. C. K. Lawrence, ch. engr. of former, O. T. Nelson, ch. engr. of latter.

Miss., Greenwood—School—Bd. Educ., c/o S. P. Kessler, pres., plans election soon to vote on $165,000 bonds, $125,000 to be used for junior high school and $40,000 for grade school.

Tenn., Nashville—Office—Independent Life Insurance Co., Independent Life Bldg., having plans prepared by G. Waller, Independent Life Bldg., 2 story, rein.-con., steel and stone addition, 44 rooms, 4th and Church Sts. $150,000. Noted Dec. 6.

Tenn., Nashville—Seminary—Amer. Baptist Theological Seminary, 161 8th Ave., N., having plans prepared by Daugherty & Gardner, Stahlman Bldg., college buildings, dormitories, etc., near Nashville. $250,000. Noted Nov. 29.

Ky., Henderson — Hotel — Community Hotel Co. having plans prepared by H. L. Stevens Co., 30 North Michigan Ave., Chicago, Ill., 6 story, 100 x 150 ft. $300,000.

Ky., Louisville—Apartment—C. A. Koerner & Co., 318 East Burnett St., plans 6 or 7 story, 100 x 150 ft., 2nd and York Sts. $800,000. Architect not selected.

Ky., Louisville — Church — Beechmont Methodist Episcopal Church South, 3rd St., plans 1 story, 60 x 125 ft., Southern Parkway. $150,000.

O., Canton—Market and Mercantile—A. B. Flory Grocery & Baking Co., 600 Mulberry Rd. S. E., plans 4 story, 66 x 200 ft., 5th Ave. and Cleveland Ave., N. W. $200,000.

O., Cincinnati — Church — Hyde Park Methodist Episcopal Church, plans church, Observatory and Grace Aves. $250,000. Lowe & Bollenbacher, 108 South La Salle St., Chicago, archts.

O., Cleveland—Apartment—Bonar Realty Co., c/o P. F. Price, 309 Union Bldg., plans 3 story and basement, brick, East 82nd St. and Crawford Rd. $150,000. Allen-Osborn Co., Rose Bldg., archts.

O., Cleveland—Apartment—N. Gottleib & Son, 668 East 113 St., plans 3 story and basement, brick and timber, Hampton Rd. and Euclid Heights Blvd. $150,000. Private plans.

O., Cleveland—Apartments—A. Krinsky and M. Sadai, 3611 East 118th St., having plans prepared by N. Pettis, Williamson Bldg., two 3 story and basement, 37 x 116 ft., and 40 x 158 ft. brick and timber, East 88th St., near St. Clair Ave. $200,000.

O., Cleveland Heights (Warrensville P. O.)—Apartment Hotel—K. H. Smith and H. E. Steffens, 4900 Euclid Ave., Cleveland, are representing company which plans 6 or 8 story, brick, Cedar Rd. and Fairmount Blvd., here. $300,000. Engineer and architect not selected.

O., Columbus—City Hall—Having competitive plans prepared by Columbus chapter of Amer. Institute of Architects, for new city hall. $600,000-$800,000.

O., Dayton—Temple—Jefferson St. Temple Congregation, plans new rein.-con. and stone, Dayton View, $300,000 to be raised for project, E. Raub, pres. Engineer and architect not selected.

Ind., Indianapolis—Temple—Beth El Jewish Congregation, had plans prepared by Vonnegut, Bohn & Mueller, 610 Indiana Trust Bldg., and soon takes bids, brick, 34th and Ruckle St. $150,000.

Mich., Detroit—Mercantile—F. B. Melin, 10202 Joseph Campau Ave., having plans prepared by L. Kamper, Kamper Bldg., 3 story and basement, 100 x 100 ft., brick and steel, plain foundation, Joseph Campau Ave. $150,000.

Mich., Detroit—Apartment and Store—J. I. Weinberg, archt., 401 Congress Bldg., preparing plans 4 story and basement, 80 x 115 ft., rein.-con., brick and steel, plain foundation, Woodward and Woodland Aves. $200,000. Owners name withheld.

Mich., Detroit — Apartment — W. Shumaker, c/o Hull & Owen, archts., 1205 Detroit Savings Bank Bldg., having plans prepared 3 story and basement, 72 x 108 ft., brick and steel, Savannah Ave. $150,000.

Mich., Highland Park (Detroit P. O.)—School—Bd. Educ. having plans prepared by Burrowes & Eurich, 2631 Woodward Ave., Detroit, 2 story and basement, 110 x 140 ft. rein.-con., brick, steel and stone, plain foundation. $200,000.

Mich., Pontiac — Hotel — Van Leyen, Schilling, Keough & Reynolds, archts., 3440 Cass. Ave., Detroit, preparing plans 8 story and basement, 80 x 150 ft., rein.-con., brick and steel, plain foundation, $1,000,000. Owner's name withheld.

Wis., Chippewa Falls—School—St. Marys Congregation, c/o J. McGuirk, pastor, 117 Allen St., having plans prepared by M. E. Trudelle, 8016 Euclid Ave., Cleveland, O., 2 story and basement, 62 x 170 ft., brick and tile, plain foundation. $150,000.

Wis., Eau Claire—Theatre—Eau Claire Theatre Co., c/o M. Homs, South Barstow St., having plans prepared by J. E. Nason, Corn Exch., Minneapolis, Minn. and C. A. Pear, Traux Bldg., Eau Claire, 2 story and basement, brick and concrete, plain foundation, East Grand Ave. $150,000.

Wis., La Crosse—Dormitory—Franciscan Sisters of Perpetual Adoration, plan to rebuild 3 story, brick and concrete, plain foundation, recently destroyed by fire. $175,000. Engineer and architect not selected.

Wis., Milwaukee — Bank and Office — Northwest Natl. Bank, c/o J. G. Rentemann, pres., 114 Grand Ave., having plans prepared by Dick & Bauer, 801 State St., 2 story and basement, 67 x 80 ft., and 25 x 65 ft., brick stone and concrete, plain foundation, North Ave. $150,000.

Wis., Milwaukee—Dormitory—Concordia College, 3127 State St., had plans prepared by R. Messmer & Bros., 221 Grand Ave., 3 story and basement, brick and concrete, plain foundation, 31st and State Sts. $150,000.

Wis., Milwaukee — High School — Marquette University, 115 Grand Ave., plans 3 story and basement, brick, tile and concrete, plain foundation. $500,000. Architect and engineer not selected.

Ia., Ft. Dodge—Hospital—Lutheran Hospital Assn., having plans prepared by F. W. Griffith, Ft. Dodge, 4 story and basement, 90 x 90 ft., rein.-con., brick, tile and stone. $200,000. T. K. Peterson, Badger, pres. Noted Apr. 5.

Ia., Ft. Dodge—Hotel—E. I. Leighton, 112 3rd Ave., having plans prepared by F. W. Griffith, 400 Snell Bldg., 3 story and basement, rein.-con., brick and stone. $150,000.

Ia., Sioux City—Lodge—Epiphany Council Knights of Columbus, Commercial Bldg., plans 3 story and basement, rein.-con., brick and stone, 8th and Douglas Sts. $150,000. J. C. Mullaney, ch. building comn.

Minn., Minneapolis—Office—Thorpe Bros., 206 Andrus Bldg., rejected bids Nov. 12, 8 story and basement, 48 x 120 ft., rein.-con., brick and tile, 519 Marquette Ave. $200,000. Will readvertise shortly.

Kan., Emporia—School—Emporia College plans school. $150,000. Architect not selected.

Mo., Carthage—Church—First Methodist Church having preliminary plans prepared by P. K. Simpson, Carthage, 1 story and basement, brick, stone and rein.-con., church and Sunday school. $150,000.

Mo., Kansas City — Business — Palace Clothing Co., 909 Main St., having plans prepared by F. E. McIllvain, 1001 Orear-Leslie Bldg., 7 story and basement, 87 x 115 ft., rein.-con. and brick, 12th and Grand Sts. $500,000.

. **Mo., Kansas City**—Hotel—C. E. Phillips, 609 Victor Bldg., plans 4 story and basement, rein.-con. and brick, 46th and Main Sts. $300,000. Private plans.

Mo., St. Louis—Bank—Soulway Realty Co., 1731 South Bway., having plans prepared by Klipstein & Rathman, Chemical Bldg., 2 story, 50 x 140 ft. rein.-con., brick, steel and stone, Chouteau St. $150,000.

Mo., St. Louis—Hospital, etc.—Bd. Pub. Serv. and Citizens Bond Issue Supervisory Com. approved $850,000 bonds hospital and similar institutions, also $150,000 bonds market.

Mo., University (St. Louis P. O.)—Office and Store—Hasgell Realty & Investment Co., c/o Weisels-Gerhart Realty Co., 8th and Chestnut Sts., St. Louis, having preliminary plans prepared 4 story, 100 x 100 ft., Delmar Blvd., here. $150,000. Private plans.

Ark., Pine Bluff—High School—Bd. Educ., c/o H. B. Strange, Citizens Bank Bldg., having preliminary plans prepared 2 story and basement, rein.-con., brick and stone. $200,000. Engineer and architect not announced.

Tex., Lubbock—College—Texas Technical Cillege having plans prepared by Sanguinet, Staats & Hedrich, First Natl. Bank Bldg., Fort Worth, college buildings, $450,000, ultimate cost $950,000. L. W. Robert, Int. Bldg., Dallas, engr. Noted Oct. 11.

Tex., San Antonio—Hotel—Syndicate in conjunction with W. J. Lytle, c/o Empire Theater, having plans prepared by A. B. and R. M. Ayres, Bedell Bldg., 8 story, 650 rooms, along river between Houstin and Travis Sts. $1,000,000.

Tex., Waco—Club and Theater—Karem Temple A. A. O. N. M. S., plans 6 story and basement, 110 x 165 ft., Washington and 7th Sts. $300,000. Engineer and architect not announced.

Tex., Waco — Hospital — Katy Hospital Assn., Missouri, Kansas & Texas Bldg., Dallas, making plans 5 or 6 story, brick and concrete. $200,000. Engineer and architect not announced.

Buildings (Continued)

Okla., Blackwell—Memorial—City plans 2 story, 125 x 160 ft., rein.-con. and stone memorial. $200,000. Smith & Senter, Commercial Bldg., Okmulgee, archts. Noted Nov. 1.

Okla., Guthrie — High School Election Dec. 18, to vote on $280,000 bonds for 3 story, 180 x 200 ft., brick, plain foundation, Noble St. Hawk & Parr, Magnolia Bldg., Oklahoma City, archts.

Okla., Ponca City—School—Bd. Educ. having plans prepared by Smith & Senter, Commerce Bldg., Okmulgee, 2 story, 160 x 180 ft., brick, plain foundation, 6th St. $150,000.

Colo., Denver—School—St. Philomenas Parish, 14th and Detroit Sts., had plans prepared by Mountjoy & Frewen, Patterson Bldg., 2 story, 75 x 225 ft., brick, terra cotta and concrete, 10th and Filmore Sts. $200,000.

Wash., Seattle—Forestry—University of Washington having plans prepared by Bebb & Gould, Hoge Bldg., forestry building. $250,000.

Wash., Seattle.— Sanatorium — W. E. Waldo, Rotary Club, having plans prepared by P. Richardson, Henry Bldg., 2 story, concrete and steel, 1st unit of 3 proposed structures, 15th and 85th Sts. $150,000.

Calif., Berkeley—College—University of California, plans fireproof construction agricultural building on block bounded by Hearst Ave., Virginia, Walnut and Oxford Sts. $150,000 or more.

Calif., Berkeley—School—Berkeley School Dist. plans school on La Loma, Le Roy and Buena Vista Aves., to replace one recently destroyed by fire. $150,000 or more.

Calif., Glendale—Hotel—Glendalia Hotel Co., Inc., rejected bids 5 story, 103 x 150 ft., brick and steel, California St. and Brand Blvd. $300,000. A. F. Priest, Fay Bldg., Los Angeles, archt. Noted Oct. 4.

Calif., Los Angeles—High School—Bd. Educ. having preliminary plans prepared by F. J. Soper, Kerchkoff Bldg., brick, Exposition and Harvard Blvds. $300,000.

Calif., Los Angeles—Hotel—Sixth & San Pedro Holding Corp., c/o C. F. Whittlesey, archt., 6533 Hollywood Blvd., had preliminary plans prepared hotel, about 10 story, 650 rooms, rein.-con., 6th and San Pedro Sts.

Calif., Richmond—Club—City had plans prepared by J. T. Narbett, 910 Macdonald Ave., 2 story, tile and stucco, war memorial clubhouse, 12th St. $150,000.

Calif., Sacramento—Lodge and Club—B. P. O. E. approved preliminary plans drawn by Hemmings & Stark, Ochsner Bldg., 6 story and basement, 100 x 160 ft., Class A construction, 11th and J Sts. $1,000,000.

Calif, San Francisco—Apartment—Fabre & Hildebrand, archts., 110 Sutter St., preparing preliminary plans 6 story and basement, rein.-con., Jones St. Owners name withheld.

Calif., San Francisco—Bungalow Apartment—L. Heilmann, 645 Bush St., had plans prepared by G. Stahlberg, Flatiron Bldg., group of 18 buildings, 1 story, frame and stucco, Bay and Larkin Sts. $150,000.

Calif., San Francisco—Hotel—Fairmont Hotel Co., California and Powell Sts., having plans prepared by Reid Bros., 105 Montgomery St., 2 story, Class A addition to present 7 story hotel, also 100 ft. extension to ballroom with roof garden, Power, California, Mason and Sacramento Sts. $600,000 or more. D. Linnard, mgr.

Calif., San Francisco—School—City and San Francisco Co., having plans prepared by J. Reid, Jr., city archt., Natl. Bank Bldg. second unit of Galileo High School, fireproof, Van Ness Ave. $150,000 or more.

Calif., San Mateo—Hotel—B. Getz, Inc., Chronicle Bldg., San Francisco, having plans prepared by Morrow & Garren, Chronicle Bldg., San Francisco, 3 to 4 story, rein.-con., 3rd St. $200,000.

Calif., San Mateo—Store—B. Getz, Inc., Chronicle Bldg., San Francisco, having plans prepared by Morrow & Garren, Chronicle Bldg., San Francisco, 1 story and mezzanine, rein.-con., 3rd St. $150,000.

Calif., San Mateo—Theatre—B. Getz, Inc., Chronicle Bldg., San Francisco, having plans prepared by Morrow & Garren, Chronicle Bldg., San Francisco, 1 story, rein.-con., Class A construction 3rd St. $150,000.

Calif., Santa Monica—Apartment—Shoreham Apartment-Hotel Co., c/o Davies & Baume, archts., Farmers & Merchants Bank Bldg., Long Beach, having preliminary plans prepared 11 story, 200 x 467 ft., rein.-con., San Vicente Blvd. and Ocean Ave.

ROAD WORK—VIRGINIA

Following are lowest three bids opened Nov. 22, by State Highway Comn., Richmond, for constructing road between Manquin and Mechanicsville, Hanover Co., Project F-166C, (A) Pace Constr. Co., Roanoke; (B) Gosnell-Russell Co., Frederick, Md.; (C) Noland-Clifford Co., Newport News. The unit bids were as follows:

	A	B	C
8.3 acres clearing and grubbing	$200.00	$190.00	$150.00
50,550 cu.yd. excavation	0.50	0.48	0.50
51,683 sq.yd. one course plain cement concrete pavement	3.15	3.33	3.38
437.7 cu.yd. class A concrete	27.00	30.00	30.00
37.4 cu.yd. class B concrete	24.00	27.00	28.00
35,724 lb. reinforcing steel	0.12	0.08	0.11
282 lin.ft. 18-in. concrete pipe	4.00	3.50	7.00
284 lin.ft. 24-in. concrete pipe	5.50	4.75	8.50
4760 lin.ft. wooden guard rail	0.85	0.60	0.70
Extended totals	$234,822	$242,150	$249,740

DAM—FREDERICK, MD.

Following are lowest three bids opened Nov. 27, by E. C. Crum, city engr., for earth dam on Fishing Creek, (A) G. B. Mullin Co., Inc., 1296 Upshur Ave., Washington, D. C., (awarded contract); (B) Development & Constr. Co., Baltimore; (C) Consolidated Eng. Co., Baltimore. The unit bids were as follows:

	A	B	C
31 lin.ft. earth excavation in cutoff wall less than 15 ft. deep	$0.34	$12.50	$14.50
125 lin.ft. earth excavation in cutoff wall less than 20 ft. deep	2.32	16.80	16.20
70 lin.ft. earth excavation in cutoff wall less than 25 ft. deep	13.87	20.50	21.36
193 lin.ft. earth excavation in cutoff wall less than 30 ft. deep	15.979	26.50	25.00
99 lin.ft. earth excavation in cutoff wall less than 35 ft. deep	34.32	29.50	28.70
31 lin.ft. earth excavation in cutoff wall less than 40 ft. deep	29.14	35.00	35.00
27 lin.ft. earth excavation in cutoff wall less than 45 ft. deep	41.95	45.00	37.00
220 cu.yd. rock excavation in cutoff wall	6.00	8.00	8.00
3,000 cu.yd. earth excavation in waste canal	0.60	1.50	0.35
750 cu.yd. rock excavation in waste canal	1.80	3.00	2.50
1,100 cu.yd. earth excavation for trenches and drain tunnel	0.60	1.20	1.25
2,600 cu.yd. concrete in cutoff wall	11.28	12.00	15.40
2,000 cu.yd. concrete in core wall	10.68	16.00	17.35
670 cu.yd. concrete in waste canal	9.456	18.50	17.50
235 cu.yd. concrete in conduit tunnel	18.312	20.00	20.40
48,300 cu.yd. rolled embankment in dam	0.60	0.80	0.87
1,300 cu.yd. rip rap and rubble masonry	2.00	4.00	4.50
1 acre top soil and seeding	720.00	1,500.00	1,000.00
55 cu.yd. stone fill in drainage ditches	2.40	2.00	5.00
Gate tower complete (lump sum)	4,867.00	6,000.00	5,270.00
No. of calendar days to complete work @ $50.00 per day	279	340	217
Extended totals	$127,341	$172,833	$176,305

Calif., Sonora—Resort—A. T. Wood, et al., plans resort buildings, incl. pavilion, clubhouse, hotel, swimming tank, etc. $150,000 or more.

Que., Montreal—Office—Montreal Harbor Comrs., plans 2 story, rein.-con., brick and steel, on Victoria Pier. $175,000. T. Daoust, 61 St. James St., archt. Forgins & Guay, 83 Craig St. W., consult. engrs.

N. B., St. John—Hotel—Thomas, Armstrong & Bell Ltd., St. John, carrying out financial arrangements for building Admiral Beatty Hotel, 10 story, 160 x 160 ft. brick, steel and stone, King Sq. $750,000. Ross & McDonald, 1 Belmont St., Montreal, Que., archts.

BIDS DESIRED

Conn., Manchester—Armory—Dec. 18, by Payne & Keefe, archts., Manwaring Bldg., New London, 3 story, 75 x 150 ft., brick and steel, plain foundation, for Manchester State Guard. Noted Aug. 9.

N. Y., Buffalo—School—Dec. 27, by Bd. Educ., 1401 Telephone Bldg., P. S. 71, 3 story, 200 x 225 ft., rein.-con. and brick, Lang Ave. $500,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Fultonville—School—Dec. 17, by Bd. Educ., Fultonville Natl. Bank, 3 story, 48 x 110 ft., brick and steel, plain foundation. $150,000. G. W. Conable, 46 West 24th St., New York City, archt. and engr. Noted July 12.

N. Y., New York — Apartment — F. F. French, 350 Madison Ave., will build 16 story, 63 x 72 ft., brick, steel and stone, plain foundation, Park Ave. Work will be done by separate contracts. Private plans.

N. Y., Niagara Falls—School—Dec. 14, by Bd. Educ., 2 story, 124 x 230 ft., brick, stone and tile, Cleveland Ave. and 13th St. $300,000. Associated Archts. of Niagara Falls, 503 3rd St., archts.

N. Y., Schuylerville—School—Jan. 14, by Clerk Bd. Educ., altering and building 3 story, 60 x 88 ft., brick and steel addition, plain foundation, Main St. $175,000. Nichols & Gardiner 46 North Pearl St., Albany, archts. and engrs. Noted Mar. 22.

N. J., Camden—High School—Dec. 17, by C. Adams, archt., 2038 Spruce St., Phila., Cramer Junior High School, 3 story and basement, 80 x 153 ft., rein.-con., brick and steel, plain foundation, 29th and Federal Sts., here, for Bd. Educ. $200,000.

N. J., Hightstown—Administration—Dec. 15, by Rich & Mathesius, archts., 800 5th Ave., New York City, 3 story and basement, 60 x 172 ft., rein.-con., brick and steel, plain foundation, here, for Peddie Institute. $200,000. Noted Nov. 8.

Pa., Bryn Mawr—School—Dec. 31, by Alden & Collins, archts., 75 Hembury St., Boston, Mass., 3 story, 74 x 147 ft. with 3 story, 64 x 92 ft. wing, brick, steel and stone, plain foundation, for Baldwin School. $200,000.

Pa., Indiana—High School—Dec. 16, by Bd. Educ., 2 story and basement, 150 x 150 ft. concrete, brick and steel. $300,000. Thayer & Johnson, New Castle, archts.

Pa., Phila.—Church—Dec. 18, by H. W. Caster, archt., St. Girard Bldg., 1 story and basement, 73 x 166 ft. church, Oxford Ave. and Dyer St., for Frankford Methodist Episcopal Church. Noted Nov. 8.

Pa., Phila.—Church—Dec. 31, by Ritcher & Eiler, archts., Reading, 1 story and basement, 52 x 89 ft., brick, steel and stone, plain foundation, 13th and Rosemont Sts., for Mihlenberg Memorial Church, 13th and Rosemont Sts. $150,000.

Pa., Reading—Hospital—Dec. 19, by F. H. Muhlenberg, archt., Reading, 6 story and basement, 45 x 150 ft. rein.-con., brick and steel, plain foundation, Walnut St., for St. Joseph Hospital. $250,000.

Md., Baltimore—Office—Dec. 20, by C. N. and N. Friz, archts., Lexington Bldg., 7 story, 60 x 150 ft., rein.-con. and brick, plain foundation, Park Ave. and Centre St., for Home Friendly Society, 1026 Linden Ave. $550,000. H. F. Doelman, 507 North Charles St., engr. Noted Feb. 8.

Ala., Birmingham—Sanitarium—Jan. 10, by R. A. Brown, genl. chmn. for Jefferson Co. Tuberculosis Assn., 2 and 3 story, 40 x 224 ft., and 40 x 170 ft. stone, Red Mt. $200,000. B. Price, Bank Bldg., archt. Noted Aug. 30.

O., Cleveland—Apartment and Commercial—L. Duchon, 3045 Essex Rd., taking bids and opens same about Dec. 21, 4 story and basement, 100 x 125 ft., brick, East 40th St. near Windsor Ave. $200,000. A. F. Janowitz, 811 Prospect Ave., archt. Noted Sept. 6.

O., Cleveland—Apartment—I. Weinberg, 3280 East 123rd St., taking bids 3 story, 76 x 104 ft., brick and timber, 929 Lakeview Rd. $150,000. Private plans. Noted Nov. 22.

O., Cleveland — School — St. Catherine Roman Catholic Church, 3443 East 93rd St., taking bids and opens same about Dec. 17, 2 story and basement, brick and steel, East 93rd St. and St. Catherine Ave. $150,000. C. R. Greco, Guardian Bldg., archt. Noted Nov. 1.

O., Lima—School—Dec. 14, by Bd. Educ., 2 story and basement, 80 x 170 ft., brick, steel and concrete. $150,000. T. D. McLaughlin & associates, Savings Bldg., archts.

O., Mansfield—City Hall—Dec. 21, by city, 3 story and basement, 106 x 160 ft.,

Buildings (Continued)

brick, steel and concrete. $175,000. V. Redding & associates, Bird Bldg., archts.

Mich., Ann Arbor—Nurses Home—Dec. 20, by A. Kahn, archt., 1000 Marquette Bldg., 4 story and basement, 60 x 136 ft. with 2 wings 43 x 130 ft. each, rein.-con., brick and steel, plain foundation, Ann St., for University Hospital. $750,000. Noted Nov. 15.

Mich., Detroit—School and Rectory—Dec. 15, by J. G. Kastler Co., archts., 523 Detroit Savings Bank Bldg., 2 story and basement, 90 x 160 ft. school and 48 x 60 ft. rectory, rein.-con. and brick, Mt. Elliot Ave. and Seven Mile Rd., for St. Louis Parish, c/o archts. $175,000. Noted Nov. 1.

Mich., Owosso—Temple—G. W. Graves, archt., 233 John R St., Detroit, taking bids and opens same about Dec. 20, 5 story and basement, 66 x 120 ft. rein.-con., brick and steel, plain foundation, for Masonic Temple Assn. $150,000.

Ill., Chicago—Apartment—Ronneberg & Pierce, archts., 19 South LaSalle St., receiving bids 3 story and basement, 120 x 130 ft., rein.-con., brick and steel, Irving Park and Kildare St. $200,000. Owner's name withheld.

Ill., Oak Park—Apartment—H. B. Aarens, archts., 109 North Dearborn St., Chicago, receiving bids 3 story and basement, 75 x 125 ft., fireproof, 419-23 South Oak Park Ave., here, for E. Krulewitch c/o architects. $150,000.

Ill., Oak Park—Store, Office and Apartment—W. F. Pagels, archt., 5111 Winthrop Ave., Chicago, receiving bids 3 story, fireproof, Madison and Wisconsin Sts., here. $150,000. Owner's name withheld.

Ill., Urbana—University—Feb. 4, by University of Illinois, at office J. M. White, superv. archt., 256 Administration Bldg., general construction 4 buildings, here; adv. E. N.-R. Dec. 13. Noted Oct. 11.

Kan., Topeka—Hospital—Jan. 2, by J. M. Kirkpatrick, pres., Security Benefit Assn., 701 Kansas Ave., 3 story, 40 x 110 ft., rein.-con., brick and stone. $200,000. Smith, Garden & Martin, 1945 Michigan Ave., Chicago. Contracts for foundation and basement let previously. Noted Aug. 23.

Mo., Columbia—Memorial Hall Tower—Jan. 3, by E. E. Brown, business mgr. Missouri University, 43 x 376 ft. rein.-con., brick and stone tower, 140 ft. high, on campus. $200,000. Jamieson & Spearl, Arcade Bldg., St. Louis, archts.

Mo., St. Louis—University—Jamieson & Spearl, archts., Arcade Bldg., taking bids and open same about Dec. 21, 3 story and basement, 54 x 188 ft., granite, stone and rein.-con. geology building, on campus, for Washington University, Skinker Blvd. $250,000.

Colo., Denver—High School—Jan. 9. by Bd. Educ., c/o W. A. E. Stutt, secy., 3 story, rein.-con., steel, brick and stone, between Franklin, Humboldt, 32nd and 33rd Aves. $1,000,000. W. N. Bowman, Central Savings Bank Bldg., archt.

Calif., Livingston—School—Trustees of Merced Union High School Dist. taking bids 1 story, rein.-con. school with auditorium, here. $200,000. W. H. Weeks, 369 Pine St. San Francisco, archt.

BIDS RECEIVED

Conn., Hartford—High School—Bd. Contract & Supply, 3 story, brick and steel, plain foundation, Maple Ave., bids on (a) job complete (b) eliminating assembly hall, music room, 2 recitation rooms, and basement room (c) omitting shop, from G. Cudemo and Southern New England Contg. Co., 703 Main St., (a) $1,429,000 (b) $1,159,000; G. Cudemo, (c) $1,379,000. Noted Nov. 22.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, Dec. 10, James Madison High School, brick, steel and stone, plain foundation, Bedford Ave. from Ave. P. to Quentin Rd., here, from **T. A. Clarke Co.**, 122 Livingston St., **(a) $2,043,000**; Turner Constr. Co., 242 Madison Ave., New York, (b) $2,045,000. Noted Nov. 22.

N. Y., New York—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Dec. 10, addition to P. S. 36, Black Rock and Castle Hill Aves., Bronx Boro, for Bd. Educ., 500 Park Ave., from G. Colon & Co., 81 East 125th St., $347,000. Noted Dec. 6.

N. Y., New York—School—Bd. Educ., 500 Park Ave., Dec. 10, P. S. 71, Roberts and Jarvis Aves., from G. Colon & Co., 81 East 125th St., $772,000. Noted Nov. 22.

N. Y., Richmond Hill (branch of Jamaica) —School—Bd. Educ., 500 Park Ave., New York City, Dec. 10, P. S. 121, 109th Ave. between 126th and 127th Sts., here, from Oscawana Building Co., 110 East 42nd St., New York City, $785,700. Noted Nov. 22.

O., Lakewood (Cleveland P. O.)—High School—Bd. Educ., Nov. 24, Harding Junior High School, 2 story and basement, 89 x 259 ft., brick, steel and concrete, Hilliard Rd., from F. H. Vogel, Ridge Rd., Brooklyn, Cleveland, $361,000. Noted Nov. 8.

Mo., St. Louis—High School—Bd. Educ., 911 Locust St., Dec. 5, general contract William Beaumont High School, 3 story, 307 x 375 ft., rein.-con., brick, steel, stone and terra cotta, Natural Bridge Rd., from E. C. Gerhard Building Co., Century Bldg., $1,240,000; plumbing, sewering and gas fitting, from H. D. M. Doerner, 2701 South Bway., $93,315; heating and ventilating, from Sodeman Heating & Power Co., 23rd and Morgan Sts., $156,447. Noted Nov. 15.

Calif., Hermosa Beach—Club—Surf and Sand Club, 1402 Strand, 6 story, 85 x 150 ft., rein.-con., from J. A. Wolvin, Braly Bldg., Pasadena, $339,450. Noted Dec. 6.

CONTRACTS AWARDED

N. H., Nashua—School—School Com., 2 story and basement, 150 x 200 ft., brick and limestone, plain foundation, to Cunningham & Birchwood, Lynn, $225,000. Noted Nov. 1.

N. Y., Brooklyn—Apartment—Lincoln Constr. Co., Inc., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., will build 6 story, 110 x 192 ft., brick, steel and stone, plain foundation, Eastern Parkway, by day labor. $900,000.

N. Y., Brooklyn—Apartment—Siris & Hearn, c/o Shampan & Shampan, archts. and engrs., 188 Montague St., will build 6 story, brick, steel and stone, plain foundation, Eastern Parkway, by day labor. $800,000.

N. Y., New York—Apartment—Jarvis & Brill, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, Longfellow Ave., by day labor. $250,000.

N. Y., New York—Apartment—B. London, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build three 5 story, brick, steel and stone, plain foundations, on plot 216 x 239 x 243 ft., Fort George Ave., by day labor. $900,000.

N. Y., New York—Apartments—M. Raymond, c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build two 5 story, brick, steel and stone, plain foundations, Montgomery Ave., by day labor. $500,000 each.

Pa., Phila.—School—Bd. Educ., 19th and Chestnut Sts., 3 story and basement, 147 x 171 ft., rein.-con., steel, limestone and granite, plain foundation Girard and Merion Sts., general contract to M. Melody & Sons, 1322 Race St., $449,000, heating to Thompson Bros., 520 Buttonwood St., $50,700.

Pa., Swissvale (Pittsburgh P. O.)—Church—A. S. Link and associates, archts., North Craig St., Pittsburgh, 1 story and part basement, 78 x 161 ft., steel and stone, here, to H. Busse Co., West End Savings Bldg., Pittsburgh, $225,000, for St. Anselms Congregation, Swissvale. Noted Nov. 8.

Del., Newark—School—Bd. Educ. general contract 3 story and basement, 118 x 170 ft., to General Northeastern Constr. Co., Lexington Bldg., Baltimore, Md., $181,000; plumbing and heating, to T. T. Welden, 916 Orange St., Wilmington, $65,160. Noted Nov. 8.

W. Va., Maggie—Hospital—State Bd. Control, Charleston, 3 story and basement, 45 x 201 ft., concrete and brick, to Forman & Putnam Co., Marietta, O., $187,165. Noted Oct. 4.

Fla., West Palm Beach—Club—Club de Montmartre, Inc., 3 story, 8,000 sq.ft. floor space, rein.-con., concrete pile foundation, Lake Trail, to J. S. Wilson, Palm Beach, $150,000.

Ala., Tuscaloosa—School—Bd. Educ., 2 story, 100 x 190 ft., brick and stone, to **A. Laycock & Sons, Tuscaloosa, $250 000.**

Tenn., Memphis—Store—B. Lowenstein Bros. Inc., Main and Court Sts., 9 story and basement, rein.-con. and brick store building, elevators, bridges and tunnels, across alley, 17 South Main St. to Gauger-Korsmo Constr. Co., 301 Endicott Bldg., St. Paul, Minn. $718,000. Noted Oct. 11.

O., Cincinnati—School—Bd. Educ., 511 West Court St., carpentry work for 2 story, 64 x 120 ft., rein.-con., brick and terra cotta, plain foundation, Tremont St., to D. Meinken & Son, 2126 Western Ave., $85,445; cut stone work to David Hummel Building Co., 2629 Spring Grove, C. W. $53,998. Noted Nov. 29.

O., Cleveland—Apartment—Abrams Bros., 203 Ulmer Bldg., 3 story and basement, 43 x 175 ft. brick and timber, 9701 Lamont Ave., to Figilis & Tepper, 3285 East 123rd St. Archts. est. $160,000. Noted Nov. 29.

O., Cleveland—Apartment—Rosen Bros., 608 St. Clair Ave., 3 story and basement, 37 x 110 ft., brick, to B. Lessovitz, 12702 Soika Ave. Archts. est. $150,000. Noted Nov. 29.

O., Cleveland—Apartment—Spangler-Euclid Co., 10936 Grantwood Ave., 3 story **and basement, 40 x 120 ft., brick, 1932 East 73rd St., to Winer & Grafchik, 3325 East 125th St. Archts. est. $150,000.**

O., Cortland—School—Bd. Educ., 2 story **and basement, 16 room, brick,** steel and **concrete, to Howell & Noble, Warren,** $130,000. **Noted July 26.**

O., Toledo—Office, etc.—Ransom & Randolph Co., 3 story office and factory, brick, plain foundation, Jefferson and Chestnut Sts., to J. H. Berkbile & Son, Toledo, $120,000.

Ind., Indianapolis—Office—R. W. Furnas **Ice Cream Co., 127 North Alabama** St., 4 **story and basement, 50 x 67 ft.,** brick and **steel, North Alabama St., general** contract, **to J. G. Karstedt Constr. Co., Fairgrounds St.**

Ind., Indianapolis—School—E. J. Hecker, **trustee, 5241 West Washington St.,** high and **grade school, brick, Warren Twp.,** general **contract to W. R. Duncan & Son,** Flora. **Archts. est. $150,000. Noted Nov. 15.**

Mich., Adrian—Auditorium—St. Josephs Academy, 2 story, 67 x 135 ft., rein.-con. and brck auditorium and gymnasium, plain foundation, North St., to C. E. Dibble, Adrian, $175,000.

Mich., Flint—School—Union School Dist., 2 story and basement, 67 x 210 ft. and 65 x 100 ft., rein.-con., brick and steel, plain foundation, Saginaw St., to F. C. Trier, Saginaw. Archts. est. $350,000.

Mich., Grosse Pointe (Detroit P. O.)—School—Bd. Educ., 399 St. Clair Ave., 2 story and basement, 90 x 95 ft., rein.-con., brick and steel, plain foundation, Rivard Blvd., to F. N. Cooper, 6370 Gratiot Ave., Detroit. Archts. est. $150,0000. Noted Nov. 15.

Mich., Lansing—Exchange—Michigan State Telephone Co., 220 North Capitol Ave., 3 story and basement, 66 x 124 ft., rein.-con. and brick, plain foundation, North Capitol Ave., to F. H. Davis & Co., 1860 Penobscot Bldg., Detroit, $150,000. Noted Nov. 1.

Mich., Springwells—School—Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation, Lois Ave. to S. Brozek, 5090 Lonyo Blvd., Detroit, $150,000.

Ill., Chicago—Store, Office and Hall—Milwaukee Ave. Building Corp., 140 South Dearborn St., 2 story, 125 x 224 ft., rein.-con., brick and steel, 2233-51 Milwaukee Ave., to McKeown Bros. Co., 112 West Adams St. Archts. est. $700,000.

Ill., Oak Park—**Store and Office**—S. Koenigsberg, c/o Koenigsberg & Weisfeld, archts., 155 North Clark St., Chicago, 4 story, 74 x 100 ft., rein.-con., brick and steel, Lake and Marion Sts., to Harper & Butendorff, 1028 North Blvd. Archts. est. $250,000.

Ill., Waukegan—Y. M. C. A., 203 North Genesse St., 4 story, 104 x 122 ft., brick, tile and concrete, Clay St., to Peterson & Weeks, 2 South County Ave., $207,609. Noted Nov. 29.

Minn., Minneapolis—School—Bd. Educ., foundation and 1st floor slab for 1 story and basement, 150 x 300 ft., rein.-con., brick and tile, Mississippi River Blvd., to M. A. Floyd Co., 908 Andrus Bldg., $26,875. Will take bids later for superstructure. Archts. est. $200,000. Noted Nov. 22.

Minn., South St. Paul—Church and School —St. Augustines Catholic Church, 2 story and basement, 120 x 180 ft., brick and stone, general contract to W. E. Suhring Co., 100 West Lake St., Minneapolis. Total $150,000. Noted July 26.

Minn., Virginia—High School—School Dist. 22, 2 story and basement, 58 x 113 ft. addition, rein.-con., brick and stone, general contract to F. Gorham, Virginia, $136,660. Former contract rescinded. Noted Nov. 29.

Mo., Joplin—Hospital—A. King, 20th and Jackson Sts., 3 story, rein.-con. and brick, plain foundation, to L. R. Hoffman, Woodlawn St. Archts. est. $150,000.

Mo., Sedalia—High School—Bd. Educ., general contract, 3 story and basement, 185 x 190 ft., rein.-con., brick and stone, to Dean-Hancock, Sedalia, $238,682; heating and ventilating apparatus, to G. Suter, Sedalia, $64,823. Noted Nov. 1.

Mo., St. Louis—Loft—B. Lesser, 904 North 9th St., 5 story and basement, 36 x 105 ft. rein.-con., brick and stone, Lucas Ave., to H. O. Hirsch & Co., Wainwright Bldg., Archts. est. $150,000.

Tex., Commerce—Auditorium—East Texas State Teachers College, general contract 3 story, brick, steel and concrete, to H. N. Jones, 212 Loyosa St., San Antonio, $249,979. Noted Nov. 22.

Colo., Denver—Store—Neusteter Co. 5 story and basement, 100 x 125 ft., rein.-con., steel and marble, Stout and 16th Sts., to F. Kirchoff Constr. Co., 718 Lawrence St., Denver, $500,000.

Wash., Tacoma—School—**School** Bd., 2 story, 260 x 360 ft. rein.-con., campus of College of Puget Sound, to O. F. Larson, California Bldg., $371,628. Noted Nov. 22.

Calif., Compton—Hotel, Store and Theatre—Ramsey & Bemis will build 2 story, 95 x 140 ft. brick and concrete, by

Buildings (Continued)

day labor. A. J. Davenport, c/o California Theatre, Compton, lessee.

Calif., Orange—Theatre and Store—G. Rickards & R. Smith, Orange, brick theatre and store building, and reconstruction of 3 story apartment and hotel adjoining theatre site, to A. T. Hesse, Hollingsworth Bldg., Los Angeles, $250,000 or more. Noted Oct. 11.

Calif., San Francisco—Apartment—G. L. Fish, 1001 Pine St., 6 story and basement, rein.-con., Pine St. near Taylor St., general contract to F. L. Hansen, 251 Kearny St., $135,000. Noted June 21.

Calif., San Francisco — Apartment — W. Props, 965 Hyde St., will build 5 story and basement, rein.-con., Sacramento and Franklin Sts., by day labor. Noted Dec. 6.

Calif., San Francisco—Office and Warehouse—See "Industrial Works."

Calif., Stockton—College—College of the Pacific, college buildings, general contract from R. W. Moller, Call Bldg., San Francisco, $526,125; power, heating and ventilating from L. Tourette-Fical Co., 907 Front St., Sacramento, $78,000; power, heating, ventilating and plumbing from Miller-Hays Co., 125 North California St., $102,500; electrical work from F. E. Newbery & Commercial Electric Co., 381 Bush St., San Francisco, $77,900. Noted Nov. 15.

B. C., Vancouver—Apartment—St. Julien Co., Bank of Hamilton Bldg., converting uncompleted 7 story, 131 x 132 ft. rein.-con., stone, tile, brick and terra cotta, Y. M. C. A. building, Georgia St., into apartment to Booker, Campbell & Whipple, 413 Granville St., $270,000.

Federal Government Work

PROPOSED WORK

Ky., Weston—Lock—U. S. Engineer, P. O. Box 72, Louisville, will probably take bids after Feb. 1, constructing 110 x 600 ft. lock for Dam 50, involving 40,000 cu.yd. concrete, near here.

Ky., Owensboro—Steel and Bolts—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 123 tons structural steel and bolts for lock at Dam 46, Ohio River, here.

Mich., River Rouge—Dredging—U. S. Engineer, Federal Bldg., Detroit, plans deepening and straightening River Rouge to provide at least 21 ft. channel to docks of Peerless Portland Cement Plant, in vicinity of West Jefferson Ave., here. E. H. Markham, dist. engr.

BIDS DESIRED

Wis., Mineral Point—Post Office and Custom House—Jan. 3, by Treas. Dept., Wash., D. C., 1 story, 46½ x 64 ft., brick, here. J. A. Wetmore, acting superv. archt.

Tex., Houston—Remodeling—Dec. 18, by Treas. Dept., Wash., D. C., remodeling first floor in Old U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

Oregon—Road—Dec. 19, by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, improving Bear Gulch Natl. Forest Rd., Malheur National Forest, Grant Co., 21 acres clearing, 25,000 cu.yd. rock, 20,000 cu.yd. common, and 1,500 cu.yd. structure excav., 2,560 lin.ft. culverts, etc.

Oregon—Road—Dec. 19, by C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, improving Scottsburg-Reedsport Natl. Forest Rd., located partly within Siuslaw National Forest, Douglas Co., 18 acres clearing, 160,000 cu.yd. excav., 126 cu.yd. Class A concrete, etc.

Calif., Livermore—Hospital—Dec. 29 (extended date) at office U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., construction complete of infirmary, administration, mess and kitchen building, recreation building, nurses' quarters, attendants' quarters, garage, storehouse, etc., mechanical equipment and outside service lines except grading and walks, at U. S. Veterans Hospital, here. F. T. Hines, dir. Noted Nov. 22.

Calif., San Francisco—Riprap—U. S. Engineer, Custom House, receiving bids 22,000 cu.yd. riprap for Richmond Dike.

BIDS RECEIVED

Pa., Phila.—Dredging—U. S. Engineer, 1505 Race St., dredging (1) 1,800 cu.yd. overlying material and (2) 141 cu.yd. ledge rock in Schuylkill River, maximum allowable overdepth overlying material 570 cu. yd., ledge rock 263 cu.yd., from Amer. Dredging Co., 510 Mariner and Merchant Bldg., (1) $1.50 (2) $100. Noted Nov. 15.

La., New Orleans—Barge and Hull—U. S. Engineer, 329 Custom House, (1) one 100 x 30 x 6 ft. 1,800 bbl. capacity steel oil barge (2) one 74 x 34 x 5 ft. steel hull derrick boat, from Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., (1) $28,506 (185 days) (2) $17,190 (224 days); W. P. Copping Steel and Iron Wks., 401 North St., Patrick St., (1) $21,950 (120 days) (2) $20,950 (120 days). Noted Nov. 8.

Ark., Marianna — Post Office — Treas. Dept., Wash., D. C., construction U. S. Post Office, here, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $42,479. Noted Nov. 8.

CONTRACTS AWARDED

Ky., Louisville—Pile Hammer—U. S. Engineer, P. O. Box 72, one 6,500 lb. steam pile hammer, to Branders Machy. and Supply Co., 325 West Main St., $1,790.

Ky., Owensboro—Lumber—U. S. Engineer, P. O. Box 72, Louisville, 30,000 ft. No. 2 common and 90,000 ft. No. 1 rough, yellow pine for Dam 46, here, to Hayden & Wescott Lumber Co., 823 Railway Exch., Chicago. Engrs. est. $5,000. Noted Nov. 29.

O., Gallipolis—Post Office—Treas. Dept., Wash., D. C., construction U. S. Post Office, here, to C. Weitz Sons Co., 713 Mulberry St., Des Moines, Ia., $50,500. Noted Dec. 6.

O., Steubenville — Post Office — Treas. Dept., Wash., D. C., 1 story, 99x100 ft., 4th and Washington Sts., here, to Garber & Cissel, Bethlehem, Pa., $160,000. Noted Oct. 25.

Unclassified

PROPOSED WORK

Subway—Erie, Pa.—Plans subway under Pennsylvania and New York Central R.R. tracks at Chestnut St. $75,000. F. G. Lynch, city engr.

Lighting System — Greenwood, Miss. — Making preliminary plans white way lighting system consisting iron street standard and underground conduits. $30,000. W. B. Hawkins, city engr.

Park Improvements—Louisville, Ky.—Bd. Park Comrs. plans improvements in Victory and Tyler Parks, etc. $32,000. G. W. Schardein, pres.

Stadium — Louisville, Ky. — Du Pont Manual Training High School having plans prepared by A. G. Tafel, Coleman Bldg., concrete stadium, Eastern Parkway. $65,000. Noted Aug. 9.

Stadium—Youngstown, O.—Rayen Alumni Athletic Assn. having tentative plans prepared stadium, 8,400 seating capacity. $125,000-$150,000. Conducting campaign to raise funds. Will mature in spring. Address E. F. Miller, professor, Rayen School. Engineer and architect not announced.

Grade Separations—Highland Park (Detroit P. O.), Mich.—Pennsylvania R.R. Co., Penobscot Bldg., Detroit, plans separating grades of Pennsylvania and Detroit Terminal tracks through city, incl. elevation of street at Oakland Ave., and elevation of tracks at Woodward and Hamilton Aves. L. C. Whitsit, city engr., and J. Reid, comr. Pub. Wks., Detroit, will prepare plans and submit same to committee of engineers, incl. engineer for railroad.

Lighting System—Urbana, Ill.—Takes bids about Feb. 7, South East Street lighting project. $60,000.

Electric Light System—Bedford, Ia.—See "Industrial Works."

Stadium, etc.—Columbia, Mo.—Missouri University having preliminary sketches made 1st unit rein.-con. memorial stadium and football field, 25,000 seating capacity (ultimately 65,000). To exceed $300,000. Jamieson & Spearl, Arcade Bldg., St. Louis, archts.

Park, etc.—Florida, Mo.—Mark Twain Memorial Assn., c/o Missouri University, Columbia, plans memorial park $115,000 and buildings $35,000, here, in honor of Mark Twain. H. A. LaRue, c/o owner, engr. H. F. Mayor, landscape, archt.

Parks, etc.—St. Louis, Mo.—Bd. Pub. Serv. and Citizens Bond Issue Supervisory Com. approved $90,000 bonds new parks and playgrounds, $150,000 bonds improving parks and playgrounds, $500,000 bonds street lights and $65,000 bonds elimination grade crossings. W. W. Horner, city engr.

Pipeline—Beaumont, Tex.—Atlantic Refining Co. had plans prepared for pipeline to tank farm and loading rack on Neches River. $100,000.

Amusement Park—Dallas, Tex.—J. C. R. Simpson, Whiteman Bldg., plans Fairyland Amusement Park, Scyene Rd. $1,000,000.

Park—Ft. Worth. Tex.—Making plans walks, drives, athletic grounds, etc. Burk Burnett Park. $50,000. D. L. Lewis, city engr.

Levee — Kaufman, Tex. — Kaufman Co. Levee Dist. voted $140,000 bonds for repairs and maintenance. W. P. Williams, co. judge. Noted Nov. 29.

Removing Obstructions, etc.—San Antonio, Tex.—Voted $400,000 bonds removing obstructions and widening San Antonio River also $600,000 bonds widening San Pedro and Alazan Rivers, river beds will be deepened and banks widened. I. Weig, city engr. Noted Nov. 15.

Hydro-Electric Power Development—Aberdeen, Wash.—City voted $2,000,000 bonds to develop 27,000 hp.

Distributing System—Carmichael, Calif.—Carmichael Pub. Utility Dist. plans electrical distributing system, to exceed $25,000. Bond election soon.

Pier Shed—Los Angeles, Calif.—City, steel transit shed on Pier No. 1, from Lynch Constr. Co., 1117 Central Bldg., Los Angeles, $64,300.

Wharves—Los Angeles, Calif.—Bd. Harbor Comrs. having plans prepared 2 wharves, 60 ft. wide, 150 ft. long, also 7 dolphins, Los Angeles Harbor. Private plans.

Power Lines, etc.—Redwood City, Calif.—Pacific Gas & Electric Co., 446 Sutter St., San Francisco, plans to reconstruct power lines and install additional transformers to supply industrial plants east of Redwood City. Private plans.

Swimming Pool — Sonora, Calif. — See "Buildings."

Underground Railroad Crossing—Stockton, Calif.—City having preliminary surveys made for crossing under railroad tracks at East Miner Ave., beginning at Aurora St. and ending at point between Union and Pilgrim Sts. To exceed $225,000. W. B. Hogan, city engr.

Electrolier System—Torrence, Calif.—City to vote on $75,000 bond issue for electrolier system.

Power Development — Carillon, Que. — Montreal Tramway Co., Craig St. W., Montreal, will probably take bids in January for 40,000 hp. development, here.

Power Development — Riviere du Loup, Que.—Montreal Tramway Co., Craig St. W., Montreal, will probably take bids in January for 20,000 hp. development, here.

Shipbuilding Yards—Three River, Que.—Canada Steamship Lines Ltd., Victoria Sq., Montreal, takes bids early in 1924 constructing shipbuilding yards at Cap de Madeline near here.

BIDS DESIRED

Test Borings—Phila., Pa.—Dec. 18, by W. S. Twining, dir. City Transit, 50 test borings for subway construction in central part of city, Contr. 7.

Ferry Boats—New Orleans, La.—Jan. 3, by Algiers Pub. Serv., 1 Canal St., 2 steel hull ferry boats, 67 x 150 ft. $225,000. Noted Nov. 29.

Culverts and Extensions—Waterloo, Ia.—Dec. 26, by Auditor Black Hawk Co., 35 box culverts and 14 culvert extensions. W. D. Johnston, Waterloo, engr.

Levee—Dallas, Tex.—Levee Dist. 9, Dallas Co., taking bids levees $55.000. McKay & Montgomery, Andrews Bldg., Dallas, engrs.

Bulkhead—Ore., Gresham—Dec. 17 by Comrs. Multnomah Co., Court House, (Portland) bulkhead on south side Powell Valley Rd., here, (1) 1 240 lin.ft. cedar piles, 16 in. butts (2) 1,240 lin.ft. Douglas fir piles, creosoted 12 lb. treatment, 16 in. butts (3) ten 1 in. x 20 ft. tie rods (4) 11,500 ft. Douglas fir, No. 1 common, 6 x 12 creosoted, 12 lb. treatment (5) 9,370 lin.ft. cedar piles, 16 in. butts (6) 9,370 lin ft. Douglas fir piles 16 in. butts, 12 lb. creosoted treatment. Bulkhead to be built of following: Items 1, 3 and 4 or alternate 2, 3 and 4, or alternate 5 or alternate 6. C. Rudeen, chn.

Amusement Pier—Alameda, Calif.—Neptune Beach Co., Webster St. and Encinal Ave., receiving bids amusement pier, 1,500 ft. long, 30 ft. wide, to rest on timber piles, Neptune Beach. Private plans.

Head Works—Wellington, New Zealand—Apr. 30 (extended date) for Arapuni power scheme, Sect. 1 headworks; adv. E. N.-R. Dec. 13.

CONTRACTS AWARDED

Special Work—New York, N. Y.—Transit Comn., 49 Lafayette St., special work (Order 23) for Lenox Ave. and 148th St. Yard, to Bethlehem Steel Corp., 25 Bway., $12,544. Noted Dec. 6.

Grain Elevator — Farmington, Conn. — Winchell Smith, Inc., 4 and 6 story, 54 x 144 ft. grain elevator, and trestle 300 ft. long, 30 ft. high, rein.-con., to Carlson & Terell Co., 50 Dwight St., New Britain. Engrs. est. $100,000. Noted May 10.

Grain Loading Jetty—Vancouver, B. C.—Harbor Comrs., 712 Pender St. W., timber pile and crib jetty 1,050 ft. long, 50 ft. wide, steel superstructure to carry four 36 in. belt conveyors, etc., to Pacific Constr. Co. Ltd., 510 Hastings St. W., $400,000.

Materials and Equipment

PROPOSED WORK

Electric Lights — Albany, N. Y. — See "Streets and Roads."

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Ashland Co. $10,000, W. E. Dillon, Highbridge, comr.; Door Co. $4,000, J. M. Laurie, Sturgeon Bay, comr.; Iron Co. $3,000, W. Weber, Saxon, comr.;

Materials and Equipment (Continued)

Polk Co. sufficient to purchase 1 rock crusher, 10 patrol graders one 12 ft. grader and large tractor, C. W. Nystrom, Balsam Lake, comr.; Douglas Co. $10,000 incl. patrol graders, etc. C. Hanson, Superior, comr.; Waupaca Co. $10,000, J. Huffcut, Wapaca, comr.; Washburn Co. $8,000, incl. crusher and screening plant, J. R. Allen, Spooner, comr.; Florence Co. sufficient to purchase several conveyors, O. F. Soderberg, Florence, comr.

Road Machinery — Wisconsin — See "Streets and Roads."

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Monroe Co. $7,000 incl. 19 patrol outfits, C. Millard, Sparta, comr.; Clark Co. $10, O. J. Weyhmiller, Niellsville, comr.; Lincoln Co. $8,000, H. H. Kuehling, Merrill, comr.; Sauk Co. sufficient to purchase small graders, small rock crusher and power unit, W. Halbersleben, Baraboo, comr.

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Trempealeau Co. $7,000 incl. patrol road graders, etc., E. F. Rotering, Arcadia, comr.; Portage Co. $2,000 incl. small tools, graders, scrapers and wheelers, T. E. Cauley, Stevens Point comr.

Street Sweeper—Eau Claire, Wis.—City takes bids this winter street sweeping machine. O. E. Olen, city clk.

Portland Cement—Springfield, Ill.—Dept. Pub. Wks. and Buildings, Div. Highways, rejected bids 4,000,000 bbl. cement for 1924 road construction program. Letting indefinitely postponed. Noted Dec. 6.

BIDS DESIRED

Tractor—Albany, N. Y.—Bd. Supervs. Albany Co. in market for one 10 ton caterpillar type tractor, and four 5 ton tractors. J. J. McNulty, chn.

Paving Blocks—New York, N. Y.—Dec. 21, by E. W. Buckley, comr. Purchase, Municipal Bldg., granite and creosoted wood paving blocks for Dept. Plant & Structures.

Machinery — Richmond, Va. — Hackley Morrison Co., 1708 Lewis St., taking bids 24 in. belt bucket elevator 50 ft. centers; 100 steel end dump stone quarry cars, 2 yd. capacity; 2 Bucyrus drag line machines one with 125 ft. boom and other with 150 ft. boom.

Tractor—Crookston, Minn.—Dec. 20, by H. B. Welte, aud. Polk Co., one 10 ton caterpillar tractor. E. H. Harding, Crookston, engr.

Road Gravel—Marlin, Tex.—Jan. 12, Comrs. Court, Falls Co., approximately 50,000 cu.yd. road gravel, for Highway 44. P. Wehrung, Lott, engr.

Crusher — San Antonio, Tex. — H. T. Phelps, Hicks Bldg., taking bids 100 ton jaw crusher.

Clam Shell Bucket—Los Angeles, Calif.—Dec. 21, by Harbor Comn., Byrne Bldg., 1 yd. capacity clam shell bucket.

Tractors—Merced, Calif.—Merced Co. in market for 2 tractors with dump bodies for use in Supervisorial Dist. No. 4. W. E. Bedesen, co. surv.

BIDS RECEIVED

Material for Bridge Repairs, etc.—Phila., Pa.—Dept. Pub. Wks., Bureau of Highways, (1) material for repairing bridges (2) furnishing granite block (3) furnishing dryers for city asphalt plant (4a) and (4b) improving intersection of 34th St. Walnut St. and Woodland Ave., from Montgomery Iron & Steel Co., 918 West Berks St., (1a) $1,279 (1b) $5,402; J. Meehan & Son, 916 West Dakota St., (2) $3,264; Phila. Stack and Tank Wks., Inc., 50 North 23rd St., (3) $2,394; Union Paving Co., 30th and Locust Sts., (4) $7,462. Noted Nov. 29.

Pipe—Dallas, Tex.—For 20,000 ft. 6 in. tile pipe, five hundred 6 x 6 Y, two hundred Dallas Y, two hundred 6 in. ¼ bends, two hundred 6 in. ⅛ bends and 500 ft. 4 in. tile pipe, from San Antonio Sewer Pipe Wks., San Antonio, and Texarkana Pipe Wks., Texarkana, both bid. $0.21 for 6 in., $0.84 for 6 in. special, $0.15 for 4 in. and $0.60 for 4 in. specials. E. A. Kingsley, Dallas, city engr. Noted July 19.

Cement, etc.—Oroville, Calif.—Thermalito Irrigation Dist., Oroville, 2,750 bbls. cement to L. C. Bills Hardware Co., Oroville, $3.39 per bbl., 30 in. needle valve from Union Machine Co., 934 Brannan St., San Francisco, $2,000.

CONTRACTS AWARDED

Cast Iron Pipe—Kansas City, Kan.—For 8,000 ft. 16 in., 8,000 ft. 12 in., and 15,000 ft. 6 in. Class B, cast iron pipe, to Amer. Cast Iron Pipe Co., 716 Scarritt Bldg., $54.50 per ton.

Gravel, etc.—Ft. Worth, Tex.—For 7,500 cu.yd. gravel for street work, to Texas Sand & Gravel Co., Box 1594, Waco, $1.60; 7,900 gal. Texaco macadam binder, to Texas Co., Southwestern Life Bldg., Dallas, $0.06.

OFFICIAL PROPOSALS

Bids: Dec. 19.

DELAWARE RIVER BRIDGE
CONTRACTS NO. 9 AND 10

Demolition

Philadelphia, Pa.

Sealed proposals for the demolition and removal of the properties on the sites of the Philadelphia and Camden approaches of the bridge over the Delaware River connecting the City of Philadelphia, Pa., and the City of Camden, N. J., will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 2:30 o'clock p.m., December 19, 1923, when they will be publicly opened and read. The contracts will be awarded, or all bids rejected, within fourteen days after bids are opened. The right is reserved to reject any or all bids.

Separate bids are asked on each of five sections of the Philadelphia approach and each of four sections of the Camden approach. The work includes demolition and removal of structures, and certain other work incidental thereto.

Bids must be made upon the blank proposal forms, which, together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission, upon deposit of $10.00, which deposit will be refunded upon receipt of bid or upon the return in good condition of the copies so taken.

Each proposal must be accompanied by a certified check for Three Thousand Dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and surety's consent must be shown. The bidder or bidders to whom the contract for each section is awarded will be required to given bond in the sum of fifty per cent of the amount of such contract, but not less than $25,000.

Delaware River Bridge Joint Commission.
GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.

Bids: Dec. 19.

Watchman's Signal System

Central Islip, N. Y.

Sealed proposals for Watchman's Signal System, at the Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock p.m. Wednesday, December 19th, 1923, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4164. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y.; at the New York Office of the Department of Architecture, 18th Floor Fuller Building, Broadway & 23rd St.; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: November 21, 1923.

Bids: Dec. 28.

State Highway Work

Richmond, Va.
December 7, 1923.

Sealed bids will be received at the office of the State Hwy. Dept., 413 N. 10th St., Richmond, until 10:30 a.m., Friday, Dec. 28, 1923, for the construction of:

1. PROJ. S-146C RT 10 Radford—Three Miles East Montg'ry Co. 3 mi. 18' 8" Bit. Mac. Road. Approx. 3,000 cu.yd. Exc. 1,376 cu.yd. Borrow Exc.
2. PROJ. S-279 RT 27 Great Bridge—N. C. State Line Norfolk Co. 12.6 mi. 18' Conc. Road. Approx. 12 A Clearing, 29,860 cu.yd. Exc., 35,800 cu.yd. borrow, 1,856 lin. ft. pipe, 380 cu.yd. "A" Conc., 207 cu.yd. "B" Conc., 22,605 lbs. reinf. steel, 3,840 lin.ft. Wood Gd. Rail.
3. PROJ. S-293-C RT 23 Newport — Hoges Store Giles Co. 1.61 mi. 24-26 ft. Grading and Dr. Approx. 13,913 cu.yd. Exc., 392 lin.ft. pipe, 70 cu.yd. "A" Conc., 120 cu.yd. "B" Conc., 8,000 lbs. reinf. steel, 604 lin.ft. Wood Gd. Rail.
4. PROJ. F-295-C RT 39 Richmond — Seven Pines Henrico Co. 5.18 mi. 18' Conc. Road. Alt. bids using 4" Gravel. Subbase, 4" Bit. Conc. coarse agg. type base, 2" Sheet Aspht. Top without binder course. Approx. 2 Ac. Clearing, 10,026 cu.yd. Exc., 5,946 cu.yd. Borrow, 682 lin.ft. pipe, 27 cu. yd. "B" Conc.
5. PROJ. S-322 RT 393 Bottoms Bridge —New Kent C. H. New Kent Co. 13.0 mi. Gravel, 38 Ac. Clearing, 92,950 cu.yd. Exc., 4,368 cu.yd. Borrow, 2,576 lin.ft. pipe, 243 cu.yds. "A" conc., 191.2 cu.yd. "B" conc., 17,426 lbs. reinf. steel, 2,120 lin.ft. wood gd. rail. Right is reserved to cut off surface if gravel is not available.

Proposal guaranties to be $500 for bids less than $100,000 and $1,000 for bids over $100,000.

Plans and specifications are on file at the office of the State Hwy. Dept., Richmond, and the following Dist. Engr's Offices: Proj. S146C Salem, S279 Suffolk, F295C and S322 Richmond, S293 Salem.

Additional plans for bidders on the above projects may be obtained upon application to State Hwy. Dept., with check for $5.00 payable to H. G. Shirley, $2.50 will be returned if plans are returned in two weeks after bids are opened.

Engineers will be at the following places to show bidders over work: S146C N&W Station. Radford 11 a.m. Wed., Dec. 19, S279 Lorraine Hotel, Norfolk, 10:30 a.m. Tues., Dec. 18, S293 N&W Station, Pembroke, 10 a.m. Dec. 21, F295C & S322 Dist. Engrs. Office, Richmond, 10 a.m. Fri., Dec. 14.

State Highway Commission reserves right to reject any or all bids.

H. G. SHIRLEY,
Chairman.

C. S. MULLEN,
Acting Commissioner.

Bids: April 30, 1924.

Arapuni Power Scheme

NEW ZEALAND
SECTION 1, HEADWORKS

Wellington, New Zealand.

The time for the receipt of tenders for the above contract is hereby extended until the 30th April, 1924. (Advertised May 24 and August 16.)

Bids: April 30, 1924.

Arapuni Electric Power Scheme

SECTION 2—POWERHOUSE & PLANT

Wellington, New Zealand.

Tenders for the above close with the Secretary, Public Works Tenders Board, Wellington, New Zealand, at noon on 30th April, 1924. Specifications may be seen on application at the New York, Cleveland, Chicago and San Francisco Offices of "Engineering News-Record" and "Electrical World."

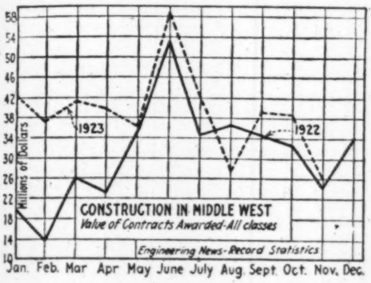
CONSTRUCTION NEWS

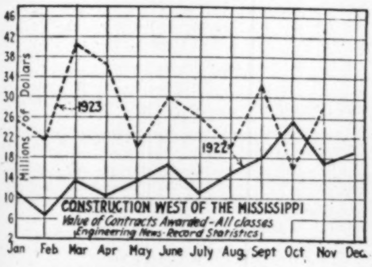
Engineering News-Record, December 20, 1923

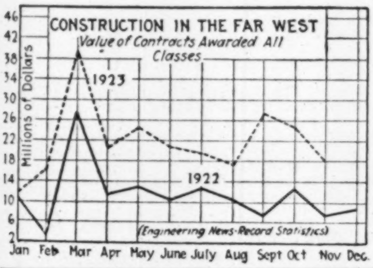
The Construction Barometer

Favorable Weather Stimulates Building in Northeastern States—Contracts Gain West of Mississippi—Other Industries Slow

FAVORABLE weather conditions throughout the country have greatly stimulated construction, particularly in New England and the Middle Atlantic states. During November, however, the group of states immediately west of the Mississippi, was the only one to show a gain in value of contracts let. While the grand total of December awards, for the entire nation, will probably show a slight seasonal drop from the month preceding, that section of the country embracing the eleven Northeastern states, will undoubtedly register a gain over the November total. This marked activity in winter construction will serve to offset the seasonal slowdown now evident in general industrial operations.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

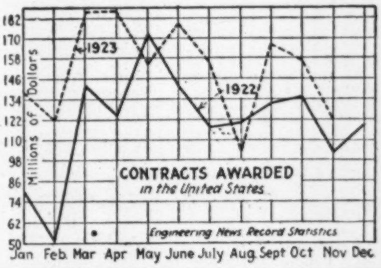
Week Ended	Public Work	Private Work	Total Contracts
Nov. 29	$10,298,000	$25,020,000	$35,318,000
Dec. 6	9,806,000	20,846,000	30,652,000
Dec. 13	10,775,000	16,335,000	27,110,000
3 Weeks	$30,879,000	$62,201,000	$93,080,000

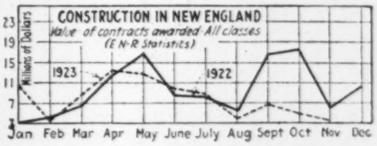
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

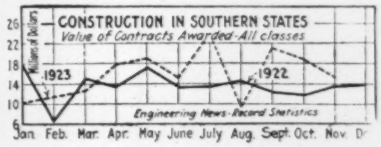
Week Ended	No.	Public Work	No.	Private Work
Nov. 29	10	$2,165,000	30	$12,810,000
Dec. 6	20	5,034,000	49	14,770,000
Dec. 13	16	3,567,000	28	9,576,000
3 Weeks	46	$10,766,000	107	$37,156,000

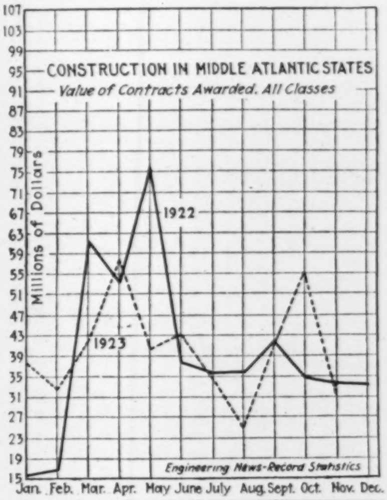
FLUCTUATION IN LUMBER—OTHER BASIC PRICES FIRM

	Quoted on Dec. 20, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N. Y., M.ft.	59.00	57.00	Dec. 13
Fir, San Fran., M.ft.	38.00	41.00	Dec. 13
Common labor, hr.	.54	.53	June 28









Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Fla., Fort Myers—Dec. 28 to vote on $80,000 bond issue for mains. F. E. Smith, clk.

Tenn., Union City—Soon takes bids improving water system, sewers and light plant $125,000. Noted Nov. 29.

O., Ashtabula—Ashtabula Water Co., had sketches made extending filter plant. $150,000. J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, engrs. Noted July 26.

Proposals will appear next week as usual.

Wis., Oconomowoc—Making plans 300,000 gal. steel tank, incl. approximately 1,700 ft. 12 in. Class C pipe. J. A. Stemper, City Hall, engr.

Kan., Russell—City voted $95,000 bond issue for improvements and extension to water works system. Noted Nov. 22.

Neb., Kearney—Election in January to vote on $132,800 bonds for waterworks improvements. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Aug. 26.

Neb., University Place (Lincoln P. O.)—Defeated $100,000 bonds for waterworks improvements. Fulton & Letton, Bankers Life Bldg., Lincoln, engrs. Noted Nov. 22.

Mont., Missoula—Apr. 2 to vote on $950,000 bonds for new water supply and distribution system. Burns & McDonnell Eng. Co., 404 Marsh-Strong Bldg., Los Angeles, Calif., engrs. Noted Nov. 15.

Mo., Palmyra—Voted $15,000 bonds water tower. Noted Nov. 1.

Mo., Piedmont—Dec. 22 to vote on $40,000 bonds water works and distribution system. Defeated at previous election by slight margin. W. A. Fuller Co., 1917 Ry. Exch. Bldg., St. Louis, engrs. Noted Nov. 8.

Mo., Thayer—Defeated $50,000 bonds waterworks. At election held several weeks ago proposition carried but opponents successfully opposed legality of election and new vote was ordered. Noted Oct. 18.

Tex., Cisco—W. B. Statham, city secy., takes bids latter part of month 650 ft. 14 in. Bell and Spigot c.i. pipe, 16,500 ft. 14 in. Class B and 500 ft. 14 in. Class C pipe, 2 tons special castings, miscellaneous valves, etc. Alternates on Universal and concrete pipe. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Lamesa—Having plans prepared complete waterworks system. $40,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Waterworks (Continued)

Tex., Malone—City voted $40,000 bonds complete water system. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Nov. 29.

Tex., Mart—Jan. 28, to vote on $150,000 bonds reservoir and new mains with pumps. Koch & Fowler, Central Bank Bldg., Dallas, engrs.

Okla., Altus—Surveys being made enlarging and raising dam and spillway at Bitter Creek. $27,000. C. Reid, city engr.

Okla., Carter—Surveys being made for new waterworks system, well, elevated tank, and distribution fittings. $28,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Okmulgee—Election in January to vote on $3,700,000 bonds for 45 mi. pipe line, 2 pumping stations, 10 m.g. reservoir and distribution system, Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

Okla., Stillwater — Preliminary plans in progress waterworks extensions and dam. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted July 26.

Wash., Wapato—City Council making plans and takes bids about Jan. 5, replacing wooden mains with 18,000 ft. 4, 8 and 10 in. c.i. mains.

Calif., Oakland—City plans 240 fire hydrants and 6, 8, 12, 20 and 24 in. mains, East Bay Water Co., 512 16th St., will install mains, city to pay 8% of cost to company each year. $615,000.

Calif., Orange—Plans to vote on bonds for purchasing two 1,000 gal. pumps, 10,000 ft. c.i. water pipe and hydrants, also $40,000 bonds for 1 m.g. reservoir.

Ont., Port Elgin—Plans to install electricity driven auxiliary waterworks pumps. $25,000. A. McClaren, chn. com.

BIDS DESIRED

N. Y., Brooklyn—Dec. 24, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bedford, Livonia and Morgan Aves. etc., here.

Md., Baltimore—Dec. 26, by Bd. Awards, 400,000 lb. pig lead for water dept. V. B. Siems, City Hall, water engr.

Miss., Belzoni—Jan. 10, concrete reservoir, concrete foundation for building and machinery, coal conveying machinery, two 500 g.p.m. motor driven centrifugal pumps, one 500 g.p.m. synchronous motor driven pump, one 1,000 g.p.m. motor driven fire pump, one 1,000 g.p.m. steam fire pump, 2 turbine driven centrifugal boiler feed pumps, 1 steam boiler feed pump, two 350-400 brake-hp. full diesel oil engines with generators, 1 building for either oil or steam plant, etc. J. J. Sisloff, supt. water and light plant.

O., Columbus—Dec. 28, by Franklin Co. 2,005 ft. 6 in. c.i. mains and 1,050 ft. ¾ in. extra strong lead pipe in Sewer Dist. Clinton 2, Contr. 32 $6,000, 6,365 ft. 6 and 10 in. c.i. mains in Sewer Dist. Clinton 2, Contr. 27, $14,000; 4,446 ft. 8 in. vitr. sewer in Sewer Dist. Clinton 2, Contr. 31, $10,000.

Ind., South Bend—Jan. 16, by Bd. Pub. Wks., City Hall, reserve pumping unit. $30,000. J. W. Joyne, engr.; adv. E. N.-R. Dec. 20.

Ia., Ames—Jan. 7, constructing 18 in. well, 100 ft. deep, and installing pumping equipment. A. B. Maxwell, clk.

Mo., Holden—Dec. 18, by E. E. Harper, engr., 3031 Park Ave., Kansas City, waterworks improvements, incl. filter house, small pump house, extending and increasing height of dam, chlorine equipment, 100,000 gal. tank on 120 ft. tower, 4,250 g.p.m. centrifugal pumps, valves, hydrants, etc., here. Noted Oct. 4.

Mo., St. James—Jan. 10, by W. H. Powell, mayor, waterworks improvements consisting of 75,000 gal. tank on 125 ft. tower, deep well and 100 g.p.m. deep well pump, etc. $33,000, also sewer lines and septic tank, $12,000. Alexander Eng. Co., Springfield, engrs. Noted Aug. 23.

Okla., Oklahoma City—Jan. 15, by M. Pershek, Jr., city clk., improving water supply; adv. E. N.-R. Dec. 20.

Calif., Burbank—Jan. 8, by F. S. Webster, city clk., 1 deep well centrifugal or turbine pump, 1,350 g.p.m. capacity, also drilling 16 in. well between 150 and 200 ft. deep, using No. 12-guage well casing.

Ont., Ford City—Dec. 27, by R. B. Braid, secy. Essex Border Utilities Comn., Heintzman Bldg., Windsor, water purification plant here incl. rein.-con. filters, coagulating basins, pure water reservoir, office building, etc., supplying 42 in. steel pipe, c.i. pipe and specials, valves and sluice gates, rate controllers and operating tables. Core, Nasmith & Storrie, 625 Confederation Life Bldg., Toronto, engrs.

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., standard and special 10, 12, 16 and 24 in. c.i. pipe castings for Buffalo Filter Plant, Contr. 11, from Fillmore Ave. Fdry. & Iron Wks., Inc., 153 Fillmore Ave., Schedule A $2,972, Schedule B $3,406, other items $2,826, total for entire work $9,204; Bowler Fdry. Co., 1688 Columbus Rd., Cleveland, O., Schedule A $143. per ton, Schedule B $124, 40 flanged ells, etc. $158; R. D. Wood & Co., 400 Chestnut St., Phila., material in lists A and B at an average price of $0.085 per lb., f.o.b. foundry with freight allowed to Buffalo; U. S. Cast Iron Pipe & Fdry. Co., 957 East Ferry St., Item 1 AQ $0.055 per lb., Item 2 AP $0.055 per lb. Item 3 AO $0.04 per lb., Item 4 AN $0.055 per lb., Item 5 AM $59.80 per net ton, Item 6 AL $0.055 per lb., Item 7 AK $0.055 per lb., Item 8 AJ $0.07 per lb., Item 9 AH $59.80 net ton, Item 10 AG $0.055 per lb., Item 11 AF $0.06 per lb., Item 11 AF $0.06 per lb., Item 12 AE $0.055 per lb., Item 13 AB $0.055 per lb., Item 14 AA $0.055 per lb., Special Items forty 24 in. flanged ¼ bends $0.075 per lb. Noted Nov. 29.

Ill., Villa Grove—Pumping station and equipment incl. 20 hp. electric motor and deep well pump, from Meister Bros., Tuscola, $15,391.

Minn., Minneapolis — F. S. Gram, city purch. agt., Dec. 5, bell and spigot c.i. pipe, from Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., 50,000 lin.ft. 6 in. Class C, 16 ft. lengths, $0.995, 12,000 lin.ft. 8 in., Class C, 16 ft. lengths, $1.445, 6,000 lin.ft. 12 in. Class B, 12 ft. lengths, $2.285, 1,400 lin.ft. 16 in., Clas C $3.48 per ft. Noted Nov. 29.

Minn., St. Paul—H. W. Austin, city purch. agt., Dec. 4, furnishing and delivering 88,440 lin.ft. Class B. c.i. pipe in 12 ft. lengths about 2,925 tons, from Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., 6, 8 and 12 in. $55.66 per ton, Glamorgan Pipe & Fdry. Co., The Rookery, Chicago, 16 and 20 in. $55.55 per ton, 19 tons c.i. water specials from Hammond-Byrd Iron Co., American Trust Bldg., Birmingham, Ala., $2,406. Noted Nov. 29.

Wash., Seattle—Bd. Pub. Wks., constructing Lake Youngs reservoir project, incl. intake, outlet conduit controlling works and pipe lines, from Jahn & Bressi, New York Bldg., $1,210,759; Goetz & Brennan, Seaboard Bldg., $1,226,471. Engrs. est. $1,200,000. Noted Nov. 15.

Wash., Seattle—Bd. Pub. Wks., Dec. 7, installing mains in East Northlake Ave., et al., from R. G. Stevenson, 1327 North 34th St., 3,055 ft. 12 in. pipe $4, 1,575 ft. 8 in. $2.25, total $19,898. Engrs. est. $21,526.

CONTRACTS AWARDED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Aves. N and O, etc., to Grippo Contg. Co., 85 Webster Ave., Long Island City, $16,800. Noted Nov. 29.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bayview, Griswold Aves., etc., to Melrose Constr. Co., 103 East 125th St., $15,500. Noted Nov. 15.

N. J., Clifton—Passaic Valley Sewerage Comrs., 900 Chamber of Commerce Bldg., 24 Branford Pl., Newark, pumping machinery and equipment for Yantacaw Pumping Station, here, to Turbine Equipment Co., 30 Church St., New York City, $27,775. Noted Nov. 29.

O., Cleveland—For 30 in. and 24 in. c.i. mains in Woodhill Rd., Contr. 32, Sects. N and S, to Winterbottom-Connelly Co., 2997 Meadowbrook Blvd., Cleveland Heights, $126,690 and $117,645 respectively. Noted Nov. 29.

O., Toledo—Director Pub. Serv. synchronous motor driven centrifugal pump, 35 m.g. capacity, to Dravo-Doyle Co., Diamond Bldg., Pittsburgh, $26,000. Noted Nov. 22.

Kan., Lenora—Constructing Waterworks system, incl. 2,600 lin.ft. 6 in. and 13,100 lin.ft. 4 in. Class B c.i. pipe in place, 2,400 lin.ft. galvanized pipe in place, 50,000 gal. tank on 80 ft. tower with 36 in. steel riser pipe erected, etc., to Burt & Tripp, Hutchinson, $25,729. Noted Oct. 11.

Minn., St. Paul—H. W. Austin, city purch. agt., 72 tons steel reinforcing bars to Kalman Steel Co., 514 Merchants Natl. Bank Bldg., $5,000; 40 tons pig lead in 100 lb. pigs, to Nassau Smelting & Refining Co., Oppenheim Bldg., $5,560; 6 sluice gates, gate stands and 1 electric motor operating device, to Michigan Valve & Fdry. Co., Amer. Trust Bldg., Detroit, Mich., $8,614; three thousand ¾ in. corporation cocks, three thousand ¾ in. inverted key curb stops and five hundred ¾ in. tail pieces, to Union Brass & Metal Mfg. Co., Lawson and Mackubin Sts., $3,390; three hundred 1 in.; one hundred 1½ in. and fifty 2 in. tail pieces, to H. Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $2,354; 1,030 lin.ft. 36 in. concrete pipe to Massey Concrete Products Corp., 817 Merchants Natl. Bank Bldg., $4,944; 3,580 disc type cold water meters, to Badger Meter Co., 30th and Meinecke Aves., Milwaukee, Wis., $29,455. Noted Nov. 15 and Nov. 22.

Mo., Greenfield—See "Sewers."

Tex., Dallas — W. W. Samuels, Medical Arts Bldg., 1¼ mi. mains in Kessler Highlands, to J. D. Winslett, 4902 Eastside St., $15,000.

Wash., Bellingham—Furnishing 520 tons 4-12 in. De Lavaud centrifugally c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., Colman Bldg., Seattle, $29,904. Noted Nov. 1.

Sewers

PROPOSED WORK

Conn., Manchester — Selectmen appropriated $50,000 for storm water sewers.

N. Y., Albany — Takes bids in January 2,200 ft. sewer in Russell Rd. to drain area near 17th Ward School, $50,000; 3,000 ft. sewer in Manning Blvd., $65,000. J. G. Brennan, City Hall, engr.

N. Y., Rensselaer—Takes bids Jan. 5, 4,000 ft. sewer in Forbes Ave. east from 9th St. $42,000. A. J. Kaufman, City Hall, engr.

Fla., Fort Myers—Dec. 28 to vote on $75,000 bonds for sanitary sewers and $70,000 for storm sewers.

Tenn., McKenzie—Soon takes bids general sewerage system. $86,000 bonds sold. H. C. Bryant, city clk.

O., Kenmore—R. E. Garvin, engr., Davis & Farley Bldg., Cleveland, submitted preliminary report for disposal plant, here. $300,000. Noted Oct. 4.

Wis., Oshkosh—Making plans vitr. clay sanitary sewers in Jefferson, Sawyer, 9th and Osborn Aves., Beach, Cedar, Maple, Arizona, Michigan and Walter Sts., also miscellaneous cross sewers. $25,000. G. Randall, City Hall, engr.

Minn., Rochester—Defeated $300,000 bond issue for sewage disposal plant. Rubling, Holdsworth & Hudson, Rochester, engrs. Noted Nov. 2, 1922.

Kan., Salina—Election about Feb. 1 to vote on $225,000 bonds for disposal plant. C. A. Haskins, 517 Finance Bldg., Kansas City, Mo., engrs.

Neb., Kearney—Election in January to vote on $165,000 bonds for storm sewers. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

Mo., Norborne—See "Waterworks."

Mo., St. James—See "Waterworks."

Calif., Elsinore—Election soon to vote on $28,000 bonds sewer improvements. Burns & McDonnell Eng. Co., 415 Marsh-Strong Bldg., Los Angeles, engrs.

Ont., Windsor—Plans extending sewers. $50,000.

BIDS DESIRED

Mass., Boston — Dec. 20, at office of Metropolitan Dist. Comn., 1 Ashburton Pl., constructing Sect. 72, New Mystic Sewer, North Metropolitan System, in Winchester and Woburn, 2,362 lin.ft. earth excav. and refilling in trench for 30 x 31 in. concrete sewer, 1,114 lin.ft. earth excav. and refilling in trench and laying pipe for 20 in. Akron pipe sewer, 40 cu.yd. brick masonry in manholes and special structures, portland cement mortar, etc. G. L. Rogers, secy.

N. Y., Buffalo—Dec. 27, by Commissioner Pub. Wks., Municipal Bldg., 4,700 ft. 10-24 in. tile sewers in Taunton Pl., Brunswick Blvd., Houston St., Elmwood and Roland Aves. $25,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Long Island City—Dec. 22, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., reconstructing outlet sewer in lines of 43rd and 51st Sts. and in Flushing Bay, etc.

N. J., Long Branch—Jan. 2, by Bd. City Comrs. sewerage system together with pumping station. J. W. Seaman, city engr.; adv. E. N.-R. Dec. 20.

Md., Baltimore—Dec. 26, by Bd. Awards 4,200 ft. of 8-27 in. sanitary sewers, Dist. 24-B Trunk Sewer, Sanitary Contr. 208, $85,000; 6,400 ft. 8-48 in. sanitary and storm drains in Dist. 50 and G-11, Storm Water Contr. 63, $70,000. B. L. Crozier, highways engr.

O., Columbus—See "Waterworks."

Minn., St. Paul—Dec. 26, by H. W. Austin, city purchasing agt., sewer junction between old and new sewer tunnels and lining 500 ft. new tunnel. $35,000. G. M. Shepherd, city engr.

Mo., Farmington—Dec. 20, by S. F. Iseman, city clk., City Hall, 62,862 lin.ft. 8-15 in. vitr. clay, and 360 lin.ft. 8-15 in. c.i. sewers, disposal plants, 63,567 lin.ft. 0-24 ft. trench and backfill, etc. $85,000. C. A. Haskins, 517 Finance Bldg., Kansas City, engr. Noted Nov. 15.

Sewers (Continued)

Mo., Maplewood (St. Louis P. O.)—Dec. 26, by G. D. Komar, city clk., City Hall, 9,800 ft. 8-36 in. vitr. clay and 200 ft. 42 in. segmental block sewer in Laclede Rd. Dist. Sewer 1. $90,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

Calif., Los Angeles—Bd. Pub. Wks. taking bids Sect. 4 north outfall sewer, 11,487 lin.ft. monolithic concrete sewer, 10 ft. high, 12 ft. wide, laid in open trench, 15 in. walls, vitr. clay block lining. Former bids rejected. Noted Dec. 13.

Calif., Newport Beach—Dec. 24, by City Council, cement concrete sanitary sewers, flush tanks, pumping stations, septic tank on Balboa Island, Municipal Impvt. Dist. No. 3. To exceed $100,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., Torrance—M. C. Halsey, engr., 661 Pacific Electric Bldg., Los Angeles, receiving bids 1,200 ft. 24 in., 1,200 ft. 8 in. and 1,200 ft. 6 in. vitr. or cement sewer pipe, here, for Pacific Electric Ry. Co., Pacific Electric Bldg., Los Angeles.

BIDS RECEIVED

O., Cincinnati—For 400 ft. vitr. and 2,700 ft. 33-45 in. concrete sewer in Marburg Ave., from M. J. Connelly, 326 West Oak St., Ludlow, Ky., $43,000. Engrs. est. $55,850. Noted Nov. 8.

Tex., Houston—Storm sewers in Southmore Addition, 1,603 ft. 96 in. monolithic concrete pipe, 15,078 ft. 15-90 in. (a) bitulithic pipe (b) concrete pipe, from C. K. Horton, Box 1025, Houston, (a) $211,912 (b) $209,837. Engrs. est. $300,000.

CONTRACTS AWARDED

Md., Baltimore—Sewers and drains in Sanitary Contr. 207, 13,500 ft. 6-48 in., to Adams & Marino Co., 216 St. Paul St., $59,236. Noted Dec. 13.

Ga., Columbus — Cook Branch Relief Sewer, to Columbus Constr. Co., Columbus, $37,464.

Ill., Chicago—Chicago Sanitary Dist., 910 South Michigan Ave., for Calumet Intercepting Sewer Contr. 1, and 95th St. Pumping Station, Divisions A, B, C, D, E, F, and G, to T. J. Forschner Contg. Co., 125th St. and Michigan Ave. Noted 29.

Mo., Greenfield—General contracts improvements to sewers and waterworks, to C. J. McCoy Constr. Co., Emporia, Kan., $39,000 and $6,000 respectively; deep well, to W. M. Edwards Co., Carthage, $3,360; deep well pump and motor, to United Iron Wks., 14th and Joplin Sts., Joplin, $2,250; centrifugal pumps and motors, to Fairbanks-Morse Co., 217 South 8th St., St. Louis, $1,104. Noted Dec. 6.

Calif., Hollister—Sewage disposal plant, using concrete pipe exclusive of screens and appurtenances, to Butte Electric Equipment Co., 530 Folsom St., San Francisco, $32,913. Noted Nov. 22.

Calif., Oakland—For 15,088 lin.ft. 8 in. vitr. sewer in Laurel St. between Maple and Midvale Sts., to S. De Guarda, 1276 47th Ave., $34,500.

Bridges

PROPOSED WORK

Mass., Wilbraham — State Hy. Comn., Boston, rejected bids Nov. 20, 1 span plate girder, here. To exceed $80,000. Will readvertise after Jan. 1. W. F. Williams, state highway comr. Noted Nov. 22.

Pa., Media—Delaware Co. having plans prepared 65 ft. rein.-con. plate girder, Old York Rd. $50,000. R. J. Aydelotte, Media, engr.

West Virginia—See "Streets and Roads."

N. C., Wilmington — New Hanover Co. plans bridge 125 ft. high over Cape Fear River, to connect Wilmington with Eagle Island. $1,000,000. A. Hewlett, chn.

Fla., Palatka—Special Road and Bridge Dist. No. 7 voted $500,000 bond issue for bridge over St. Johns River, here. S. C. Stallings, Palatka, engr. Noted Dec. 6.

Kentucky — State Hy. Dept., Nashville, plans 200 ft. steel bridge, two 100 ft. spans on Jackson Rd. over Kentucky River 4 mi. west of Hazard, State Project 4, Sect. B, Perry Co.; 260 ft. steel, two 100 ft. spans on Jackson Rd. over Kentucky River 2 mi. west of Hazard, State Project 4, Sect. B, Perry Co.; 280 ft. steel and concrete, two 100 ft. steel and two 40 ft. concrete spans, State Project 4, Sect. C, Perry Co.; 380 ft. steel and concrete, three 100 ft. steel, two 40 ft. concrete spans on Whitesburg Rd. over Kentucky River, 4 mi. east of Hazard, State Project 4, Sect. C, Perry Co. Substructures will be of concrete or cement rubble masonry. J. S. Boggs, state highway engr.

Ohio—See "Streets and Roads."

Wisconsin—Following are county appropriations for county aid bridge work. Adams $3,000; Ashland $5,000; Barron $18,355; Bayfield $18,000; Brown $38,600; Buffalo $35,498; Burnett $6,000; Calumet $22,500; Chippewa $36,653; Clark $18,807; Columbia $1,454; Crawford $31,806; Dane $20,000; Dodge $8,075; Douglas $5,525; Dunn $9,470; Florence $6,000; Fond du Lac $10,000; Grant $62,019; Green Lake $456; Iron $5,500; Jackson $9,712; Jefferson $6,002; Kenosha $1,500; Kewaunee $4,461; Lafayette $15,000; Langlade $4,108; Lincoln $6,400; Manitowoc $10,700; Marathon $38,063; Marinette $9,790; Monroe $50,138; Oconto $31,080; Ozaukee $1,500; Pepin $15,000; Pierce $13,269; Polk $2,000; Portage $3,211; Racine $1,200; Richland $34,852; Rusk $10,000; Sauk $3,995; Shawano $34,413; Sheboygan $17,501; Taylor $25,643; Trempealeau $16,177; Vernon $12,078; Waupaca $5,000; Waushara $5,221; Winnebago $10,300; Wood $62,765.

Wis., Reedsburg — Sauk Co. (Baraboo) appropriated $30,000 steel and rein.-con. bridge over Baraboo River, here. W. Halbersleben, Baraboo, co. comr. Engineer not selected.

Minn., St. Paul—See "Streets and Roads."

Tex., Ballinger—See "Streets and Roads."

Tex., Brady—See "Streets and Roads."

Tex., Houston—Takes bids about Jan. 1, for 80 ft. concrete deck girder bridge over Buffalo Bayou on Smith St. $80,000. J. C. McVea, city engr.

Tex., Leakey—See "Streets and Roads."

Okla., Arnett—Ellis Co. defeated $180,000 bond issue for bridges. Noted Dec. 6.

Okla., El Reno—Canadian Co. had plans prepared 3 span steel truss bridge and approaches, 480 ft. long 2 pneumatic piers, 16,000 cu.yd. earth approach and fill. $80,000. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Wash., Aberdeen — Making plans and takes bids about Feb. 25, bridges, one over Chehalis River, other over Wishkah River, $200,000 each. Bond voted. E. G. Hunt, city engr. Noted Nov. 22.

Wash., Hoquiam—Preparing plans bridge across Hoquiam River on Simpson Ave. $250,000 bonds voted. F. C. Black, city engr.

Ont., Pembroke—City Council soon takes bids steel bridge over Muskrat River on St. Marys St. $75,000.

BIDS DESIRED

N. Y., Buffalo—Dec. 26 by Commissioner Pub. Wks., Municipal Bldg., reconstructing, renewing and protecting following viaducts, on Elk St., one over New York, Chicago & St. Louis R.R. and one over Erie R.R. tracks; on Van Rensselaer St. over Erie R.R. tracks; on Fulton St. over Lake Shore & Michigan Southern R.R. tracks. To exceed $75,000. C. E. P. Babcock, city engr.

Tenn., Nashville—Br. Pub. Wks., City Hall, taking bids repairing and strengthening steel and concrete bridges over Cumberland River on Sparkman and Jefferson Sts. $300,000. Freeland, Roberts & Co., Independent Life Bldg., consult. engrs. Noted Sept. 27.

Mo., North Kansas City — See "Streets and Roads."

Wash., Seattle—Jan. 11, by Bd. Pub. Wks., concrete viaduct and retaining wall, West Spokane St. J. D. Blackwell, city engr.; adv. E. N.-R. Dec. 20.

BIDS RECEIVED

Kentucky—State Hy. Dept., Frankfort, 540 ft. steel superstructure, two 150 ft. and one 240 ft. spans, over Kentucky River, on Lexington-Danville Rd., State Project 25, Sect. A, Garrard and Boyle Counties, from Kentucky Hydro Electric Co., Danville, $44,250; cement rubble masonry substructure, from L. E. Myers, 53 West Jackson St., Chicago, $31,321.

Ohio—See "Streets and Roads."

Tex., Cleburne—Johnson Co., 360 ft. concrete girder bridge over Buffalo Creek, near here, twelve 30 ft. spans, from McClung Constr. Co., Cleburne, $21,047. Noted Nov. 22.

Tex., Palestine—See "Streets and Roads."

CONTRACTS AWARDED

Pa., Salisbury Junction (Meyersdale P. O.)—Baltimore & Ohio R.R., Maloney Bldg., Pittsburgh, grade crossing elimination bridge, double track through plate girder span 54 ft. long encased in concrete, near here, to Kelly Atkinson Constr. Co., 189 West Madison Ave., Chicago, Engrs. est. $100,000.

Kentucky — State Hy. Dept., Frankfort, 540 ft. steel superstructure, one 240 ft. and two 150 ft. spans, cement rubble masonry substructure, over Dix River, on Nicholasville-Danville Rd., Garrard and Boyle Counties, to F. K. Keller Co., Chicago, $79,634.

South Dakota—State Hy. Dept., Pierre, approach to north end of bridge over Missouri River, 553 lin.ft. long, 130,000 lb. structural steel, 61,100 lb. reinforcing steel 350 sq.yd. asphalt surfacing, to Meridian Highway Bridge Co., Yarkton, $35,673. Noted Oct. 18.

Tex., Beaumont — Jefferson Co. bridge over Neches River, Project 328, to A. C. MacFarlane, Orange, $316,613. Noted Nov. 8.

Dams

PROPOSED WORK

Okla., Stillwater—See "Waterworks."

Calif., Merced—Merced Irrigation Dist., rejected bids for Exchequer Dam. Will readvertise for gravity section arch type dam. Starr-Thebo-Anderton, Sharon Bldg., San Francisco, consult. engrs. Noted Nov. 22.

Calif., Willits — Central Mendocino Co. Power Co. plans Dutch Flat Dam and electric transmission lines from dam to Willits, and from Willits to Potter Valley. $70,000. Noted Mar. 29.

CONTRACTS AWARDED

Md., Frederick—City, earth dam on Fishing Creek, to Consolidated Eng. Co., Calvert Bldg., Baltimore, $165,208. Noted Dec. 6.

Railways

PROPOSED WORK

Texas — Houston, East & West Texas R.R., subsidiary Southern Pacific Ry., Southern Pacific Station, Houston, had plans prepared reballasting tracks from Nacogdoches to Bonita Junction. $75,000. L. Webb, Nacogdoches, engr.

BIDS DESIRED

Missouri—See "Streets and Roads under North Kansas City."

Oregon—Eng. Dept. of Southern Pacific Co., 65 Market St., San Francisco, Calif., receiving bids 25 mi. road from Klamath Falls to Eugene, (portion Natron Cut Off), also 7 mi. section over Cascade Mts., incl. very heavy grading, also tunnel to cost between $2,000,000 and $3,000,000. G. W. Boschke, ch. engr.

BIDS RECEIVED

California—Municipal Railway System of Eureka, furnishing 460 tons 70 lb. rails, from Rolph-Mills Co., 149 California St., San Francisco, $52.50 per ton; 325 tons high T rails, also joint plates, from U. S. Steel Products Co., Rialto Bldg., San Francisco, $59.43 per ton and $4.42 per hundred weight respectively.

Excavation, Drainage, Irrigation

PROPOSED WORK

Wis., Turtle Lake—Barron Co. Drainage Bd., having plans completed for system to drain 1,200 acres, incl. 4 mi. open ditching. $25,000. O. G. Holway, c/o Court House. Chippewa Falls, engr.

Wis., Verona—Dane Co. Farm Drain Bd. plans about 5 mi. tile and open ditch drainage in D.D. 12, about 2,500 acres $30,000. N. Holman, 508 West Washington Ave., Madison, secy. Engineer not selected.

Calif., Blythe—Palo Verde D. D. rejected bids Nov. 24, constructing West Side Drain. Noted Dec. 13.

Calif., Merced—Merced Irrigation Dist. to vote on $3,500,000 bonds for completion of irrigation works.

BIDS DESIRED

N. Y., Brooklyn — Dec. 29, by J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York, dredging at Bay Ridge Ave., Contr. 1824, also at 52nd St. pier, Contr. 1823, here.

N. Y., New York — Dec. 28, by J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., dredging slip, west side, Pier 4, East River, Contr. 1825.

N. Y., Rochester—Jan. 17, by R. K. Fuller, comr. Canals & Waterways, Albany, completing excavation of canal channel in Genesee River and placing rock spoil protection along river banks, here, Contr. 214; adv. E. N.-R. Dec. 20.

Ky., Greenville—Drainage Comn. Muhlenburg Co. taking bids and opens same about Dec. 24, drainage ditch, 130,000 cu.yd. excav., to exceed $25,000.

Calif., Modesto—Dec. 28, by C. S. Abbott, secy. Modesto Irrigation Dist., drilling wells, constructing drainage pumping plants as follows: 12 installations, each comprising well, motor driven deep-well turbine pump, motor started and sheet metal pumphouse.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Dec. 13, dredging 15,000 cu.yd. scow measurement in Gowanus Canal and 20,000 cu.yd. in Wallabout Canal, from W. E. Potter, $14,535 and $15,980 respec-

Excavation, Drainage, Irrigation (Continued)

tively; 40,000 cu.yd. in Newtown Creek, from J. McSpirit, $25,600; 40,000 cu.yd. foot of 64th St., from Columbia Dredging Corp., 30 Church St., New York, $11,160. Noted Dec. 6.

CONTRACTS AWARDED

Calif., Blythe—Palo Verde D. D., 100,000 cu.yd. earthwork at Ehrenberg cut, Riverside Co., to C. Thompson, Loew State Bldg., Los Angeles, $0.18 and $0.20 per cu.yd.

Streets and Roads

PROPOSED WORK

Connecticut—State Highway Dept., Hartford, made appropriations for State Aid roads in following counties: Middlesex, $98,244; Fairfield, $71,250; New London, $118,375; Litchfield, $127,569; Hartford, $167,500; Windham, $177,000. J. A. Macdonald, comr.

N. Y., Albany—Making plans and takes bids in January relaying pavement on 1.2 mi. Morton Ave., 72 ft., redressed granite blocks on concrete. $100,000. J. J. Brennan, city engr.

N. Y., Watervliet — Had plans prepared and takes bids after Jan. 1, filling, grading and asphalt and concrete paving 4.2 mi. Erie Blvd., 165,000 cu.yd. fill. $260,000. H. E. Gabriels, city engr.

N. J., Trenton—Mercer Co. plans reconstructing about 4 mi. road from Robbinsville to Yardville, concrete. H. F. Harris, Court House, engr. Noted Oct. 4.

Pa., Allentown—Plans to resurface and repair 1½ mi. North 7th, North 12th and Madison Sts. $45,000, also paving 3 mi. Union, Maxwell, South 17th, South 16th, Fulton, Fairview, South Penn, Allen, Lawrence, Linden, Union, Jordon and Washington Sts. $138,000. H. F. Bascom, City Bldg., engr.

West Virginia—State Rd. Comn., Charleston, rejected bids 25 highway projects and 17 bridges. $3,500,000. E. B. Carskadon, secy. Noted Nov. 29.

W. Va., Moundsville—Washington Dist. Marshall Co. voted $50,000 bond issue for roads. A. Purdy, Moundsville, co. engr. Noted Nov. 15.

N. C., Bridgeton—Voted $212,000 bonds sidewalks and street improvements.

N. C., Greensboro—Sold $501,250 bonds street paving. P. C. Painter, city mgr.

N. C., Raleigh — Plans to sell $750,000 bonds paving various streets. Additional issue may be authorized later. C. C. Page, comr. Pub. Wks.

Fla., Fort Myers — Dec. 28 to vote on $90,000 bond issue for paving various streets. F. E Smith, clk.

Kentucky — State Hy. Dept., Frankfort, plans improving various roads **(F.A.P. means Federal Aid Project, S. P. means State Project)** grading and surfacing with rock asphalt or rein.-con. 11 mi. Williamstown-Georgetown Rd., 18 ft., F.A.P. 115, Scott Co., 10.76 mi. Williamstown-Georgetown Rd., 18 ft., F.A.P. 114, Grant Co.; surfacing with gravel, waterbound macadam or waterbound surface treating 12.7 mi. Glasgow-Burksville Rd. from Ferris Creek to Burksville, 16 ft., S.P. 40 Sect. B, Cumberland Co.; grading 2.2. mi. Glasgow-Burksville Rd. from Metcalf Co. line to Ferris Creek, 24 and 28 ft., S.P. 40, Sect. A, Cumberland Co., 11.4 mi. Glasgow-Burksville Rd. from Glasgow to Metcalf Co. line, 24 and 28 ft., S.P. 40 Sect. A, Barren Co., 12 mi. Glasgow-Burksville Rd. from Barren Co. line to Cumberland Co. line, 24 and 28 ft., S.P. 40, Sect. A, Metcalf Co. J. S. Boggs, state highway engr.

Ky., Louisville—Plans surfacing 1 mi. Hill Top Rd. in Iroquois Park, 25 ft. $50,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened Dec. 11, grading, bridging and paving 4.181 mi. roads in Columbiana, Cuyahoga and Pickaway Counties. Noted Dec. 6.

O., Lisbon — Columbiana Co. plans improving 2 mi. Wellsville-Salineville Rd., 20 ft., $75,000-$100,000; 2 mi. McQueens Run Rd., 20 ft., $75,000, both brick. Will mature in spring. L. C. Kirk, Court House, engr.

O., Massillon—Plans improving 1.25 mi. Green and South High Sts., $110,000, also ½ to ¾ mi. Commonwealth Ave., $45,000, all 40 ft. wide. Will mature in spring. C. E Rice, City Bldg., engr.

O., Warren — Plans to widen High St. from 34 to 60 ft. $74,000. Will mature in spring.

Wisconsin—Following are county appropriations for road construction during 1924. Eau Claire Co. $120,946, G. Osborne, Eau Claire, comr.; Dodge Co. $1,212,875, concrete and gravel, E. T. Klug, Juneau, comr.; Langlade Co. $132,689, C. Olsen, Antigo, comr.; Dane Co. $545,444, J. R. Caldwell, Madison, comr.; Buffalo Co. $173,581, J. Reinhardt, Nelson, comr.

Wisconsin—Following are county appropriations for road construction during 1924: Kewaunee Co. $121,881, H. Griese, Algoma, comr.; Iron Co. $59,794, W. Weber, Saxon, comr.; Jefferson Co. $339,398, R. D. Royce, Ft. Atkinson, comr.; Rusk Co. $63,968, P. Koehler, Ladysmith, comr.; Sheboygan Co. $415,192, G. W. Ubbelohde, Sheboygan, comr.; Portage Co. $312,374, J. T. Henton, Portage, comr.; Ozaukee Co. $374,425, W. J. Ubbink, Port Washington, comr.

Wisconsin—Following are county appropriations for county and state trunk highway maintenance: Adams $7,500; Ashland $22,000; Barron $85,000; Bayfield $7,000; Buffalo $35,483; Burnett $4,000; Chippewa $45,000; Clark $23,000; Columbia $82,000; Crawford $20,000; Dane $55,000; Dodge $5,000; Door $30,000; Douglas $50,000; Dunn $32,000; Fond du Lac $20,000; Grant $40,000; Green Lake $8,000; Iowa $20,000; Iron $2,000; Jackson $63,000; Jefferson $17,000; Juneau $15,000; Kewaunee $14,000; Lafayette $30,000; Langlade $25,000; Lincoln Co. $35,000; Manitowoc $40,000; Marathon $20,000; Marinette Co. $8,000; Monroe $43,374; Oconto $30,000; Ozaukee $7,000; Pepin $7,000; Pierce $25,000; Polk $71,504; Portage $10,000; Price $20,000; Racine $15,000; Richland $24,000; Rock $5,000; Rusk $8,000; Sauk $30,000; Shawno $73,000; Sheboygan $75,000; Taylor $25,000; Trempealeau $75,000; Vernon $37,780; Walworth $10,000; Washburn $10,000; Washington $28,000; Waupaca $30,000; Waushara $2,000; Winnebago $50,000; Wood $15,000.

Wis., Oshkosh — Making plans paving (probably concrete, asphalt and brick), Sawyer Ave., Parkway, East Oak, Congress, Ohio, 5th and Pearl Sts., $25,368; Merritt St., $5,320, street railways share additional $2,317; New York Ave., $3,533, street railway share $3,307. G. Randall, City Hall, engr.

Ia., Indianola—Plans to pave about 22 blocks during 1924. E. M. Wilson, clk.

Ia., Manchester—Takes bids in January for about $60,000 sq.yd. pavement, various types to exceed $100,000. H. R. Green, Cedar Rapids Savings Bank Bldg., Cedar Rapids, engrs. Noted Nov. 1.

Ia., Oelwein—Plans to pave approximately 50 blocks during 1924. E. B. Tourtellot, city engr.

Minn., Faribault—F. M. Kaisersatt, aud. Rice Co. takes bids about April gravel surfacing. $80,000. J. C. McElherne, engr.

Minn., Moorhead—Clay Co. voted $250,000 bonds for highways. E. Martinson, Moorhead, engr.

Minn., St. Paul—Ramsey Co. will issue $2,000,000 bonds for road and bridge construction during 1924. G. J. Ries, co. aud.

Kan., Oskaloosa—Jefferson Co. making plans surfacing 14.25 mi. Oskaloosa-Nortonville Rd., concrete, 18 ft.; 12.4 mi. Golden Belt Highway, gravel. Kansas Eng. Co., 1233 Western Ave., Topeka, engrs.

Kan., Wichita—Plans paving 11 blocks, 26-36 ft. wide. $65,000. P. L. Brockway, City Bldg., engr.

South Dakota—State Hy. Dept., Pierre, plans to grade 10 mi. Federal Aid Project 161 Hanson Co., $31,240, 19.7 mi. Federal Aid Project 164, Brookings and Moody Counties, $65,615, 11.1 mi. Federal Aid Project 166, McCook Co., $35,103. F. D. Hudgins, ch. engr.

Wyoming — State Hy. Dept., Cheyenne, plans surfacing 43.637 mi. Federal Aid Project Rev. 64, Carborn Co., $115,500. Government pays $74,671.

Missouri—State Hy. Dept., Jefferson City, rejected bids Nov. 27, grading 2.483 mi. State Project Route 7, Sect. 83, Texas Co., and gravel surfacing 4.916 mi. State Project Route 21, Sect. 4A, Washington Co. Noted Dec. 6.

Mo., Maplewood (St. Louis P. O.)—Plans grading, curbing, guttering and paving 9,725 sq.yd. Edgar, St. Elmo, Kensington and Sussex Aves., 7 in. rein.-con. $35,000-$37,500. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr.

Mo., St. Louis—Plans widening and opening 6 blocks 14th St. $375,000. W. W. Horner, City Hall, engr.

Tex., Amarillo—Potter Co. had plans prepared and takes bids about Jan. 10, gravel surfacing 6.1 mi. highway between here and St. Frances, 16 ft. $75,000. O. A. Seward, co. engr.

Tex., Anson—Jones Co. election Dec. 22 to vote on $25,000 bonds grading, etc. in Rd. Dist. 4. J. F. Lindsey, co. judge.

Tex., Ballinger—Runnels Co. making plans grading and constructing steel and concrete bridges 9.36 mi. State Highway 30, 18 ft. $67,000. J. E. Pirie, co. engr.

Tex., Brady—McCulloch Co. making plans and soon takes bids grading, gravel surfacing and bridging 4.74 mi. State Highway 9, 16 ft. $45,000. E. A. Burrows, co. engr.

Tex., Brownsville—Cameron Co. election Dec. 22 to vote on $660,000 bonds grading and concrete paving 25 mi. Brownsville-Barrida-Point Isabel Highway and county road, 18 ft. W. O. Washington, co. engr.

Tex., Daingerfield — Morris Co. plans grading and gravel surfacing 5 mi. State Highway 35, 16 ft. $30,000. J. Douglas, co. engr.

Tex., Dallas — Plans prepared widening (from 30 to 80 ft.) and paving 200 ft. Lamar St. from Elm to Pacific Sts. $210,756. E. A. Kingsley, city engr.

Tex., Ft. Worth—Beacon Hill Land Co., c/o Baker & Von Zuben, engrs., Ellison Bldg., making plans Beacon Hill Subdivision, 154 acre tract, incl. paving, etc. $75,000.

Tex., Georgetown—Williamson Co. voted $300,000 bonds grading, gravel surfacing and bridging in Taylor Rd. Dist. 91. R. A. Nichols, co. engr. Noted Nov. 8.

Tex., Kerrville—Kerr Co. making plans grading, surfacing, gravel base and asphalt top 4.14 mi. and surfacing 1.82 mi. already graded and graveled with 4 in. crushed rock and asphalt top, State Highway 41, 18 ft. $65,000. W. E. Simpson Co., 414 Natl. Bank of Commerce Bldg., San Antonio, engrs.

Tex., Lamesa—City voted $60,000 bonds brick paving Public Sq., etc. Elrod Eng. Co., 3206 Elm St., Dallas, engrs. Noted Nov. 15.

Tex., Leakey—Real Co. making plans and takes bids about Feb. 1, grading and bridging 18 mi. Kerrville-Rock Springs Rd., 16 ft. $90,000. W. E. Simpson Co., 414 N. B. C. Bldg., San Antonio, engrs.

Tex., Menard—Menard Co. making plans grading, etc., 15 mi. State Highway 23, Junction Menard Rd., 16 ft. $75,000. Will gravel surface road at later date, $40,000. M. L. Grady, engr., c/o J. W. Mathews, co. judge.

Tex., Memphis—Hall Co. making plans grading and concrete surfacing 5 mi. State Highway 5, 18 ft. $200,000 bonds recently voted. Hasie & Preston, co. engrs. Noted Dec. 13.

Tex., Pecos—Reeves Co. had plans prepared and soon takes bids gravel surfacing 13.3 mi. State Highway 1, 16 ft. $100,000. S. S. Posey, Box 565, co. engr.

Tex., Rockdale — Milam Co. will start taking bids Jan 9, highway improvements incl. 11.4 mi. surfaced highway from West Bank Brazos River to Gause beat line, 16 ft. $175,000. A. F. Mitchell, Cameron, engr.

Tex., Uvalde—Uvalde Co. making plans grading and surfacing, gravel base and bituminous topping 5.9 mi. State Highway 3, 18 ft. $90,000. M. B. Hodges, co. engr.

Okla., Fairfax—Surveys being made grading and vertical fibre brick paving 11 blocks 5th, Elm, Mulberry and Locust Sts., 26 ft. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Holdenville—Preparing plans concrete paving 42 blocks. $130,000. C. Edge, Holdenville, engr.

Okla., Norman—Plans grading and paving 7 blocks Monett, North University and Flood Sts., 8,000 sq.yd. concrete, 4,750 lin. ft. curbing, 3,200 cu.yd. excav. $38,000. F. Cobb, Norman, engr.

Okla., Oklahoma City—Plans grading and paving 11 blocks Blackwelder, Deuland, Mckinley Sts. and alleys, 2,700 sq.yd. asphalt, 3,000 sq.yd. concrete, 1,800 lin.ft. curbing, 2,250 cu.yd. excav. $30,000; 11 blocks Classen Blvd. from 22nd to 32nd Sts., 14,000 sq.yd. asphalt, $28,000; 8 blocks 7th, D, Shartel and 12th Sts., 6,100 sq.yd. asphalt, 5,100 lin.ft. curbing, 2,400 cu.yd. excav., $31,500; 19 blocks Klein, Western and Pottawatomie Sts., 7,700 sq.yd. asphalt, 7,800 lin.ft. curbing, 3,100 cu.yd. excav. $39,000. B. M. Hart, City Hall, engr.

Okla., Pauls Valley—Garvin Co. election Jan. 4, to vote on $750,000 bonds grading and paving 25 mi. highways, 275,000 cu.yd. concrete. P. A. Little, Chickasha, engr. Noted Nov. 29.

Okla., Sapulpa—Creek Co. election Jan. 4, to vote on $700,000 bonds paving 35 mi. Ozark Trail and other roads, 350,000 sq.yd. concrete, 300,000 cu.yd. excav. C. K. Howard, Sapulpa, engr.

Idaho — State Hy. Dept., Boise, plans gravel surfacing 4.2 mi. Federal Aid Project 77, Boundary Co., $49,998. Government pays $28,999.

Calif., Colusa—Colusa Co. having surveys made paving 4.5 mi. from Mills Orchard along Maxwell-Sites Rd. to Stiles, $35,000 or more, ½ mi. from Colusa drawbridge to Colusa Butte Rd., $5.500, 4.5 mi. from Maxwell along Maxwell-Sites Rd. to Mills Orchard, $50,000 or more, 3.5 mi. from Prize Bridge along Grimes-Arbuckle Rd. to Prize store and along Grimes College City Rd., $35,000 or more, Grimes to Prize Bridge Highway on Grimes-Arbuckle Rd., $120,000 or more, 6 mi. road from Colusa Drawbridge to Butte Creek School, to exceed $65,000; paving with concrete 7.6 mi. Grimes to intersection of Grimes-Colusa and Colusa Meridian Rd., to exceed $120,000, 14 mi. Princeton to Colusa Co. Highway unit to exceed

Streets and Roads (Continued)

$200,000; gravel 22 mi. road from Sites along Sites Stonyford Rd. to Stonyford $45,000, 7.25 mi. from intersection of Stovall-Wilcoxen Rd. with Williams Venada Rd. to Dora Riester ranch, $13,500, 4.5 mi. from Sect. 18, Twp. 15 to Central School, $9,000, 4.5 mi. from Williams-Venada Rd. to Sect. 11, Twp. 15, $9,000. J. M. Felknor, co. engr.

Calif., Fairfield—Solano Co. having surveys made Sears Point Highway. $150,000. F. A. Steiger, co. surv.

Calif., Hillsborough—City to vote on $30,000 bond issue for paving various streets with concrete and macadam. W. C. Hammatt, Hearst Bldg., San Francisco, consult. engr.

Calif., Salinas — City plans improving Main, Market and Monterey Sts., 166,300 sq.ft. grading, 500 tons base rock, 1,225 tons asphaltic concrete binder course, 165,980 sq.ft. Warrenite bitulithic surface, etc. To exceed $30,000. H. Cozzens, city engr.

Calif., Santa Paula—Ventura Co. (Ventura), plans improving Willow St. and Willard Ave., here, 58,144 sq.ft. asphaltic macadam pavement, etc.

BIDS DESIRED

N. Y., Brooklyn—Dec. 27, by E. Riegelmann, boro pres., Boro Hall, paving Carroll St., permanent asphalt on 6 in. concrete; grading Flatbush Ave.; grading, curbing, flagging where necessary and paving Ocean View Ave., second-hand granite on sand; curbing where necessary and paving Ave. D, 7 in. preliminary concrete.

N. Y., Brooklyn—Dec. 28, by E. Riegelmann, boro pres., Boro Hall, repaving Liberty Ave., permanent asphalt on 6 in. concrete.

N. Y., New York—Dec. 27, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, etc., for width of 60 ft. centrally located Neill Ave. from Bronxdale to Matthews Aves., for its full width from Matthews to Paulding Aves.

N. Y., New York—Dec. 27, by J. Miller, pres. Manhattan Boro, Municipal Bldg., widening and repaving widened portion 57th St., sheet asphalt on concrete.

Louisiana—Jan. 3, by State Hy. Comn., Reymond Bldg., Baton Rouge, 5.94 mi. Federal Aid Project 143, Beggs-Palmetto Highway, St. Landry Parish, also furnishing 3,982 cu.yd. washed gravel and 40% sand clay, gravel or alternate. J. M. Fourny, ch. engr.

La., New Orleans—Dec. 30, by Bd. Port Comrs., New Court House Bldg., concrete floor slab grading and paving at Claiborne Ave. landing. J. H. Walsh, genl. mgr.

Indiana—Jan. 2, by J. D. Williams, dir. State Hy. Comn., Indianapolis, paving with brick, bituminous concrete and concrete 6.032 mi. Louisville Rd., Federal Aid 21, Sect. B, Clark Co.; 5.812 mi. Dixie Bee Line, Federal Aid 65, Sect. B. Gibson Co.; 8.088 mi. Sect. A and 8.779 mi. Sect. B, Middlebury-Lagrange Rd., Federal Aid 67, Lagrange and Elkhart Counties; 7.736 mi. Sect. A, 5.743 mi. Sect. B, 8.639 mi. Sect. C and 8.095 mi. Sect. D, Lafayette Pike, Federal Aid 74, Boone, Clinton and Tippecanoe Counties; grading and structures under 20 ft. span on 6.894 mi. Sect. A, 9.698 mi. Sect. B and 8.176 mi. Sect. C. Lyford-Veedersburg Rd., Federal Aid 68, Parke Co.

Ind., Monticello—Jan. 8, by White Co., improving 10,575 ft. Augustus U. Lux et al Rd., Princeton Twp. $63,388. F. E. Vinson, aud.

Ia., Newton—Dec. 27, by Auditor Jasper Co., grading 2.56 mi. Federal Aid Project 64, Sect. E, 57,365 cu.yd. earth excav., 28,362 cu.yd. channel change, etc. Iowa Hy. Comn., Ames, engrs.

Ia., Waterloo—Dec. 26, by Auditor Black Hawk Co., grading and gravel surfacing 11.136 mi. primary road south and southwest of here, 74,372 cu.yd. excav., 17,372 cu.yd. gravel, 71,633 ft. tile drain, etc. Iowa Hy. Comn., Ames, engrs.

Kan., Fort Scott—Dec. 24, by C. Luffel, city clk., excavating and paving with asphalt, brick or asphaltic concrete 19 blocks, 6th St. from Margaret to Short Sts. R. Toles, engr. Noted Nov. 22.

Mo., North Kansas City—Jan. 3, by M. H. Raming, purch. agt., City Hall, Kansas City, grading for railroad siding about ¾ mi. long, relocated electric railroad and highway about ⅜ mi. long incl. 16 ft. span rein.-con. highway bridge, 18 ft., north of here. Fuller & Maitland, 600 Walnut St., Kansas City, and Fuller & McClintock, 170 Bway., New York City, engrs.; adv. E. N.-R. Dec. 20.

Tex., Houston—City Com. taking bids gravel surfacing Freeman, Allston, and Cortland Sts., etc. $75,000. J. C. McVea, city engr.

Tex., San Angelo—Jan. 10, by G. Gilchrist, engr. Tom Green Co., bituminous macadam surfacing 9.73 mi. highway from here to Carlsbad, 16 ft. $106,500.

Nevada — Jan. 2, by Directors Dept. Highways, Carson City, improving 17.59 mi. road from Mormon Mesa to Nevada-Arizona State line, Route 6, Sect. H, Clark Co., 222,000 cu.yd. excav., 11,200 cu.yd. loading and screening, 29,400 yd. mi. hauling and 11,200 cu.yd. spreading gravel, 190 cu.yd. Class A and 220 cu.yd. Class B concrete, etc.

Nevada—Jan. 2, by State Hy. Comn., Carson City, improving 5.03 mi. road between Carroll Summit and Campbell Creek Ranch, 58,300 cu.yd. excav., 1,900 cu.yd. load and screen selected material, 2,540 cu. yd. mi. haul selected material, 1,900 cu.yd. spread selected matèrial, etc., 155 cu.yd. Class A concrete. G. W. Borden, state highway engr.

California—Dec. 31, by State Hy. Comn., Sacramento, grading 11.5 mi., surfacing 7.2 with gravel or broken stone, and paving 4.3 mi. with Portland cement, road between Baltane and Schellville, Sonoma Co., 45,000 cu.yd. roadway embankment, 76,800 sta.yd. overhaul, 13,120 cu.yd. crushed gravel or broken stone, preparing and shaping 22,524 lin.ft. subgrade, 10,400 cu.yd. Class A concrete, etc. R. M. Morton, state engr. Noted Nov. 29.

California—Jan. 7, by State Hy. Comn., Sacramento, improving 1.9 mi. road near Galt, Sacramento Co., 4,000 cu.yd. embankment, 9,900 lin.ft. subgrade, 3,980 cu.yd. Class A concrete pavement, 30 cu.yd. Class A concrete in culverts, etc. R. M. Morton, state highway engr.

Calif., Los Angeles—Dec. 31, by Supervs. Los Angeles Co., improving 6,658 lin.ft. Western Ave. between Clark and Rosencrans Aves., 3,272 tons asphaltic concrete top, 26,632 sq.ft. concrete shoulders, 26,632 sq.ft. 3 in. concrete sand cushions, etc.

Calif., Oakland — Dec. 31, by Supervs. Alameda Co., improving roads in Pleasanton and Livermore, 4,200 cu.yd. grading, 134,000 sq.ft. subgrade, 130,000 sq.ft. 5 in. concrete pavement, etc. To exceed $25,000. G. A. Posey, co. surv.

Calif., San Diego — Dec. 31, by A. H. Wright, clk., improving Falcon and Lewis Sts. and Ft. Stockton Dr., 113,394 sq.ft. 1½ in. asphaltic concrete top on 2½ in. bituminous base, etc. F. A. Rhodes, city engr. Noted Nov. 8.

Calif., San Diego — Dec. 31, by H. A. Wright, clk., improving Sutter St., 87,777 sq.ft. paving with 1½ in. asphaltic concrete on 2½ in. bituminous base, etc. F. A. Rhodes, city engr.

Calif., San Francisco — Bd. Pub. Wks. taking bids grading Ocean View Extension of Municipal Ry. System, 64,000 cu.yd. excav. under 400 ft., 188,000 cu.yd. excav. equivalent to 100 ft. overhaul, removing storing and replacing 28,000 sq.yd. top soil, 50 cu.yd. concrete, etc. To exceed $100,000. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

N. Y., Syracuse—Bd. Contr. & Supply, Dec. 10, paving (1) Spring St. (2) Fellows Ave. (3) Clifton Pl. (4) Clairemonte Ave. (5) Westminster Ave. (6) Glenwood Ave. (7) Parkside Ave. (8) Amherst Ave. (9) Roosevelt Ave. with (a) asphalt (b) bituminous concrete, from G. B. Dickison, Union Bldg., (1a) $26,004 (1b) $25,395 (4a) $53,715 (4b) $51,962; J. H Gallup, Union Bldg., (2a) $67,471 (2b) $64,969 (5a) $19,037 (5b) $18,723 (9a) $33,351; Dale Eng. Co., Mann Bldg., Utica, (3a) $14,928 (3b) $14,449 (8b) $15,220 (9b) $32,406; F. J. Baker, University Blk., (6a) $29,285 (6b) $28,575 (7a) $15,223 (7b) $14,967 (8a) $15,483 (8b) $15,220. Noted Nov. 29.

Pennsylvania—State Hy. Dept., Harrisburg, Dec. 11, constructing 18,421 ft. Route 54, Indiana Co., from M. Bennett & Sons, Indiana, $201,988; 4,151 ft. Application 2404, Jefferson Co., from G. I. Thompson Co., Clearfield, $39,710; 16,949 ft. Route 109, Applications 2678 and 2710, Greene Co., from S. Gamble, Glass St., Carnegie, $227,097; 25,693 ft. Route 187, Sect. 4B, Westmoreland Co., from Rood Constr. Co., Butler, $279,850; 14,062 ft. Route 50, Spur A, Applications 2731, 2732 and 2733, Somerset Co., from Owen & Plummer, Inc., Otto Bldg., Johnstown, $150,892; 8,769 ft. Route 61, Application 1736, Jefferson Co., from F. S. Wilson, Kittanning, $87,731; 13,453 ft. Route 187, Sect. 4A, Westmoreland Co., from Corrado & Galiardi, Colonial Natl. Bank Bldg., Connellsville, $146,702; 1,805 ft. Route 180, Chester Twp., Delaware Co., from McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $34,983; 10,530 ft. Route 204, Beaver Co., from W. S. Morrison, New Brighton, $119,816; 7,424 ft. Route 1, Application 2136, Northumberland Co. from Reitz Bros., 822 South Front St., Sunbury, $52,024.

Pa., Waynesburg — Comrs. Greene Co. concrete paving 3,044 ft. Ninervah Rd., 16 ft., from Reed & Moore, Waynesburg, $44,835.

Kentucky—State Hy. Dept., Frankfort, reshaping and surfacing with waterbound macadam 10.7 mi. Georgetown-Cynthianna Rd., State Project 58½, Sect. B, Harrison Co., from B. W. Gorham, Lexington, Ky., $66,794.

Kentucky—State Hy. Dept., Frankfort, grading and gravel surfacing 11 mi. Bardstown-Hodgensville Rd., State Project 3, Sect. B, Larue Co., 18 ft., from Ellis & Smithers, Owensboro, $232,885; grading and surfacing with waterbound macadam 1.689 mi. Nicholasville-Danville Rd., State Project 25, Sect. A, Garrard and Boyle Counties, 16 ft., from Bates-Paynter Co., Danville, $34,396, 1.969 mi. Buffalo-Hardyville Rd., State Project 3, Sect. A, Hart Co., 18 ft., from Tenyman & Hanaley, Hodgensville, $52,147. Surface treating above roads from Atlantic Refining & Asphalt Co., Candler Bldg., Atlanta, Ga., Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, and F. G. Breslin, 32nd and Market Sts., Louisville, $15,575, $2,321 and $3,500, respectively.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging, and paving roads with (a) rein.-con. (b) bituminous macadam, asphalt (c) bituminous macadam, tar (d) concrete (e) bituminous macadam, asphalt and brick (f) bituminous macadam, tar and brick (g) brick (h) Kentucky rock apshalt (1) 2.554 mi. Sect. "B" Marietta-Athens Rd., Athens Co. (2) 3 mi. Sects. "C and I" Chardon-Madison Rd., Geauga Co. (3) 0.979 mi. Sect. "Caledonia" Marion-Galion Rd., Marion Co. (4) 0.625 mi. Sect. "Caledonia" Marion-Galion Rd., Marion Co. (5) 4.095 mi. Sects. "W-Englewood and portion of" National Rd., Montgomery Co. (6) 0.457 mi. Sect. "D" Canton-Steubenville Rd., Stark Co. (7) 1.493 mi. Sect. "B-1 and B-2" Alliance-Minerva Rd. (8) 0.984 mi. Sect. "I-1" Bucyrus Upper Sandusky Rd., Wyandot Co., from Mariner Co., Athens (a1) $85,738 (b1) $78,209 (c1) $78,209; G. A. Stein, Niles (d2) $49,309; W. K. Drake, Marion, (e3) $51,017 (f3) $51,162; Malloy & Seckel, Marion (g4) $3,635; Bigler Bros., Middletown, (a5) $136,863; Eldorado Paving Co., Eldorado, (g5) $176,074; Losey Rd. Constr. Co., Kenton, (h5) $122,414; P. Christensen, 1355 Yale Ave., W. W., Canton, (d6) $17,787 (g6) $23,085; G. W. Hadley, Goldberg Bldg., Canton, (g7) use 80 per cent old brick $49,546; G. B. Walther, 425 Amer. Bank Bldg., Lima, (g8) $37,693. Noted Dec. 6.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.206 mi. Federal Aid Project 63, Sect. B, Bay Co., 44,603 sq. yd. concrete, from Galamo Constr. Co., Bay City, $71,326. Noted Nov. 29.

Michigan—State Hy. Dept., Lansing, grading and surfacing 2.628 mi. Federal Aid Project 101, Sect. C, Van Buren Co., 31,411 sq.yd. concrete, from A. E. Green, 47 Union Ave. N. E., Grand Rapids, $56,700; 3.041 mi. State Trunk Line Rd. 13-44, St. Joseph Co., 32,070 sq.yd. concrete, from Twitchell & Barrows, Orland, Ind., $65,539. Noted Nov. 29.

Ind., Wabash—Wabash Co., paving Lee A. Carr Rd., 17,328 sq.yd. asphalt on concrete, from Citizens Paving Co., Kokomo, $55,435. Engrs. est. $61,000.

Tex., Austin—Travis Co. grading, etc., 5.57 mi. State Highway 2, Federal Aid Project 409, 521 cu.yd. concrete, 20,733 cu. yd. roadway, 23,649 cu.yd. borrow, 2,548 cu.yd. loose and 1,225 cu.yd. solid rock excav., 48,045 lb. reinforcing from Evans & Greathouse, c/o J. A. Greathouse, 1706 West 6th St., Austin, $27,158. Engrs. est. $27,977.

Tex., Cleburne—Johnson Co. 302.65 stas. grading and reshaping road bed and hauling and placing 14,173.4 cu.yd. gravel on State Highway 10-A, State Aid Project 443, from McClung Constr. Co., Sherman, $34,841. Noted Nov. 22.

Tex., Palestine — Anderson Co. grading, gravel surfacing and constructing concrete bridges on 10.75 mi. Palestine-Bushy Rd., 16 ft. also grading, rein.-con. surfacing and bridging 9.7 mi. State Highway 19, Federal Aid Project 403 A, 16 and 18 ft., from Henderson & Co., Omaha, $32,444 and $321,076 respectively. Engrs. est. $40,000 and $358,900 respectively. Noted Nov. 22 and 29.

Tex., Palo Pinto — Palo Pinto Co. improving State Highway 1, (a) paving 35,140 sq.yd. vitr. brick, (b) 42,180 lin.ft. concrete curbing, from Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, (a) $50,967; McClung Constr. Co., Cleburne, (a) $53,076 (b) $21,934. Noted Nov. 22.

California—State Hy. Comn., Sacramento, grading 10.4 mi. road between Quail Lake and North Boundary, Los Angeles Co., from Williams & Singletary, Colton, $43,675, (engrs. est. $51,291); concrete paving 16.2 mi. between San Diego an Oceanside, San Diego Co., from Jahn & Bressi, 243 South Bway., Los Angeles, $436,045 (engrs. est. $526,145). Noted Nov. 15.

Streets and Roads (Continued)

Calif., Los Angeles—Los Angeles Co., concrete roads and walks at Olive View Sanitarium, from Dewaard & Cobham, Granger Bldg., San Diego, $25,690.

Calif., Los Angeles — Supervs. Los Angeles Co., grading, removing old macadam and repaving with concrete 2.65 mi. Compton-Clearwater Rd., 13,655 cu.yd. excav., 4,667 cu.yd. old macadam base, 37,966 sq.yd. concrete pavement, etc., from Oglesby & Dahl, 423 Edgewood Rd., Santa Ana, $67,608. County will furnish 10,000 bbl. cement. Noted Nov. 22.

CONTRACTS AWARDED

New Hampshire—State Hy. Dept., Concord, 1.35 mi. gravel road in Grafton Co., to A. D. Bridges Sons, Inc., Hazardville, Conn., 3,668 sq.yd. 10 in. surfacing $2.41, 4009 cu.yd. excav. $1.40, 3602 cu.yd. rock excav. $3.75 etc., total $48,836; 0.88 mi. modified asphalt paving in Carroll Co., to Colburn Constr. Co., Concord, 1238 sq.yd. surfacing $3.60, etc., total $18,300. Noted Sept. 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks, etc. on Howland St. also regrading North Jane St., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, $6,505 and $14,597 respectively; grading, curbing, laying sidewalks, etc., on Darvall St., to R. A. Hess, Inc., 14 Queens St., Astoria, $6,309; Rene Pl. and 85th Dr., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $9,394 and $12,387 respectively; 87th Ave. and 90th Rd., to H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, $3,610 and $5,127 respectively. Noted Dec. 13.

New Jersey—State Hy. Dept., Trenton, constructing Route 16, Sect. 6-A, from here to Passaic River, Morris and Somerset Counties, 31,001 yd. concrete, to D. Klockner, 1621 Nottingham Way, Trenton, $173,387. Engrs. est. $174,307. Noted Dec. 13.

S. C., Aiken—Aiken Co., sand clay surfacing 11.4 mi. Federal Aid Project 212, State Route 28, to J. L. Carroll, Columbia, $40,086; rein.-con. bridge with four 22 ft. spans, on above, to J. Houseal, Winnsboro, $6,623. Noted Nov. 22.

S. C., Moncks Corner—Berkeley Co., sand clay surfacing 9.5 mi. State Route 41, to W. N. Thompson, Burlington, $46,905.

Fla., Clearwater—Pinellas Co., to Davis Miller, Cone Bros., and Peninsula Constr. Co., c/o W. H. Armston, Tampa, 13.2 mi. Rd. 1 A, St. Petersburg to Clearwater, 69,024 sq.yd. asphalt block, 122,000 lin.ft. concrete curbing, 72,000 cu.yd. earth excav., 60,000 sq.yd. old brick relaid, $348,670, 13.2 mi. Rd. 1 B, Clearwater to Pasco Co. line, 74,000 sq.yd. asphalt block, 139,000 lin.ft. concrete curbing, 80,000 cu.yd. excav., 50,000 sq.yd. relaid brick, $368,045, 11.45 mi. Rd. 2, Clearwater to Hillsborough Co. line, 77,306 sq.yd. asphalt block, 121,154 lin.ft. concrete curbing, 64,000 cu.yd. excav., $333,162, 7 mi. Rd. 3, Ozon to 1 mi. northwest Oldsmar, 35,933 sq.yd. asphalt block, 73,950 lin.ft. concrete curbing, 40,000 cu.yd. excav., 30,200 sq.yd. relaid brick, $181,142, 14.7 mi. Rd. 4 Indian Rock Drawbridge to Dellwood, 103,000 sq.yd. asphalt block, 154,000 lin.ft. concrete curbing, 94,000 cu.yd. excav., 25,701 sq.yd. brick relaid, $413,473, 10.04 mi. Rd. 5, 10,900 sq.yd. vitr. brick, 5,280 lin. ft. concrete curbing and guttering, 50,000 cu.yd. excav., 43,606 sq.yd. brick relaid, etc., $154,923, 6.92 mi. Rd. 6, 69,600 sq.yd. asphalt brick, 78,292 lin.ft. concrete curbing, 55,000 cu.yd. excav., etc., $255,786, 6.05 mi. Rd. 7, 106,550 sq.yd. asphalt block, 64,000 lin.ft. concrete curbing, 30,750 cu.yd. excav., 106,550 sq.yd. 5 in. rock base, $353,044, Rd. 8, 1,425 sq.yd. asphalt block, 1,600 lin.ft. concrete curbing, etc., $5,614. Noted Nov. 15.

Fla., Tampa — Grading and paving Ida and Ola Sts., to Harwell Constr. Co., Tampa, $9,636; Plymouth, Stowell and Giddens Sts., to Concrete Constr. Co., Tampa, $17,299. Work involves 10,650 sq.yd. 2½ asphalt blocks. Noted Nov. 22.

Fla., Winter Haven—For 9,000 sq.yd. concrete paving, curbs and gutters on various streets, to Carolina Contg. Co., $25,882.

Kentucky—State Hy. Dept., Frankfort, improving roads **(F.A.P. means Federal Aid Project, S.P., State Project)** grading and surfacing with rock asphalt 10.155 mi. Scottsville-Glasgow Rd., 18 ft., F.A.P. 112, Allen Co., to Billiter & Wiley, Covington, $387,054 with waterbound macadam 1.6 mi. Nicholasville-Danville Rd., 16 ft. S.P. 25, Sect. A. Garrard and Boyle Counties, to Bates & Paynter Co., Danville, $34,396, 17.082 mi. Owenton-Georgetown Rd., 14 ft., S. P. 49, Sect. A, Owen Co., to Billiter & Oliver Bros., Covington, $362,327, 1.969 mi. Buffalo-Hardyville Rd., 18 ft., S. P. 3, Sect. A, Hart Co., to Twyman & Hanley, Hodgenville, $52,147; with gravel 11 mi. Bardstown-Hodgensville Rd., 18 ft., S. P. 3, Sect. B, Larue Co., to Ellis & Smithers, Owensboro, $232,885, 7.765 mi. Madisonville-Hopkinsville Rd., 18 ft., F. A. P. 111, Christian Co., to Alexander Bros., Cadiz, $169,595; surfacing with gravel 14.032 mi. Marion-Princeton Rd., 14 ft., S. P. 10, Sect. C, Caldwell Co., to McQuarry Bros., Hopkinsville, $96,845, 7.212 mi. Marion Princeton Rd., 14 ft., S. P. 10, Sect. C, Crittenden Co., to Costello Bros., Henson Bldg., Knoxville, Tenn., $54,469; with rein.-con. 17.035 mi. Barboursville-Corbin Rd., 18 ft., F. A. P. 61, Sect. C, Knox Co., to R. L. Peters, Knoxville, Tenn., $555,812; with waterbound macadam 5.54 mi. London-Mt. Vernon Rd., 18 ft., F. A. P. 29; Sect. E, Laurel Co., to Travil & Ingram, Danville, $199,725, 10.7 mi. Georgetown-Cynthiana Rd., 14 ft., S. P. 58½, Harrison Co., to B. W. Gorham, Harp St. and Innes Park, Lexington, $66,794; grading 10.941 mi. Irvine Beattysville Rd., 24 and 28 ft., S. P. 29, Sect. B, Estill Co., to J. S. Lusk, Knoxville, Tenn., $253,992, 9.924 mi. Beattysville-Booneville Rd., 24 and 28 ft. S. P. 31, Sect. A, Lee and Owsley Counties, to J. C. Williams, Winchester, $202,609, 9.498 mi. Richmond-Mt. Vernon Rd., 24 and 30 ft., F. A. P. 88, Madison and Rockcastle Counties, to Codell Constr. Co., Winchester, $119,456, 16.558 mi. Somerset-Whitley City Rd., 24 and 28 ft., F. A. P. 110, Pulaski Co., to Ping Bros., Constr. Co., Somerset, $191,440. Noted Dec. 6 and 20.

Ind., Indianapolis—Marion Co., grading and paving with portland cement 2.97 mi. Russell N. Edwards Rd. and Penn St., to Lowell F. Parker & Co., Bloomfield, $106,700. Noted Nov. 29.

Ia., Jefferson—Greene Co., grading and surfacing 16,667 mi. Federal Aid Project 203, 18 ft., to Empire Constr. Co., 308 Flynn Bldg., Des Moines, 67,989 cu.yd. excav. $0.80, 175,755 sq.yd. concrete $2.58, etc., total $507,839. Noted Nov. 15.

Ia., Sioux City—Woodbury Co., paving and incidental work on Moville-Correctionville Rd., to C. F. Lytle Constr. Co., 2727 Jackson St., 190,062 sq.yd. concrete paving $2.38, 42,877 cu.yd. earth excav. $0.90, 152 special intakes $120, etc. Noted Nov. 22.

Minnesota—State Hy. Dept., St. Paul, 18 mi. State Project 6-39, Sect. 1, Federal Aid Project 332, Kittson Co., 190,000 cu.yd. excav., grading Div. A, to A. M. Barrett, St. Cloud, $32,719; Div. B, to S. Enebak, Warren, $29,788. Contracts awarded conditional upon securing right of way. Noted Oct. 11.

Wyo., Cheyenne—Paving 5 blocks Carey Ave. and 6 blocks adjacent to State Capitol Bldg., Dist. 3, with 5 in. concrete base, 1½ in. binder and 1 in. top, 40-52 ft. wide, to A. T. Read Co., Omaha, Neb., $72,847. Noted Oct. 18.

Missouri—State Hy. Dept., Jefferson City, grading roads **(S. P. R. 31-3, De Kalb means State Project Route 31, Sect. 3, De Kalb Co.)** 5 mi. S. P. R. 31-3, De Kalb, 4.779 mi. S. P. R. 1-34, Buchanan, and 0.139 mi. State Project Refund 1, Madison Co., to M. E. Gillioz, Monett, $30,036, $48,124 and $2,160 respectively; 4.024 mi. S. P. R. 3-107, Christian, 2.583 mi. S. P. R. 35-3, Jackson, 2.583 mi. S. P. R. 35-3, Jackson, 2.917 mi. S. P. R. 35-4, Jackson, and 2.917 mi. S. P. R. 35-4, Jackson, to Carterville Constr. Co., Carterville, $9,939, $16,223, $78,839, $14,926 and $76,692 respectively; 4.811 mi. S. P. R. 16-53, Howell and 4.754 mi. S. P. R. 16-52, Howell, to Muskogee Contg. Co., Tulsa, Okla., $15,297 and $20,681 respectively; 0.729 mi. S. P. R. 20-11, Lafayette, and 0.729 mi. S. P. R. 20-11, Lafayette, to A. J. Cosby, Leeds, $26,192 and $38,027 respectively; 4.207 mi. S. P. R. 76-8, Taney, and 1.184 mi. S. P. R. 80-1, Ozark, to Smith & Creech Constr. Co., St. Louis, $35,424 and $11,886 respectively; 2.939 mi. S. P. R. 5-3, Putnam, and 3.828 mi. S. P. R. 5-2, Putnam, to C. P. O'Reilley, Wainwright Bldg., St. Louis, $8,597 and $14,315; 3.566 mi. S. P. R. 12-17, Pettis, and 3.566 mi. S. P. R. 12-17, Pettis, to A. A. Davis & Co., 301 West 19th St., Oklahoma City, Okla., $34,668 and $35,036 respectively; 2.426 mi. S. P. R. 1-6, Atchison, to G. W. Condon, 510 Farnum Bldg., Omaha, Neb., $12,936; 0.089 mi. S. P. R. 3-115, Taney, to Easley Bros., Aurora, $2,158; 1.572 mi. S. P. R. 12-16, Pettis, to Bertman & Menafee, Sedalia, $10,721; 4.04 mi. S. P. R. 47-1, Lincoln, to W. P. Smith, Troy, $29,211; 1.366 mi. S. P. R. 1-19, Holt, to Allison Dillingham Constr. Co., Oregon, $11,516; 4.034 mi. S. P. R. 15-28, Monroe, to Newton Constr. Co., California, $36,970; 4.104 mi. S. P. R. 3-108, Christian to Cox & Chaney, Branson, $14,131. Noted Dec. 6.

Ark., Fayetteville—Grading and surfacing College, Center, School and East Maple Sts., 30,000 sq.yd. asphaltic concrete on concrete, to Moreno-Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, $80,000.

Ark., Osceola—Mississippi Co. grading, surfacing, etc. 37.75 mi. in Mississippi County Rd. Impvt. Dist. 1, 20 ft., 398,747 sq.yd. Topeka mix asphalt, 137.87 cu.yd. concrete, 36,325 cu.yd. earth excav., 427,153 sq.yd. concrete base, 3,939 cu.yd. sand cushion, preparing 389,660 sq.yd. sub-grade fine grading, etc.: grading, etc., to E. E. Parke, Okmulgee, Okla. surface and concrete base, to H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, Ill. Total cost $750,000.

Tex., Dallas—Paving with willite asphalt on 5 in. concrete, Cockrell, 2nd, Colonial, 8th and Oram Sts., to Fuller Constr. Co., Amer. Exch. Natl. Bank Bldg., $159,674; warrenite bitulithic on 2 in. and 5 in. concrete, on Walter, Henderson, 9th, 4th, Fitzhugh, Waverley, Oakland and Madison Sts., to Central Bitulithic Co., Praetorian Bldg., $319,979; brick on McKinney, Alamo and Hord Sts., to Smith Bros., Sumpter Bldg., $42,903. Noted Dec. 13.

Tex., Houston—See "Unclassified."

Tex., Jasper—Jasper Co. gravel surfacing 4.24 mi. State Highway 36, State Aid Project 93, 12 ft., and grading, gravel surfacing and bridging 6.41 mi. State Highway 63, Federal Aid Project 82, 12 ft., to R. B. Sparks, Gaston Bldg., $9,381 and $47,419 respectively; 6.677 cu.yd. and 9,875 cu.yd. gravel furnished by county $19,830 and $27,961 respectively. Engrs. est. $32,133 and $82,918 respectively. Noted Dec. 13.

Oklahoma — State Hy. Dept., Oklahoma City, grading and paving 11.73 mi. road from Norman to Oklahoma Co. line, Federal Aid Project 112, 125,857 sq.yd. asphalt, 56,287 cu.yd. earth, 571 cu.yd. rock excav., to Southern Constr. Co., Durant, $329,765.

Okla., Oklahoma City—Grading and paving 5 blocks 19th St., 4,200 sq.yd. concrete, to M. A. Swatek & Co., Security Bldg., $22,422. Noted Dec. 6.

Idaho—Bureau of Highways, Boise, grading and crushed rock surfacing 10.25 mi. Federal Aid Project 75, Sects. A and B, to J. A. Terteling & Sons, Moscow, 71,032 cu.yd. excav. $0.28, 4,428 cu.yd. rock excav. $1.25, 93 cu.yd. structural concrete $24, 21,559 cu.yd. 8 in. surfacing, etc. total $100,844. Noted Nov. 1.

Wash., Seattle—Bd. Pub. Wks., grading and paving Youngstown Pl. et al., to Goetz & Brennan, Seaboard Bldg., $359,004 (clay). Noted Dec. 13.

California—State Hy. Comn., Sacramento, grading and concrete paving 9.95 mi. Redding-Bayha Rd., Shasta Co., (11-Sha-3-B) to Kaiser Paving Co., Amer. Bank Bldg., Oakland, $423,287. Noted Dec. 13.

Calif., Hawthorne — Improving Raymond and Hawthorne Aves., 96,000 sq.ft. 2½ in. asphalt base with 1½ in. Willite surface, 310,000 sq.ft. 4 in. asphalt base, 2 in. Willite surface, grading, curbs, gutters, etc., to Oswald Bros., 366 East 58th St., Los Angeles, approximately $213,500. Noted Dec. 13.

Calif., Los Angeles—Will pave 108,400 lin.ft. Mulholland Dr. Highway, 24 to 40 ft., ultimate width 200 ft., by force account. D. L. Reaburn, Central Bldg., consult. engr. and general supt.

Que., Montreal—Grading 56,500 sq.yd. Sherbrooke St., to F. Lapan, 601 Lacordaire Ave., $87,960, paving 6,500 sq.yd. Marquette St., 3 in. asphalt on 6 in. concrete, to Quinlan, Robertson & Janin Ltd., 50 Notre Dame St. W., $33,805. Noted Dec. 13.

Ont., North Bay—Asphalt pavements to Warren Bituminous Paving Co. 54 University Ave., Toronto, $193,729.

Industrial Works

PROPOSED WORK

Conn., Hartford—Storage—Fuller Brush Co., Windsor Ave., plans 2 story, brick and steel storage plant. $50,000. Private plans.

Conn., Waterbury—Storage, etc.—F. Pepe, 42 Canal St., plans remodeling 3 buildings and adding extra stories on each building, etc., Bank St. $60,000. T. M. Freney, 51 Leavenworth St., archt.

N. Y., Brooklyn—Plant—Organic Preparation Co., 60 Hewes St., soon takes bids 1 story, 60 x 140 ft., rein.-con., brick and steel addition, plain foundation. $50,000. Tillion, Acock & Tillion, 103 Park Ave., New York, archts. and engrs.

Pa., Bessemer—Engine House—Bessemer & Lake Erie R.R., Greenville, having plans prepared for engine house. Private plans. H. S. Porter, c/o owner, engr.

Pa., Bethlehem — Plants — Bethlehem Steel Co. plans to complete 8,000 hp. boiler house at Franklin plant, construct clay-mixing and ladle house for blast furnaces, install coke-screening system for 3 Franklin furnaces, changes and additions to steel car plant at Franklin, erect coal spillage elevator at Rosedale coke plant, double track 2 mi. railroad, establish liming station at Quemahoning Dam.

Industrial Works (Continued)

D. C., Wash.—Warehouse—R. P. Andrews Co., 727 13th St., N. W., having plans prepared by Milburn-Heister Co., 710 14th St., N. W., for warehouse Canal and A Sts. $100,000.

Va., Glenlyn—Power Plant—Appalachian Power Co., 31 Nassau St., New York, having plans prepared by Ville, Blackwell & Buck, engrs. and archts., 49 Wall St., New York, 60,000 kw. capacity plant. $2,000,000.

N. C., Kinston—Plant—Washington Gas Co, Washington, plans plant, here. $100,000. Expect to start work in January. M. Mitchell, mayor.

Fla., Fort Myers—Gas Plant, Dec. 28 to vote on $130,000 bond issue for gas plant and mains. F. E. Smith, clk.

Tenn., Memphis—Assembly Plant—Ford Motor Co., Highland Park, Detroit, Mich., having plans prepared by A. Kahn, Marquette Bldg., Detroit, Mich., brick and steel plant, Riverside Blvd., here. Taking bids on steel framework, to cost several hundred thousand dollars. Total cost $1,000,000.

Ky., Louisville—Power House—Louisville Hydro Electric Co., 321 West Chestnut St., having plans prepared power house here. Probably one or two million dollars. D. McDonald, c/o owner, engr.

Ky., Mt. Sterling—Stockyards—Farmers Incorporated Stock Sales Co. plans stockyards. $40,000.

O., Cleveland—Garage—A. P. Jones, 304 Alhambra Theatre Bldg., had plans prepared 1 story and basement, 70 x 70 ft. brick and timber, East 71st St. and Cedar Ave. $40,000. Private plans.

O., Cleveland—Plant—German Consolidated Newspapers Co., c/o C. Raid, genl. mgr., 1570 West 3rd St., takes bids about Dec. 22, 3 story, 90 x 132 ft., brick, steel and concrete, 12th St. and Oregon Ave. $150,000. P. S. Schmidt, 4500 Euclid Ave., archt.

O., Cleveland—Warehouse—Morgan Sash & Door Co., 2435 Orange Ave., having plans prepared by A. Sogg, 319 Hippodrome Bldg., 2 story, 105 x 300 ft. brick and steel or mill construction. $150,000.

O., Columbus—Garage, etc.—Belt-Franklin Co., 224 East Gay St., having plans prepared 3 story and basement, 62 x 187 ft., garage and salesroom, brick and concrete, East Broad St. $150,000. Engineer and architect not announced.

Wis., Madison—Garage—Fox Motor Car Co., 107 East Doty St., having plans prepared by P. G. Homer, Pioneer Block, 2 story, 72 x 165 ft. brick, rein.-con. and steel, plain foundation, $50,000.

Kan., Coffeyville—Plant—City plans election to vote on $500,000 bonds gas production and distributing plant. T. R. Marshall, Coffeyville, engr.

Mo., Rush Tower—Sawmill and Polishing Plant—Missouri Marble Quarries, Inc., St. Louis, plans sawmill and polishing plant, 1 mi. from here facing Mississippi River. To exceed $125,000. G. J. Breaker, Boatmen's Bank Bldg., St. Louis, one of incorporators.

Mo., St. Louis—Factory—Diamond Wood Heel Mfg. Co., 407 South Bway., having plans prepared by E. J. Hess, 3228 Magnolia Ave., 2 story and basement, 75 x 168 ft., brick and rein.-con. $65,000.

Ark., Little Rock—Power House, etc.—Arkansas Central Power Co., plans extensions and improvements to power house, new switchboard, etc., Arch St. $100,000.

Tex., Houston—Ice Plant—Eureka Ice Co., Travis St., having plans prepared ice plant, brick and concrete. $150,000. Engineer and architect not announced.

Tex., Salado—L. Harrington Co., engrs., Houston Bldg., San Antonio, preparing plans and takes bids soon, power plant, pumping plant, crusher, elevators, washer, screens and bins. Owner's name withheld.

Calif., Colton — Substation — Southern California Edison Co., 306 West 3rd St., Los Angeles, plans to enlarge sub-station. $250,000.

Calif., Los Angeles — Factory — R. C. Durant, 10910 East 14th St., Oakland, A. G. Waddell, 346 Hanover St., Oakland, et al., plan factory buildings, here. To exceed $2,500,000.

Calif., Los Angeles — Factory — Hoyt Teater Co., 2838 East 2nd St., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 1 story, 70 x 200 ft. brick, Santa Fe Ave., $40,000.

Calif., Los Angeles — Factory — Ironall Factory of California, 822 South Los Angeles St., having plans prepared by F. D. Chase, Inc., Title Insurance Bldg., 6 story, 100 x 150 ft. rein.-con. $165,000.

Calif., Los Angeles—Garage—Peerless Auto Agency, 1620 South Figueroa St., having plans prepared by McNeal-Swasey, Hibernian Bldg., 2 story, 114 x 150 ft., brick garage and salesrooms, Gordon St.

Calif., Los Angeles—Plant—Los Angeles Brewing Co., 1920 North Main St., having plans prepared by L. A. Parker, archt., Pacific Electric Bldg., 2 story, 125 x 175 ft., brick, North Main St.

Calif., Los Angeles—Plant—Natl. Paper Products Co., 1789 Montgomery St., San Francisco, and Zellerbach Paper Co., 534 Battery St., San Francisco, plan paper plant, here. Total expenditure of plant and equipment will exceed $1,750,000. J. Y. Barun, 220 South Los Angeles St., dist. genl. mgr.

Calif., Los Angeles — Warehouse — A. Wohlfarth, 1607 Pleasant Ave., having plans prepared by A. C. Martin, Higgins Bldg., 8 story, 50 x 150 ft. rein.-con., Pico and Normandie Sts. $100,000.

Calif., Oakland — Garage — Telegraph Avenue Corp., c/o M. I. Diggs, archt., (who is interested in corporation), 19th St. and Telegraph Ave., had preliminary plans prepared underground garage with sub-basement under other building, 19th St. and Telegraph Ave. $150,000.

Calif., Sacramento — Warehouse and Workshop—W. P. Fuller Co., 10th and R Sts., having plans prepared by E. C. Hemmings, and L. Stark, Ochsner Bldg., 2 story and basement, rein.-con., brick and steel, 10th and R Sts. $50,000 for first unit.

Calif., San Francisco—Garage—J. Pelaprat, 202 14th St., plans 50 x 275 ft. rein.-con., 18th St. near Sanchez St. $42,000.

Calif., San Francisco — Service — See "Buildings."

Que., Chelsea—Power House, etc.—Riorden Co. Ltd., 355 Beaver Hall Hill, Montreal, plans power house and dam here on Gatineau River, $1,500,000. Montreal Eng. Co. Ltd., 164 St. James St., Montreal, engrs. Company plans to run hydro lines to city of Hull and Ottawa,, etc.

Que., Outremont—Garage—Bernard Ave. Garage Co., Bernard Ave., having plans prepared by Perrault & Godbois, 2100 Park Ave., Montreal, 90 x 167 ft., Bernard and L'Epee Aves., $250,000.

Ont., Windsor—Brewery—Amer. Brewing Co. having plans prepared by G. A. Mueller, 1510 Stroh Bldg., Detroit, Mich., 3 and 5 story, rein.-con. and brick, plain foundation. $50,000.

BIDS DESIRED

Mass., Cambridge (Branch of Boston)—Factory—J. F. Linckman, 33 Edinboro St., Boston, taking bids and opens same about Jan. 3, 5 story and basement, 100 x 150 ft., rein.-con. and brick, wood pile foundation, here. $300,000. Brainerd & Leeds, 89 Franklin St., Boston, archts. Noted Nov. 15.

Conn., Bridgeport—Service Station, etc.—Dec. 21, by Fletcher-Thompson, Inc., engrs., 542 Fairfield Ave., 1 and 2 story, 100 x 298 ft., brick, concrete and steel, Fairfield Ave., for A. L. Clark Co., 1710 Main St. $150,000. Noted May 24.

Md., Baltimore—Laundry and Garage, etc. —See "Buildings."

Fla., Jacksonville—Assembly Plant—Dec. 22, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 1 story, 200 x 560 ft., brick and steel, 8th St., for Ford Motor Co., Highland Park, Mich.

O., Toledo — Industrial — Dec. 27, by Devore Co., archts. and engrs., Nicholas Bldg., 1 story, 187 x 1002 ft. polishing and grinding plant, railroad siding and drainage work, East Bway., for Libbey-Owens Sheet Glass Co. $1,000,000. Noted Dec. 13.

Mich., Iron Mountain—Plant—Dec. 27, by Ford Motor Co., Highland Park (Detroit P. O.) 2 story, 91 x 310 ft. brick and steel carbonization plant. A. Kahn, 1000 Marquette Bldg., Detroit, archt.

Wis., Milwaukee — Warehouse — Brust & Philipps, archts., 405 Bway., taking bids 1 story, 40 x 100 ft. brick and timber, plain foundation, Green Bay Rd., for Boston Blacking Co., 572 Edison Ave. $40,000.

Wis., Milwaukee—Warehouse—Union Oil Supply Co., 29th and Forest Homes Aves., taking bids 1 story, 73 x 120 ft., brick and timber warehouse, plain foundation, Leeck Pl. $40,000. J. Topzant, 144 Oneida St., archt.

Cuba, Velasco—Mill—Cuba Cane Sugar Corp., 112 Wall St., New York City, will build sugar mill, here, by separate contracts under supervision of owners. $200,000.

CONTRACTS AWARDED

N. Y., Buffalo—Mill—Russell-Miller Milling Co., 434 Security Bldg., Minneapolis, Minn., 8 story, 50 x 180 ft. rein.-con., with 10 ft. platforms, Childs St. and Buffalo River, here, to J. W. Cowper Co., Fidelity Bldg., who will let sub-contracts. Engineers of above company will superintend construction. Noted Oct. 18.

N. Y., Canajoharie—Storage—Beech-Nut Packing Co., 4 story and part basement, 60 x 100 ft., rein.-con., to M. C. Tuttle Co., 862 Park Sq. Bldg., Boston, Mass.

N. Y., Newburgh—Storage and Manufacturing Plant—Crawshaw Carpet Co., 635 Bway., 2 story, 50 x 106 ft., rein.-con., brick and steel, plain foundation, to B. M. Higginson, Inc., 64 2nd St. Archts. est. $50,000. Noted Nov. 22.

N. Y., Rensselaer—Textile—W. Barnet & Son, Inc., 4 story, 68 x 90 ft., brick and steel addition, plain foundation, 1st St., to W. Hayes, 59 North Swan St. $75,000 plus 10%.

N. Y., Yonkers—Garage—J. J. Hayes, Proctor Bldg., will build 2 story, 100 x 100 ft., brick, School and Herriott Sts., by day labor. $50,000. W. P. Katz, 2 Hudson St., archt. Noted Nov. 1.

N. J., Salem—Factory—Congoleum Co., Inc., Morris Bldg., Phila., 1 story, 103 x 120 ft., and 3 story, 65 x 100 ft., brick and steel, plain foundations, here, to Austin Co., Jefferson Bldg., Phila., $100,000.

Pa., Allentown — Plant — Amer. Beauty Silk Co., Meadow and Allen Sts., 3 story, 50 x 60 ft. plant, to Ritter & Smith, Allentown, $40,000.

Pa., Beaver Falls — Sub-Station — Duquesne Light Co., Chamber of Commerce Bldg., Pittsburgh, 2 story, 28 x 45 ft. substation in Water Alley, to D. P. Robinson Co., 1300 Penn Ave., Pittsburgh, $100,000.

Pa., Carlisle—Plant—Lockwood-Greene & Co., archts. and engrs., 101 Park Ave., New York City, 3 story, 250 x 600 ft., rein.-con., brick and steel plant, plain foundation, for C. H. Masland & Sons, Carlisle, to H. A. Lackey, Carlisle. Noted Dec. 6.

Pa., Holmesburg (Phila. P. O.)—Machine Shop—Electric Development & Machine Co., Shellmere and Edmunds Sts., 1 story, 84 x 432 ft. brick and steel, plain foundation, to Franklin, Harris & Co., 1520 Parrish St., Phila., $75,000.

Pa., McKeesport—Sub-Station—Duquesne Light Co., Chamber of Commerce Bldg., Pittsburgh, 2 story and basement, 40 x 68 ft., 3rd Ave., to D. P. Robinson Co., 1300 Penn Ave., Pittsburgh, $70,000.

Pa., Pittsburgh—Sub-Station—Duquesne Light Co., Chamber of Commerce Bldg., 2 story and basement, 74 x 109 ft. substation, 636 2nd Ave., and 2 story and basement, 30 x 68 ft. substation, on Winthrop Ave., to Dwight P. Robinson Co., 1300 Penn Ave., $150,000 and $75,000 respectively.

Md., Mt. Winans (Baltimore P. O.)—Factory—Maryland Glass Corp., 1 story, 100 x 120 ft. and 1 story, 60 x 140 ft. brick, plain foundation, to Austin Co., 16112 Euclid Ave., Cleveland, O., $63,000.

W. Va., Williamson—Garage—Universal Motor Corp., 1 story 90 x 150 ft. brick, to W. E. Preston, Williamson, $40,000.

N. C., Rockingham—Cotton Mill—Hannah Pickett Co. 250 x 390 ft. mill, 25,000 spindles and 800 looms, to T. C. Thompson Bros., Rockingham.

O., Cleveland—Factory—P. A. Geier Co., c/o P. R. Geier, pres., 540 East 105th St., 4 story and basement, 80 x 230 ft., brick and rein.-con., to E. F. Gibbons Constr. Co., Prospect-Fourth Bldg. Archts. est. $300,000. Noted Nov. 22.

O., Cleveland—Factory—Peerless Motor Car Co., 2555 East 93rd St., labor only for 1 story, 96 x 196 ft., steel addition, to United Erecting Co., Euclid-46th Market Bldg. Archts. est. $45,000.

O., Cleveland—Factory—Richman Bros., 1600 East 55th St., 2 story and basement, 65 x 200 ft., brick and rein.-con. addition, to S. W. Emerson Co., Union Bldg. Archts. est. $150,000. Noted Nov. 29.

O., Cleveland — Factory — Taylor-Lockwood Co., 2230 Clarkwood Ave., 2 story, 57 x 72 ft., brick, steel and concrete addition, to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $40,000.

O., Cleveland—Warehouse—Bourne-Fuller Co., Hanna Bldg., 1 story, 62 x 300 ft., and 65 x 300 ft. steel and asbestos metal additions, East 53rd St., to Massillon Bridge & Structural Co., Massillon. Archts. est. $150,000. Noted Nov. 22.

O., Uhrichsville—Factory, etc.—Federal Collieries Co., c/o H. H. Felsmans, secy., Leader News Bldg., Cleveland, will build 3 story, 112 x 286 ft. factory, 48 x 80 ft. machine shop and 42 x 82 ft. boiler room, brick and steel, here, by day labor, under supervision of J. W. Moore, supt. constr. $250,000. W. C. Owen, Hanna Bldg., Cleveland, archt. and engr. Noted Nov. 8.

Ind., Indianapolis—Garage—L. B. Millikin, 501 North Delaware St., will build 1 story, 97 x 107 ft., rein.-con. and brick. 21st St., by day labor. $50,000. Private plans. Noted Nov. 29.

Industrial Works (Continued)

Ind., Michigan City—Tile Works—V. Milcarek will build 2 story, rein.-con., Orthur St., by day labor. $300,000. Ohlgrim & Boonstra, Michigan City, archts.

Wis., La Crosse — Factory, etc. — La Crosse Rubber Mills Co., Indian Hill, 4 story and basement, brick and concrete, factory and power house, plain foundation, to Holm-Page Co., Kishwaukee St., Rockford, Ill. $80,000.

Wis., Lake Mills — Garage — Overland Garage Co., c/o O. W. Farmer, mgr., 1 story, 50 x 70 ft. garage and repair shop, brick. rein.-con. and steel, plain foundation, to Hunzickir Constr. Co., Lake Mills. $40,000.

Wis., La Crosse—Factory—La Crosse Rubber Mills Co., c/o F. Stewart, mgr., will build 4 story and basement, 60 x 150 ft. factory and power house, brick, rein.-con. and steel, plain foundation, by day labor. $60,000. Private plans.

Wis., Milwaukee—Garage—Yunker-Hansen Sales Co., 6516 Greenfield Ave., 1 story, 40 x 120 ft., brick and concrete, plain foundation, to Yunker Bros., 615 37th Ave., $40,000.

Wis., Milwaukee — Newspaper Plant — Journal Co., 182 4th St., 5 story superstructure, 152 x 200 ft., brick and concrete, plain foundation, to W. W. Oeflein, 86 Michigan St. Archts. est. $500,000. Noted Aug. 23.

Wis., Milwaukee — Storage — Hummel & Downing Co., 324 Thomas St., 1 story, 100 x 102 ft., concrete and steel, plain foundation, Newhall St., to P. Riesens Sons, 1018 Humboldt Ave. Est. $40,000. Noted Dec. 13.

Wis., Milwaukee — Warehouse — Amer. Mill Supply Co., 1718 Vliet St., 1 story, 40 x 140 ft. brick and wood, plain foundation, Auer Ave., to M. Wachofsky, 539 4th St. Archts. est. $45,000.

Ia., Des Moines—Warehouse—See "Buildings."

Ia., Sioux City—Garage—F. H. Clark, 609 Pierce St., general contract 2 story, 100 x 150 ft. brick and concrete, 5th and Jennings Sts., to J. Keeffe, 1620 West 5th St., $51,790.

Mo., Springfield—Printery—Inland Printing Co., 413 East Oliver St., 1 story, 60 x 162 ft., brick, steel and rein.-con., to S. E. Dobbs, 530 West Tynn St. Archts. est. $60,000.

Tex., Dallas—Warehouse—E. P. Fisher, 2428 South Harwood St., general contract, 1 story, brick and concrete warehouse, Commerce St., to L. H. Lacy Co., 3310 Commerce St., $50,000. Total cost $100,000.

Tex., Ft. Worth—Garage—Gabert Auto Wks., Throckmorton St., 2 story, 110 x 200 ft., brick, to Southwell & Addott, Natl. Bank Bldg., $50,000.

Calif., Glendale—Garage—Tanner & Hall, 237 South Brand St., 1 story, 75 x 156 ft., brick, Maple and Brand Sts., to E. Elliott, 612 East Elk Ave.

Calif., Long Beach—Garage—Ocean View Garage, 34 Locust St., 1 story, 120 x 170 ft. brick, American Ave. and 20th St., to Austin & Co., Bartlett Bldg., Los Angeles.

Calif., Long Beach—Power Station—Southern California Edison Co., Edison Bldg., Los Angeles, 60,000 kw. extension to power station, here, to Stone & Webster, Inc., 147 Milk St., Boston, Mass.

Calif., Los Angeles—Bakery—Christopher Co., 2101 South Los Angeles St., 1 story, 50 x 175 ft. brick, 21st and Los Angeles Sts., to May & Grimwood, Haas Bldg., $41,500.

Calif., Los Angeles—Boiler House—See "Buildings."

Calif., Los Angeles—Garage—M. A. Bresee, 941 Bon Brae St., 1 story, 60 x 150 ft. brick, Bronson Ave., to Bartlett & Corey, 256 North Belmont Ave.

Calif., Los Angeles — Garage — Retzer Bros. 1200 East 7th St., 1 story, 110 x 160 ft., brick, Pasedena Ave., to L. J. Moser, 8335 Sunset Blvd.

Calif., Santa Monica—Garage—H. Malian, 1232 11th St., 1 story, concrete, Santa Monica Blvd., to Western States Constr. Co., Santa Monica, will exceed $45,000.

Calif., San Francisco—Garage—J. Pasqualetti, 785 Market St., 2 story, rein.-con., Ocean Ave., to Amer. Concrete Co., Humboldt Bank Bldg., $45,000.

Calif., San Francisco—Warehouse—R. W. Kinney Co., 645 Howard St., 3 story, concrete, 5th and Bryant Sts., to Cahill Bros., 110 Sutter St., $40,000. Noted Nov. 29.

Buildings

PROPOSED WORK

Conn., Groton—Home—Odd Fellows of Connecticut, c/o Whiton & McMahon, archts., 36 Pearl St., Hartford, plan three 3 story, fireproof. plain foundations. $450,000.

Conn., Hartford—Apartment—L. Greenshpon, 20 West St., having plans prepared by Berenson & Moses, 30 Allyn St., 4 story, 90 x 140 ft., brick, plain foundation, Buckingham St. $150,000.

Conn., Hartford—Industrial Home—Salvation Army, 344 Trumbull St., plans 4 story, brick, stone and steel, plain foundation, Edward St. $150,000.

Conn., Hartford—Office—D. A. Dunham, 199 North Beacon St., having plans prepared by Smith & Bassett, 36 Pearl St., 3 story, 48 x 100 ft., also remodeling 2 large buildings, Lewis St., $200,000.

Conn., Waterbury—Hotel—W. Wood, 224 East Main St., having plans prepared by C. J. Bailey, 63 Bank St., 4 story, brick and steel, plain foundation, East Main St. $150,000.

N. Y., Buffalo — High and Vocational School—Bd. Educ., 1400 Telephone Bldg., plans high and vocational school. $2,500,000. Associated Buffalo Architects, 234 Delaware Ave., archts.

N. Y., Buffalo—Office and Store—H. C. Curtis, Erie Co. Bank Bldg., had plans prepared 4 story, 100 x 150 ft., rein.-con., brick and steel, Delaware Ave. $160,000. Engineers and architects names withheld.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., preparing sketches 5 story, 100 x 100 ft., brick, steel and stone, Morris Ave. $250,000. Owner's name withheld.

N. Y., New York—Apartment—D. S. Lang, archt. and engr., 110 West 34th St., preparing sketches 5 story, 100 x 105 ft., brick, steel and stone, Bryant Ave. $250,000. Owner's name withheld.

N. Y., New York — Apartment-Hotel — Three Hundred Two West Seventy-Fifth St. Corp., c/o R. T. Lyons, archt. and engr., 342 Madison Ave., soon takes bids 15 story, brick, steel and stone, West 75th St. $750,000.

N. Y., New York — Apartment-Hotel — Warinick Corp., c/o L. A. Abramson, archt. and engr., 48 West 46th St., soon takes bids 14 story, brick, steel and stone, 3rd Ave. $2,000,000.

N. Y., White Plains—Apartment—Yorkshire Apartments, c/o H. C. Ingalls, archt. and engr., 347 Madison Ave., New York City, soon takes bids 5 story, brick, steel and stone, plain foundation, Martine Ave., here. $500,000.

New Jersey—Schools—Hopewell Twp. Bd. Educ., Hopewell, plans 3 schools, 1 at Hopewell, 1 at Pennington and 1 on Pennington Rd. $220,000. J. O. Hunt, 219 East Hanover St., Trenton, archt. Noted May 31 under "Hopewell."

N. J., Bridgeton — Hospital — Stearns & Woodnutt, archts., St. Girard Bldg., Phila., preparing plans and take bids about Feb. 1, 3 story and basement, 40 x 140 ft., brick and steel, plain foundation, Irving and Magnolia Sts., here, for Bridgeton Hospital. $150,000.

N. J., Lambertville — School — Lambertville Bd. Educ. plans school. $185,000. E. Moonan, mayor.

Pa., Allentown — Schools — School Bd. plans two 12 room additions to Sheridan and Roosevelt Schools, $400,000. Architect not selected.

Pa., Altoona — Home — Jaffa Temple Shriners, 709 Chestnut Ave., plans 3 story and basement, 200 x 200 ft., Broad Ave. $500,000.

Pa., Johnstown — Public Safety — City having plans prepared by Hersh & Shollar, Commerce Bldg., Altoona, 3 story and basement, 100 x 150 ft., concrete, brick and steel, Market and Washington Sts. $250,000.

Pa., Palmerton—High School—Bd. Educ. having revised plans prepared by W. H. Lee, 15th and Rase Sts. and soon takes new bids 3 story and basement, 139 x 165 ft. rein.-con., brick and steel, 3rd and Lafayette Sts. Noted Nov. 15.

Pa., Phila.—Apartment—Nineteenth and Spruce Sts. Corp., c/o Ballinger & Co., archts., 12th and Chestnut Sts., having plans prepared 15 story, on lot 14 x 133 ft. 19th and Spruce Sts.

Pa., Phila.—Club—Penn Athletic Club, 925 Chestnut St., had plans prepared by Zanzinger, Borie and Medary, Otis Bldg., 14 story, 175 x 200 ft., rein.-con. and steel, 18th St. between Walnut and Locust Sts. $2,500,000. Will take bids about March 1.

Md., Baltimore—Apartment—R. Parr, 219 East Redwood St., interested in syndicate which is having plans prepared by C. N. and N. Friz, Lexington Bldg., 6 story, brick and steel, Park Heights Ave. near Suburban Club. $800,000. H. F. Doeleman, 507 North Charles St., engr.

W. Va., Clarksburg—Church—Church of Immaculate Conception having plans prepared by E. J. Weber, K. of C. Bldg., Pittsburgh, 1 story and basement, 65 x 160 ft., East Pike and Maple Sts. $250,000.

W. Va., Huntington—Office—Meanor & Handloser, archts., Robson-Prichard Bldg., soon take bids 14 story, 60 x 170 ft. brick and steel, 11th St. and 4th Ave., for Coal Exchange Building Co., Inc. $1,000,000.

W. Va., Morgantown—Church—Baptist Church plans church. $150,000. E. M. Everly, Morgantown, engr.

W. Va., Wellsburg—Church—St. John's Evangelical Congregation having plans prepared by E. J. Weber, K. of C. Bldg., Pittsburgh, 2 story and basement, 66 x 132 ft. $150,000.

W. Va., Williamson—Hotel—Chamber of Commerce having plans prepared by Meanor & Handloser, Huntington, 5 story and basement, 100 x 180 ft. $200,000.

N. C., Fayetteville—School—Cumberland Co. sold $183,000 bonds new school. E. A. Poe, chn. B. T. McBryde, supt. schools.

N. C., Greensboro — Depot — City and Southern Ry. Co., 13th St. and Pennsylvania Ave., Wash., D. C., had plans prepared by A. Fellheimer, 7 East 42nd St., New York City, and soon lets contract depot. City voted $1,300,000 bonds for work in conjunction with Southern Ry. Co. Address H. W. Miller, vice-pres. Southern Ry. Co.

Ala., Athens—Church—Firth Methodist Episcopal Church plans 1 story and balcony, Jefferson and North Sts. $150,000.

La., Alexandria—School—Voted $1,250,000 bonds for schools, for Bd. Educ. Favrot & Livaudais, Hibernia Bank Bldg., New Orleans, archts. Noted Oct. 11.

La., New Orleans—Hospital—Administrators of Charity Hospital, Tulane and Villere Sts., having plans prepared by Favrot & Livaudais, Hibernia Bldg., for first unit to cost $1,160,000, two other units will be built, making total cost $3,750,000.

Tenn., Knoxville — Apartment — Laurel Heights Apartment, Inc. having plans prepared by Barber & McMurray, Burnell Bldg., 6 story, rein.-con. and tile, Laurel Ave. and 8th St. $240,000.

Tenn., Memphis—Apartment—D. Dermon, Madison Ave., having plans prepared by W. C. Lester, Madison Ave. Bldg., 200 x 232 ft., Poplar and Cooper Sts. $150,000.

Tenn., Nashville — Office — Independent Life Insurance Co., Independent Life Bldg., takes bids about Jan. 3, 2 story addition to present 12 story rein.-con., steel and stone, 4th and Church Sts. $150,000. G. Waller, 210 Independent Life Bldg., archt. Noted Dec. 13.

Ky., Lexington—Library—Transylvania College plans 3 story library. $150,000. Architect not selected.

Ky., Louisville — Seminary — Southern Baptist Theological Seminary, 5th and Bway, having plans prepared by J. G. Rogers, 367 Lexington Ave., New York City, seminary and dormitory on Cherokee Dr. $500,000. Plain foundation for dormitory, to H. Bickel & Co., 443 Garden St. Est. cost $50,000. Noted May 24.

Ky., Louisville—Temple—Scottish Rite Assn., 438 6th St., will open bids about Feb. 1, (extended date) temple, 4th and Breckenridge Sts. $750,000. Nevin, Wischmeyer & Morgan, Starks Bldg., archts. Noted Nov. 15.

Ky., Murray—Hospital—William Mason Memorial Hospital plans 3 story, 40 x 84 ft. rein.-con. addition. $150,000. C. G. Lowry, Murray, archt.

O., Cleveland — Office — Rapid Transit Land Co., 2409 Euclid Ave., having plans prepared by J. H. MacDowell, Bulkley Bldg., 3 story, concrete, brick, steel and wood, East 105th St. $150,000.

O., Cleveland—School and Seminary—Polish Sisters of St. Joseph, 6700 Lansing Ave., plan 2 story and basement, Granger Rd. $150,000. Architect and engineer not selected.

O., Dayton—Store—Simon & Co., 31 North Main St., having plans prepared by Pretzinger & Musselman, archts., 1155 Reibold Bldg., 3 story, 25 x 180 ft. rein.-con., stone and terra cotta, North Main St. $175,000.

O., Lakewood (Cleveland P. O.)—Apartment—J. T. Fritsche, 552 Leader-News Bldg., plans 4 story, brick, Lake Ave. and West 112th St. $200,000. Private plans.

Ind., Indianapolis—Recreation—J. Chartrand, 1347 North Meridian St., rejected bids 2 story and basement, 97 x 180 ft., rein.-con. and brick, North Meridian St. Kopf & Woolling, Pythian Bldg., archts. $150,000. Noted Dec. 6.

Mich., Ann Arbor — School — Michigan School of Religion, c/o L. W. Goodenough, 915 Hammond Bldg., Detroit, plans 3 story, rein.-con. and brick, plain foundation, Monroe St. $300,000. Engineer and architect not selected.

Mich., Detroit—Office—J. J. Garrison, 1 McGraw Bldg., plans 38 x 75 ft. rein.-con., brick and steel, plain foundation, Wayne and Congress Sts. $350,000. Engineer and architect not selected.

Mich., Detroit—Office—S. J. Murphy Co., 1206 Penobscot Bldg., having plans pre-

Buildings (Continued)

pared by Donaldson & Meier, 1314 Penobscot Bldg., rein.-con. and steel, Griswold and Fort Sts. $5,000,000 to $6,000,000.

Mich., Detroit — University — University of Detroit, East Jefferson Ave., having plans prepared by Malcomson, Higginbotham & Palmer, 1219 Griswold St., 12 new buildings, incl. administration, general science, gymnasium, engineering, library, chapel and power house, etc., 3 story and basement, fireproof, Livernois Ave. and Six Mile Rd.

Ill., Freeport—Store and Apartment—R. F. Koenig, 641 West Stephenson St., having plans prepared by J. R. and E. J. Law, 1st Central Bldg., Madison, Wis., 2 story, 50 x 156 ft., rein.-con., brick and steel, here. $150,000.

Ill., Monticello—Gymnasium—Twp. Community High School Bd. having preliminary plans prepared by J. C. Llewellyn, 38 South Dearborn St., Chicago, 2 story and basement, 70 x 140 ft., rein.-con., brick and stone. $150,000.

Wis., Madison—Church—Calvary University Church, c/o G. W. Wiegle, 654 Williamson St., plans 2 story and basement, about 75 x 190 ft., brick, rein.-con. and steel, plain foundation, Fitch Court. $160,000. Engineer and architect not selected.

Wis., Madison — Club — The University Club, 803 State St., having plans prepared by J. R. and E. J. Law, 1st Central Bldg., 4 story, about 60 x 150 ft. brick, rein.-con. and steel addition, plain foundation. $150,000. W. J. Mead, pres.

Wis., Madison—Schools—Bd. Educ. having plans prepared by J. R. and E. J. Law, 1st Central Bldg., 2 story and basement, 66 x 104 ft. brick, rein.-con. and steel addition to Longfellow School, plain foundation, $150,000; by F. L. Kroenberg, Carroll Blk., 2 story and basement, 60 x 90 ft. brick, rein.-con. and steel addition to Emerson School, plain foundation, $160,000.

Wis., Rice Lake—Hotel—W. W. Allen & Son, proprietors Tourist Hotel, having plans prepared by Johnson & Griswold, Wisconsin Blk., Superior, 3 story and basement, brick and concrete, plain foundation. $150,000.

Kan., Wichita—Temple—York Rite Masonic Assn. having plans prepared by Eberson & Weaver, 514 Orpheum Bldg., 7 story and basement, 74 x 134 ft., rein.-con. and brick. $400,000.

Neb., Columbus—High School—Bd. Educ. plans high school. $300,000 bonds voted. R. R. McGee, secy.

Mo., Cape Girardeau—High School—Defeated $268,000 bonds for junior high school. Noted Nov. 29.

Mo., St. Joseph — School — Defeated $3,000,000 bonds new school buildings. Noted Nov. 8.

Tex., Dallas—Store—Sanger Bros., Main and Lamar Sts., having plans prepared remodeling and building additions to present building, etc. $250,000. Engineer and architect not announced.

Tex., San Antonio—Hotel—C. Garrett, et al., having plans prepared by R. H. Cameron, 1115 City Natl. Bank Bldg., 12 story, rein.-con., brick, stone and part steel, Houston St. and Ave. E. $1,500,000.

Wash., Everett—Temple—Everett Aerie 13, Fraternal Order of Eagles Building Corp., plans temple. $170,000. E. M. Turner, pres.

Wash., Tacoma—Church—First Baptist Church having plans prepared by Heath, Gove & Bell, Puget Sound Bank Bldg., 4 story, 115 x 120 ft., rein.-con. and brick veneer, plain foundation, 9th and Market Sts. $200,000. W. W. Newschwander, c/o Puget Sound Natl. Bank, chn. building com. Noted Apr. 26.

Calif., Berkeley—Market—Telegraph Avenue Corp., c/o M. I. Diggs, archt., (who is interested in company) 19th St., and Telegraph Ave., Oakland, having plans prepared fireproof construction, North Berkeley section, $200,000.

Calif., Eagle Rock—College—Occidental College, Campus Rd., Los Angeles, having plans prepared by M. Hunt, Hibernian Bldg., Los Angeles, women's dormitory and administration building, fireproof construction, $150,000 and in excess of $150,000, respectively.

Calif., Gridley — High School — Gridley Union High School Dist. defeated $225,000 bond issue for school. Noted Nov. 15.

Calif., Los Angeles—Hotel and Store—E. N. Adam, c/o Russell & Alpaugh, archts., Story Bldg., had preliminary plans prepared 9 story and basement, rein.-con., 5th and San Pedro Sts. $400,000 or more.

Calif., Los Angeles—Hotel—A. Jerome, c/o L. L. Jones, archt., Grosse Bldg., having plans prepared 4 story and basement, brick, Lake St., $150,000.

Calif., Los Angeles—Hotel—N. Kratz, c/o L. A. Smith, archt., Lily Fletcher Bldg., having plans prepared 4 story and basement, brick, Fremont Ave. $150,000.

Calif., Los Angeles—Hotel and Store—Trattner & Harrison, Garland Bldg., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 12 story, rein.-con., Bway. near 9th St., to exceed $500,000.

Calif., Los Angeles—Store and Hotel—E. N. Adam having plans prepared by Russell & Alpaugh, Story Bldg., 9 story and basement, 95 x 139 ft., rein.-con. and brick, 5th and San Pedro Sts. $600,000.

Calif., Los Angeles—Store and Hotel—Tratner & Harrison, Garland Bldg., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 13 story, 90 x 143 ft., rein.-con. and brick, Bway. between 9th and 10th Sts. $1,000,000.

Calif., Oakland—College—Mills College, 59th Ave., had plans prepared by W. H. Ratcliff, Jr., 1st St. Natl. Bank Bldg., Berkeley, 2 story, rein.-con. and terra cotta arts building, first unit to cost $75,000, total $300,000.

Calif., Oakland—Store and Office, etc.—Telegraph Avenue Corp., c/o M. I. Diggs, archt. (who is interested in corporation), 19th and Telegraph Aves., having plans prepared department store, Telegraph Ave., $500,000; store and office, approximately 10 story, Northwest 13th St. and Franklin St., $800,000 to $900,000; 8 story hotel, Clay St. near 19th St., $400,000; market building, East Oakland section, $150,000 to $200,000; theatre, capacity 2,500 to 3,000, 19th St. and Telegraph Ave. $150,000 to $200,000. All fireproof construction.

Calif., Palo Alto — Theatre — Palo Alto Theatre Co., c/o Weeks & Day, archts., 315 Montgomery St., San Francisco, having preliminary plans prepared Class A construction, Ramona St., $150,000.

Calif., San Francisco—Apartment—Fabre & Hildebrand, archts., 110 Sutter St., preparing plans 6 story and basement, Class A construction, Jones St. near Bush St. $150,000. Owner's name withheld.

Calif., San Francisco—Apartment—P. D. Tyler, 1438 Cabrillo St., had plans prepared by W. Wethered, State Hotel, 5 story and basement, rein.-con., Leavenworth St. $150,000.

Calif., San Francisco—Auto Sales, etc.—White Motor Co., 6611 Euclid Ave., Cleveland, plans 3 to 5 story auto sales and service building, fireproof construction, half of block bounded by Market, 11th, 12th and Mission Sts. $600,000 or more. G. A. Urquhart, 1490 Market St., San Francisco, vice pres.

Calif., San Francisco—Dormitory—Glad Tidings Tabernacle, Inc., and Bible Training School, c/o Gunnison & Merritt, archts., 57 Post St., had plans prepared 6 story and basement, rein.-con., Ellis St., $150,000.

Calif., San Francisco—Hotel—A. Vayssie, c/o Fabre & Hildebrank, archts., 110 Sutter St., had plans prepared 6 story and basement, steel and rein.-con., Eddy and Jones Sts. $300,000.

Calif., San Francisco—Post Office—J. Kulp & Co., 33 South La Salle St., Chicago, plans 4 story and basement, 141 x 200 x 289 ft., fireproof, The Embarcadero. U. S. Government, lessee.

BIDS DESIRED

Mass., Revere—School—City taking bids and opens same in January, 2 story and basement, 80 x 125 ft., brick, plain foundation, Garfield St. To exceed $150,000. E. I. Wilson, 109 State St., Boston, archt.

Mass., Salem—School—School Com. taking bids and opens same about Jan. 15, 3 story and basement, 68 x 130 ft., brick, plain foundation, Washington Sq. $200,000. J. H. Bickford, 6 Beacon St., Boston, archt. Noted Nov. 30, 1923.

Conn., Bridgeport—Church, etc.—Trinity Episcopal Church, Fairfield Ave. and Broad Sts., will let contract about Dec. 28, 1 story, 69 x 144 ft., church and 2 story and basement parish house, brick, tile and local stone, plain foundations, Washington Ave. $150,000. O. B. Wilkins and E. B. Caldwell, Jr., 884 Main St., archts.

N. Y., St. George—School—Jan. 3, by Superintendent Bd. Educ., 500 Park Ave., New York, P. S. 16, brick, steel and stone, plain foundation, Daniel Low Terrace through to Monroe Ave., here. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Pa., Phila. — Apartment — Dec. 24, by Hoffman-Henon Co., archts., Finance Bldg., three 4 story and basement, 46 x 104 ft. brick and steel, plain foundation, City Line. Owner's name withheld.

Pa., Phila.—Bank—Dec. 22, by Stearns & Woodnutt, archts., St. Girard Bldg., 1 story, 70 x 114 ft. rein.-con. and steel, plain foundation, 433 Frankford Ave., for Frankford Trust Co., 4344 Frankford Ave.

Pa., Wilkes-Barre—Church—Jan. 1, by R. Herr, archt., Simon Long Bldg., 1 story and basement, 65 x 110 ft. brick and stone, South River St. for Temple Israel, South Washington St. $175,000.

Md., Baltimore—Church—Jan. 3, by C. N. and N. Friz, archts., Lexington Bldg., 1 story, 130 x 140 ft., stone, plain foundation, Liberty Heights and Granada Ave., for First Baptist Church. $150,000.

Md., Baltimore—Ward, etc.—Dec. 28, by W. G. Beecher, archt., 12 East Pleasant St., 3 story ward buildings, boiler house, laundry and garage, brick, plain foundation, Green Spring Ave. and 41st St., for Children Hospital School. $175,000.

N. C., Wilson—Court House—Jan. 8, by Comrs. Wilson Co., court house. $300,000. F. A. Bishop, Petersburg, Va., archt. Noted Aug. 30.

O., Cleveland—Commercial and Apartment—J. F. Mandle, 1500 Coit Rd., taking bids 3 story and basement, 50 x 90 ft., brick and timber. $150,000. P. T. Cahill, 4502 Prospect Ave., archt.

O., Mayfield (South Euclid P. O.)—School Dec. 22, by Bd. Educ., c/o H. Adelson, Mayfield Rural School Dist., 2 story, brick, steel and concrete. $150,000. Fulton & Taylor, 8120 Euclid Ave., Cleveland, archts.

Ind., Indianapolis—Hotel—E. G. Spink & Co., Hume-Mansur Bldg., will build by separate contracts 12 story and basement, 50 x 102 ft., rein.-con. and brick, McCrea St. $900,000. Private plans.

Wis., Milwaukee—Service—Dec. 27, by School Bd., 3 story, 147 & 170 ft. concrete and brick, 11th St.

Tex., Ft. Worth—Hospital—Jan. 1, by Ft. Worth Methodist Hospital c/o W. G. Clarkson & Co., archts., First Natl. Bank Bldg., 9 story, rein.-con. and brick, plain foundation, Cannon St. $1,000,000. G. W. Williams, Boston, Mass., engr. Noted July 12.

Tex., Houston—Library—City Com. taking bids 3 story and basement, brick concrete and stone. $200,000. W. W. Watkins, Scanlan Bldg., archt. Noted Oct. 11.

Tex., Texarkana — Hotel — Jan. 3, by Mann & Stern, archts., A.O.U.W. Bldg., Little Rock, Ark., 8 story, rein.-con., brick, steel and stone, for Texarkana Hotel Co. $300,000.

Ariz., Tucson—Library—Jan. 3, by Bd. Regents, c/o Lyman & Place, archts. and engrs., 79 North Stone Ave., 3 story and basement, 42 x 110 x 194 ft., brick, terra cotta, steel and rein.-con., on campus, here. $405,000. Former bids rejected. Noted Nov. 8.

Calif., Los Angeles—High School—Dec. 26, by Bd. Educ., 2 and 3 story high school group, 135 x 247 ft. and 44 x 144 ft., rein.-con. and brick, Record St. and Brooklyn Ave. $300,000. E. H. Cline, 743 North Wilton Ave., archt.

Calif., Los Angeles—Hotel and Store—L. L. Smith, archt., Byrne Bldg., receiving bids 14 story and basement, rein.-con., South Main St., for W. W. Paden, Story Bldg. To exceed $500,000. Noted Oct. 4.

Calif., Los Angeles—Store and Office—Norton & Willis, archts., 716 South Spring St., receiving bids 13 story, 58 x 135 ft., Class A construction, 7th and Spring Sts., for Cahn-McCabe Co., 716 South Spring St.

Calif., Petaluma — Bank — Sonoma Co. Natl. Bank will build 1 story and basement, rein.-con., by separate contracts under supervision of H. H. Winner Co., archts., Sharon Bldg., San Francisco. $150,000.

Calif., San Francisco—Exchange—Bliss & Faville, archts., Balboa Bldg., taking bids 3 story and basement, Class A construction, Bush and Larkin Sts., for Pacific Telephone & Telegraph Co., 333 Grant Ave. $300,000. Noted Dec. 6.

BIDS RECEIVED

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., constructing Armstrong Manual Training School, (1) work complete, from G. E. Wyne, Home Life Bldg., (1) $469,700, $75, Alternate (2) $18,000, Alternate (3) $1,000; Schneider-Spliedt Co., 1416 F St., N. W., (1) $481,900 piles $65 each, Alternate (1) add $300, Alternate (2) deduct $10,000, Alternate (3) deduct $1,200; alternate on electric work (b) $200. Noted Nov. 29.

O., Mt. Vernon—School—Bd. Educ. Dec. 10, 2 story and basement, 64 x 146 ft., brick and concrete, from Taylor & Owen, Coshocton, $93,245. Noted Nov. 29.

Ia., Cedar Falls—Dormitory—State Bd. Educ., Des Moines, 3 story and basement, rein.-con., brick, tile and stone addition to Iowa State Teachers College, here, from Tapager Constr. Co., Albert Lea, Minn., $136,867. Noted Nov. 22.

Minn., St. Paul—School—Summit School Corp., 655 Holly Ave., 2 story and basement, rein.-con., brick, tile and stone, Goodrich Ave. and Dunlap St., from P. O. Nasvik, 1368 Ashland Ave. Cost complete $175,000. Noted Sept. 27.

Calif., San Francisco—Orphanage—Bliss & Faville, archts., Balboa Bldg., 3 story administration building, six 2 story concrete and stucco cottages, and 1 story, rein.-con. laundry and power house, on

Buildings (Continued)

10 acre site, bounded by 28th and 30th Aves., Vicente and Wawona Sts., from Lindgren-Swinerton, Inc., Standard Oil Bldg., $350,000. for San Francisco Protestant Orphanage Society, c/o architects. Noted Aug. 9.

CONTRACTS AWARDED

Mass., Boston—Hospital—Massachusetts Women's Hospital, 3 story and basement, 80 x 120 ft., brick and stone, wood pile foundation, 53 Parkerhill Ave., to D. Donaldson, 99, Pine St., Belmont (Boston P. O.), $150,000. Noted Sept. 27.

Conn., Hartford — High School — High School Comn., 3 story, brick and steel, plain foundation, Maple Ave., to Southern New England Contg. Co., 703 Main St., $1,170,125. Noted Dec. 13.

N. Y., Brooklyn—Apartment—Chalven Court Constr. Co., c/o Kieswetter & Hamburger, archts. and engrs., 186 Remsen St., will build 4 story, brick, steel and stone, Bay Pkway., by day labor. $150,000.

N. Y., Brooklyn—Apartment—Hicklow Constr. Co., c/o W. I. Hohausen, archt. and engr., 116 West 39th St., New York, will build 5 story, 100 x 200 ft., brick, steel and stone, Bedford Ave., here, by day labor, $300,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, P. S. 202, brick, steel and stone, plain foundation, Hegeman and Atkins Aves., here, to G. Colon & Co., 81 East 125th St., New York, $996,400. Noted Dec. 6.

N. Y., Elmhurst—Apartment—S. Evans, c/o Stone Bros., archts. and engrs., 361 Stone Ave., Brooklyn, will build 4 story, brick, steel and stone, Jackson Blvd., here, by day labor. $250,000.

N. Y., New York—Apartment—A. Blumenthal, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, Harrison Ave., by day labor. $350,000.

N. Y., New York—Apartment—C. Mark Realty Corp., c/o Springsteen & Golhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, Haven Ave., by day labor. $400,000.

N. Y., New York—Apartment—M. Minskoff, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, Stebbins Ave., by day labor. $350,000.

N. Y., New York—Apartment—S. Minskoff, c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 6 story, 150 x 150 ft., brick, steel and stone, Kingsbridge Rd., by day labor. $500,000.

N. Y., New York — Apartment — One Thirty-Six East Thirty-Sixth St. Corp., will build brick, steel and stone, East 36th St., by day labor. $500,000. G. F. Pelham, 200 West 72nd St., archt. and engr.

N. Y., New York—Apartment—S. Root, c/o C. B. Meyers, archt. and engr., 31 Union Sq., will build 6 story, brick, steel and stone, West 44th St., by day labor. $250,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 71, Roberts and Jarvis Aves., to G. Colon & Co., 81 East 125th St., $772,000. Noted Dec. 13.

N. Y., Richmond Hill (Branch of Jamaica) — School — Bd. Educ., 500 Park Ave., New York City, P. S. 121, 109th Ave. between 126th and 127th Sts., here, to Oscawana Building Co., 110 East 42nd St., New York, $785,700. Noted Dec. 13.

Pa., Greensburg—School—School Dist., 2 and 3 story, 120 x 300 ft., to Natl. Concrete Fireproofing Co., Citizens Bldg., Cleveland, O., $250,000.

Pa., Phila. — Office — Insurance Co. of North America, 3rd and Walnut Sts., 16 story, 147 x 220 ft. steel, brick, granite, limestone and terra cotta, 16th and Arch Sts., to Stone & Webster, Real Estate Trust Bldg., $3,000,000. Sub contracts will be taken about Jan. 1 by contractor.

Del., Newark — Library — University of Delaware, 2 story and basement, 83 x 188 ft., brick and steel, plain foundation, to Delaware School Auxiliary Assn., Dupont Bldg., Wilmington, $250,000. Noted May 3.

Md., Baltimore—School—Calvert School, Inc., c/o L. H. Fowler, archt., 347 North Charles St., 2 story, 110 x 160 ft., brick, plain foundation, University Circle and 40th St., to Consolidated Eng. Co., Calvert Bldg., $165,000. Archts. est. $150,000. Noted Nov. 22.

N. C., Greensboro—College—North Carolina College for Women, 2 dormitories, physical education building and addition to dining hall, general contract to J. A. Jones, Realty Bldg., Charlotte. $453,500; heating, to B. McKenzie, Greensboro, $45,805; plumbing, to W. P. Donaldson, Greensboro, $34,577. Noted Nov. 15.

Fla., Melbourne — Hotel — Melbourne Building and Investment Co., 3 story steel, to E. H. Barbo, West Palm Beach, $315,000.

Miss., Jackson—Bank—First Natl. Bank Bldg. 3 story, South Congress and Capitol Sts., to Sumner & Sollit Co., Natl. Bank of Commerce Bldg., San Antonio, Tex., $250,000.

O., Cincinnati—Apartment—Fourth and Bway. Apartments Co., 4th and Main Sts., 12 story, rein.-on., 4th and Bway., to Ferro Concrete Constr. Co., 3rd and Elm Sts., $700,000. Noted Sept. 27.

O., Cleveland — Apartments — S. Kraus, 8902 Kempton Ave., two 3 story and basement, 32 x 165 ft. brick and wood, 832-836 Lakeview Rd., to M. Berkoff, 3346 East 135th St., $160,000.

O., Cleveland Heights (Warrensville P. O.)—Commercial and Apartment—H. Caplan, 3464 East 123rd St., Cleveland, masonry contract 2 story and basement, 54 x 128 ft., brick and timber, Coventry and Hampshire Rds., here, to B. Zuckerman, 11605 Kinsman Rd., Cleveland. Archts. est. $150,000.

O., Lakewood (Cleveland P. O.)—Apartment)—W. M. Blusinsky, 508 Ulmer Bldg., 3 story and basement, 94 x 115 ft. brick, 202 Atkins Ave., to S. Friedman, 9920 Somerset Ave., Cleveland, $150,000. Noted Dec. 6.

O., Lakewood (Cleveland P. O.)—High School—Bd. Educ., 1456 Warren Rd., 2 story and basement, 89 x 259 ft., concrete, brick and steel, Hilliard Rd., to F. H. Vogel, Ridge Rd., Cleveland, $361,000. Noted Dec. 13.

O., Lima — High School — Bd. Educ., 2 story and basement, rein.-con. and brick, to Green & Sawyer, Lima, $123,799. Noted Dec. 13.

Mich., Flint—Theatre, Bank and Offices—Flint Bldg. Corp., 415 Genessee Bank Bldg., general contract 6 story, 153 x 334 ft., rein.-con. and steel, to Wells Bros. Constr. Co., 53 West Jackson Blvd., Chicago, $2,500,000.

Ill., Belleville—High School—Bd. Educ., general contract 2 story and basement, brick, rein.-con. and stone auditorium to S. M. Wilson, Granite City, $138,000, gymnasium to Boyer Contg. Co., Kennett, Mo., $9,900; heating for both to Karr Supply Co., 129 West Main St., Belleville, $38,357. Noted Oct. 4.

Ill., Joliet—High School—Bd. Educ., 4 story, 145 x 145 ft., rein.-con., brick, stone and steel, Eastman Ave., to Schmidt Bros. Constr. Co., 22 East Huron St., Chicago. Archts. est. $500,000. Noted June 7.

Wis., Milwaukee—Apartment—J. Hunholz, 2310 Vliet St., concrete work for two 8 story and basement, 52 x 100 ft. concrete and brick, plain foundation, Mason St., to Cutter Costr. Co., 886 46th St. Noted Nov. 22.

Ia., Ames—Dormitory—State Bd. Educ., Des Moines, general contract 3 story and basement, rein.-con., brick and stone, on campus of Iowa State College here, to F. M. Eller, Ames, $129,000.

Ia., Des Moines — Store, etc. — Brown-Camp Hardware Co., 330 Southwest 5th St., 6 story and basement, 128 x 288 ft., rein.-con. and brick store and warehouse, West 1st and Elm Sts., to A. H. Neumann & Co., Hubbell Bldg., $450,000.

Minn., Slayton—School—Bd. Educ., 2 story and basement, rein.-con., brick and tile, general contract to F. W. Fais, Spencer, Ia., $95,331. Noted Nov. 22.

Minn., St. Paul—Gymnasium, etc.—Macalester College, Grand and Snelling Aves. ,2 story and basement, 88 x 188 ft., rein.-con., brick and stone, to James Leck Co., 316 South 7th St., Minneapolis, $138,000. Noted Nov. 22.

Mo., St. Louis—High School—Bd. Educ., 911 Locust St., general contract William Beaumont High School, 3 story, 307 x 375 ft., rein.-con., brick, steel, stone and terra cotta, Natural Bridge Rd., to H. C. Gerhard Building Co., Century Bldg., $1,240,000; heating and ventilating apparatus, to Sodeman Heating & Power Co., 23rd and Morgan Sts., $156,447; plumbing, to H. D. M. Doerner, 2701 South Bway., $93,315. Noted Dec. 13.

Tex., Dallas—Office—Lone Star Gas Co., Amer. Exch. Bank Bldg., 4 story and basement, brick, concrete and steel, to H. O'Rourke, Wilson Bldg., $175,000. Noted July 13.

Calif., Long Beach — Apartment and Store—C. H. and F. Stillwell, 115 American Ave., 12 story and basement, rein.-con., 3rd and Cedar Aves., to Vaughan Constr. Co., Chapman Bldg., Los Angeles, to exceed $750,000. Noted June 21.

Calif., Los Angeles—Auditorium, etc.—Hollywood High School Dist., 2 story and basement, rein.-con. and brick auditorium and boiler house, to Olcester & Kerr, 1528 Ramona Ave., South Pasadena, $240,800. Noted Dec. 6.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., 4 story and basement, brick and steel addition, Rampart St., to J. Mathis, 753 South San Pedro St., $195,000.

Calif., Los Angeles—Hotel—L. Chan, c/o L. L. Jones, archt., Grosse Bldg., will build 5 story and basement, rein.-con., Columbia Ave. and Acacia St., by day labor. $175,000.

Calif., Los Angeles — Loft — Wayside Press, 311 East 4th St., 3 story and basement, 113 x 129 ft., 9th and San Pedro Sts., to Los Angeles Building and Contg. Co., Marsh-Strong Bldg., 178,000.

Calif., San Francisco—Bungalow Apartment—L. Heilmann, 645 Bush St., will build group of 18 buildings, 1 story, frame and stucco, Bay and Larkin Sts., by day labor. $150,000. G. Stahlberg, Flatiron Bldg., archt. Noted Dec. 13.

Calif., San Francisco — Office — Pacific Telephone & Telegraph Co., 333 Grant Ave., 26 story and basement, steel and rein.-con., New Montgomery St., to Lindgren-Swinerton Co., Inc., Standard Oil Bldg., $2,500,000.

Calif., Stockton—College—College of the Pacific, college buildings, general contract to R. W. Moller, Call Bldg., San Francisco, $526,125; power, heating, ventilating, plumbing, gas fittings and sheet metal work to Miller Hayes Co., 125 North California St., $102,500; electric work to F. E. Newberry Electric Corp., 381 Bush St., San Francisco, and Commercial Electric Co., 311 East 12th St., Stockton, $77,900. Noted Dec. 13.

Ont., Ottawa—Archives—Dept. Pub. Wks. Dominion Government, rein.-con. and stone, Sussex St., to P. Lyall & Son Constr. Co., Ltd., 5000 Western Ave., Montreal, Que., $338,000. Noted Oct. 25.

Que., Montreal—Office—Montreal Harbor Comrs., 3 story, 54x108 ft. rein.-con., brick and steel, Victoria Pier, to Colles & Freres, 1243 St. Hubert St., $150,000. Noted Dec. 13.

Federal Government Work

PROPOSED WORK

Mass., Thatchers Island—Radio Station—Spec. 4932—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans radio compass station, here.

D. C., Wash.—White House—Treasury Dept., Wash., D. C., J. A. Wetmore, acting superv. archt., preparing plans 3 story and basement, 100 x 100 ft. stone and brick addition. $400,000. C. O. Sherrill, Room 1056, New Navy Bldg., 19th and B Sts., N. W., will probably take bids.

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, plans to purchase 35,000 bbl. cement for lock at Dam 46, Ohio River.

Ky., Owensboro—Forgings, Castings, etc.—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 10 tons cold rolled steel forgings, 1,700 lb. phosphor bronze castings, 28 tons reinforcing bars, etc., for river wall valves, Dam 46, Ohio River, here.

Ill., Great Lakes—Coal Bunkers, etc.—Spec. 4929—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids coal storage bunkers and railroad siding at Naval Training Station, here. Noted Dec. 6.

Calif., Presidio (San Francisco P. O.)—Warehouse — Constructing Quartermaster, Ft. Mason, having plans prepared 3 story, 95 x 900 ft. rein.-con. warehouse, here.

Calif., San Diego—Barracks—Spec. 4933—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans barracks and storehouse, at Naval Base, here. Noted June 27 under Spec. 4765.

Porto Rico, San Juan—Quarters—Spec. 4909—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids double quarters and auxiliary buildings, at Naval Radio Station, here. Noted Dec. 6.

BIDS DESIRED

N. J., Lakehurst—Material, Piping, etc.—Dec. 27, in Room 6117, Interior Dept., Wash., D. C., furnishing labor, material, piping, concrete and electrical work for installation in and around generator building, U. S. Naval Air Station, here.

Pa., Phila.—Scow—Jan. 9, by U. S. Engineer, Schaaf Bldg., 1505 Race St., constructing one 60 x 22 x 5 ft. 11 in. wooden scow, to be delivered at Ft. Mifflin, here.

D. C., Wash.—Filtration Plant, etc.—Jan. 15 at office U. S. Engineer, 250 Old Land Office Bldg., Wash., D. C., filtration plant and pumping station substructures for District of Columbia water supply system; adv. E. N.-R. Dec. 20.

D. C., Wash.—Underpinning Foundations—Spec. 4934—Jan. 9 by Bureau Yards & Docks, Navy Dept., Wash., D. C., underpinning foundations to Navy Building, here.

N. C., Cape Hatteras — Storage and Recreation—Spec. 4931—Jan. 9 by Bureau Yards & Docks, Navy Dept., Wash., D. C., storage and recreation room, here.

N. C., Poyner's Hill—Quarters and Boathouse—Spec. 4907—Jan. 9, by Bureau Yards

Federal Government Work (Continued)

& Docks, Navy Dept., Wash., D. C., remodeling quarters and constructing boathouse, here. Noted Sept. 20.

Ga., **Fort Benning**—Quarters—Dec. 26, at office Constructing Quartermaster, six double sets officers quarters, here; adv. E. N.-R. Dec. 20. Former bids rejected. Noted Nov. 29.

Ky., Louisville—Operating Machinery—Dec. 22 (extended date) at office U. S. Engineer, P. O. Box 72, operating machinery for Dams 44 and 45, Ohio River. Noted Nov. 22.

Wis., Milwaukee—Scows and Barge—Jan. 16, at office U. S. Engineer, steel dump scows and barge; adv. E. N.-R. Dec. 20.

Wash., Keyport—Extension to Building—Spec. 4926—Jan. 2, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to operating building, here. Noted Nov. 29.

H. T., Pearl Harbor—Storehouse—Spec. 4911—Feb. 6 by Bureau Yards & Docks, Navy Dept., Wash., D. C., paint and oil storehouse, here. Noted Oct. 4.

BIDS RECEIVED

Pa., Allentown — Remodeling — Treas. Dept., Wash., D. C., remodeling U. S. Post Office, here, from Garber & Cissel, Inc., 203 West 4th St., Bethlehem, $9,000. Noted Nov. 15.

Ala., Montgomery—Towboat—U. S. Engineer, 1 steam towboat, from Johnson Iron Wks. and Fdry. Co., Morgan and Seguin Sts., New Orleans, La., $171,000. Noted Nov. 8.

Ind., Clinton—Post Office—Treas. Dept., Wash., D. C., construction of U. S. Post Office, here, from D. Bright, Clinton, $43,000.

Ind., South Bend—Post Office—Treas. Dept., Wash., D. C., constructing extension to U. S. Post Office, here, from Platz & Gill South Bend, $7,156. Noted Nov. 22.

Wis., Ripon—Post Office—Treas. Dept., Wash., D. C., construction complete incl. mechanical equipment, U. S. Post Office, here, from J. Laureitzen, Fergus Falls, Minn., $49,995. Noted Nov. 22.

Okla., Oklahoma City — Pump — Treas. Dept., Wash., D. C., deep well pump, here, from J. L. Powers, Bennettsville, S. D., $2,300. Noted Nov. 22.

CONTRACTS AWARDED

Mass., Hingham—Repairs to Seawall—Spec. 4908—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to walls of slip at Naval Ammunition Depot, here, to Cement Gun Co., Inc., Allentown, Pa., $9,200. Noted Nov. 15.

N. Y., Hoosick Falls—Post Office—Treas. Dept., Wash., D. C., constructing U. S. Post Office, Main St., here, to Sarles Constr. Co., 527 5th Ave., New York, $58,564. Noted Nov. 15.

N. Y. New York—Dredging, etc.—U. S. Engineer, Army Bldg., 39 Whitehall St., dredging and rock removal in East River, to Bridgeport Dredge and Dock Co., 1024 Main St., Bridgeport, Conn., $261,430. Noted Nov. 15.

N. Y., New York—Dredging, etc.—U. S. Engineer, 1st Dist., Army Bldg., 39 Whitehall St., dredging and rock removal in East River, to F. H. Lovell Co., Arlington, N. J., $3,033. Noted Nov. 1.

Pa., Pittsburgh—Cement—U. S. Engineer, furnishing 53,000 bbl. cement for lock construction on Monongahela River, to Universal Portland Cement Co., Frick Bldg., $2.30. Noted Dec. 6.

Va., Fort Monroe — Steel Tank — Constructing Quartermaster, elevated steel water tank, here, to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $17,400.

S. C., Clinton—Post Office—Treas. Dept., Wash., D. C., 1 story, 62 x 64 ft., brick and tile, here, to Perkins Constr. Co., Greenville, $42,485. Noted Nov. 1.

Ga., Fort Benning—Hospital—Constructing Quartermaster, hospital building, here, to E. A. Boehl Co., Leavenworth, Kan., $268,713. Noted Nov. 29.

La., New Orleans—Barge—U. S. Engineer, Custom House, one steel barge to Dravo Contg. Co., Diamond Bldg., Pittsburgh, Pa., $20,400. Noted Nov. 1.

La., New Orleans—Steel Oil Barges—U. S. Engineer, 1 steel oil barge to Johnson Iron Wks., Drydock and Shipbuilding Co., Morgan and Seguin Sts., $21,420; 1 steel oil barge to W. P. Copping Steel Plate and Iron Wks., Inc., 401 North St. Patrick St., $27,400.

Ky., Louisville—Barges—U. S. Engineer, for steel barges, sixteen 6½ x 46 x 110 ft. steel barges, to American Bridge Co., Ambridge, Pa., $256,550; two 7½ x 36 x 120 ft. steel barges with cargo boxes, to Nashville Bridge Co., foot of Shelby St., Nashville, Tenn., $57,440; two 5 x 25 x 100 ft. steel barges without cargo boxes, to C. Hegewald & Co., New Albany, Ind., $30,900. Noted Dec. 6.

H. T., Pearl Harbor—Storehouse—Spec. 4859—Bureau Yards & Docks, Navy Dept., Wash., D. C., 1 story, 120 x 480 ft., steel and concrete storehouse at Naval Operating Base, here, to David & Nicholson, 324 West Lafayette St., Stockton, Calif., $173,374 (240 days). Noted Nov. 22.

Unclassified

PROPOSED WORK

Memorial — Hartford, Conn. — Park Bd., Municipal Bldg., appropriated $25,000 for war memorial.

Gas Mains—Fort Myers, Fla.—See "Industrials."

Wharf and Shed—New Orleans, La.—Dock Bd. plans wharf and shed along river at St. Joseph St. $1,000,000. J. H. Walsh, genl. mgr.

Street Lighting System—Oconomowoc, Wis. — Making plans ornamental street lighting system on West Ave., Milwaukee, North and South Main Sts., 100 iron standards and lamps. $25,000. J. A. Stemper, City Hall, engr.

Park Improvements—Eureka, Calif.—City plans election to vote on $65,000 bond issue for park improvements.

Street Lighting System—Oakland, Calif.—City plans street lighting system on Bway. between 14th and 24th Sts. $50,000.

Transmission Lines—Willits, Calif.—See "Dam."

BIDS DESIRED

Bulkhead—Long Island City, N. Y.—Dec. 28, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., bulkhead at end of 3rd St., on westerly side of Dutch Kills Creek.

Heating and Ventilating Apparatus — Brooklyn, N. Y.—Dec. 28, by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., heating and ventilating apparatus in P. S. 205, 20th Ave. from 67th to 68th Sts., for Bd. Educ., 500 Park Ave., New York.

Swimming Pool—Taylor, Tex.—Jan. 7, by city, rein.-con. swimming pool and tile dressing room. $25,000. Giesecke & Harris, Austin, archts.

Transmission Towers — San Francisco, Calif—Jan. 9 by Bd. Pub. Wks., furnishing steel transmission towers for Mocassin Creek Power Plant of Hetch Hetchy Project, incl. 394 standard towers, 98 heavy duty towers and 12 transmission towers with foundation stubs, 3 special towers with foundation steel and 60,000 lb. tower extension steel. Towers divided into 4 general types: (1) standard (2) heavy duty (3) transposition (4) special towers. $500,000. M. M. O'Shaughnessy, city engr.

CONTRACTS AWARDED

Concrete Wall—Hartford, Conn.—South School Dist., underpinning school wall, concrete, to Foundation Co., 120 Liberty St., New York City. Engrs. est. $25,000.

Heating, Ventilating, Plumbing, etc. — Phila., Pa.—F. H. Caven, dir. Pub. Wks., 216 City Hall, and Bd. Trustees Free Library of Phila., heating and ventilating system for free library, Vine, 20th, Wood and 19th Sts., to J. Cooney, 210 North 4th St., Harrison, N. J., $397,500; plumbing, etc., to W. G. Cornell Co., Colonial Trust Bldg., $236,000. Noted Nov. 29.

Culverts, etc.—Clearwater, Fla.—Pinellas Co. concrete culverts, fills, bulk heading, etc., on various roads, to Latham & Ward, Dade City, $62,440.

White Way — Chattanooga, Tenn. — Bd. Comrs., "White Way" system on Main St., to Tennessee Electric Power Co., Chattanooga. Est. cost to exceed $25,000. Noted Nov. 22.

Foundation—Louisville, Ky.—See "Proposed Work Under Buildings."

Track Elevation—Cleveland, O.—Cleveland Electric Illuminating Co., c/o R. Lindsey, genl. mgr., Pub. Sq., elevating 350 ft. track, concrete piers, wood and steel platform, to S. W. Emerson Co., Union Bldg., $40,000.

Amusement Park—Houston, Tex.—Houston Amusement Park Co., 2200 Houston Ave., will construct walks, drives, riding devices, etc., by day labor. $100,000.

Concrete Tanks—San Antonio, Tex.—San Antonio Portland Cement Co., Lakeview Ave., 3 concrete stacks, 8 ft. 6 in. diameter at top, 201 ft. high, 213 ft. overall length, incl. 330 cu.yd. earth excav., 700 cu.yd. rein.-con., 50,000 fire brick, to J. De Puy, Bedell Bldg., $23,290. Noted Nov. 29.

Materials and Equipment

PROPOSED WORK

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924: Kewaunee Co. $6,000, H. Griese, Algoma, comr.; Iron Co. $10,000 incl. tractor and snow plow, W. Webber, Saxon, comr.; Jefferson Co. $19,000 incl. tools and machine shop equipment, also 1 scarifier, R. D. Royce, Ft. Atkinson, comr.; Burnett Co. $2,000 incl. large tractor, grader and patrol graders, G. E. Miller, Webster, comr.; Rusk Co. $7,000, incl. 6 patrol graders, 10 or 15 ton tractor and four trucks, P. Koehler, Ladysmith, comr.; Portage Co. $35,000 incl. 2 stone crushers, 4 trucks, some graders, scrapers, etc. J. T. Henton, Portage, comr.; Ozaukee Co. $17,500 incl. small tools and snow removal machinery, W. J. Ubbink, Port Washington, comr.

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Eau Claire Co. $25,000, incl. rock crusher, patrol graders, etc., G. Osborne, Eau Claire, comr.; Dodge Co. $5,000, E. T. Klug, Juneau, comr.; Langlade Co. $14,000, C. Olsen, Antigo, comr.; Dane Co. $15,000, incl. tractor and oiling equipment, J. R. Caldwell Madison, comr.; Buffalo Co. $3,000, incl. patrol graders, J. Reinhardt, Nelson, comr.

Crusher — Rush Tower, Mo. — Missouri Marble Quarries, Inc., St. Louis, plans to purchase crusher to handle waste and which also could be used for road building material. $75,000. G. J. Breaker, Boatmen's Bank Bldg., St. Louis, one of incorporators.

BIDS DESIRED

Tractors, etc.—Ballston Spa, N. Y.—Bd. Supervs. Saratoga Co. taking bids four 10 ton caterpillar type tractors, 1 Fordson type tractor, 4 rotary type snow plows and 1 plow. J. E. Hodgman, supt. highways.

Road Oil—Madison, Wis.—Dane Co. Bd., c/o J. R. Caldwell, comr., taking bids road oil for approximately 100 mi. gravel roads. $100,000 appropriated. Private plans.

Stone, etc.—Oshkosh, Wis.—Winnebago Co. Road & Bridge Comn., c/o W. H. Hoppe, secy., taking bids 16,000 cu.yd. crushed stone and 8,000 cu.yd. gravel, 40 tons ⅝ in. round steel, for road work next season.

Bridge Material—Allison, Ia.—Dec. 26, by Auditor Butler Co., furnishing 3 cars 2 in. oak bridge flooring and 6 cars No. 1, rough fir bridge plank.

Lumber — Indianola, Ia. — Dec. 28, by Auditor Warren Co., 5,420 ft. piling, 203,000 ft. fir bridge lumber and 110 posts. R. E. Boyle, co. engr.

Lumber—Montezuma, Ia.—Dec. 26, by Auditor Poweshiek Co., 180,290 ft. fir lumber. C. E. Olson, co. engr.

Reinforcing Steel Rods, etc.—St. Paul, Minn.—Dec. 26, by H. W. Austin, city purch. agt., 418 tons reinforcing steel rods; 10,000-gal. tank car of low test gasoline. G. M. Shepard, city engr.

Grader—Marlin, Tex.—Auditor of Falls Co. taking bids 7 ft. road grader.

Valves and Connections—San Francisco, Calif.—Jan. 9, by Bd. Pub. Wks., 3 Butterfly valves, each 104 in. inside diam., 1 c.i. blind flange for one side of valve, 1 steel platform extending over valves, and all operating mechanism for all valves, bypass valves and connections, all bolts and gaskets for joints and bolts for foundation and platform. Will be used in connection with Hetch Hetchy Moccasin Creek Power plant. $40,000. M. M. O'Shaughnessy, city engr.

BIDS RECEIVED

Cement — Brooklyn, N. Y. — E. Riegelmann, boro pres., Boro Hall, Dec. 12, 3,000 bbl. portland cement, from E. E. Buhler Co., 103 Park Ave., New York, $8,370. Noted Dec. 6.

CONTRACTS AWARDED

Steel—Greenville, Miss.—Furnishing steel for bridge, 60 ft. span, 18 ft. roadway, structural and reinforcing steel, to Lukens Steel Co., 626 South Peters St., New Orleans, La., $49,930.

Wire and Cables—Austin, Minn.—City, 124,500 lin.ft. 0-4-6-8 cable to North Western Electric Equipment Co., 174 East 6th St., St. Paul, and Pierce Electric Co., Austin, $22,514 and $9,358 respectively; 8,200 lb. 4-6-8-10 T.B.W.P. wire, to St. Paul Electric Co., 145 East 5th St., St. Paul, $1,684; switchboard and equipment to General Electric Co., 410 3rd Ave. N., Minneapolis, $7,110. Noted Nov. 29.

Cranes, etc.—Longview, Wash.—Long-Bell Lumber Co., one 10 ton, one 3 ton and ten 5 ton electric cranes, 5 lumber trolleys equipped with Sumner type grapple, 11 two-way switches and 6,000 ft. track, to Pawling & Harnischfeger Co., 38th St. and National Ave., Milwaukee, Wis.; 6,000 ft. conveyor belts to Pioneer Rubber Mills, 68 Sacramento St., San Francisco, Calif.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Jan. 7.

Notice Inviting Bids for Making Test and Core Borings at San Gabriel Dam Site and Vicinity

Los Angeles, Calif.

Notice is hereby given that sealed bids will be received by the Clerk of the Board of Supervisors of the Los Angeles County Flood Control District, State of California, until 11 o'clock a.m. of January 7, 1924, for core and test drilling, for the testing of the underlying formations for a dam site, the location of which is just below the confluence of the west fork of the San Gabriel River with the main San Gabriel River, which point is about eleven (11) miles northward from Azusa and about thirty-two (32) or thirty-three (33) miles northeasterly from Los Angeles.

The proposed contract embodies the material, equipment and labor for the drilling of approximately thirty (30) test holes, (more or less), of indefinite depths, the upper portions of the formation at the dam site being of material designated as boulder wash, and the material below the boulder wash, or detrital material, as bed rock.

The approximate amount of drilling in an indefinite number of holes through the boulder wash material and bed rock is about three thousand (3,000) lineal feet, divided into seven (7) classes—"A," "B," "C," "D," "E," "F," "G," which classes indicate the different depths below the surface and which may occur in any or all holes.

Class A, about 300 feet, more or less, in boulder wash material.

Class B, about 300 feet, more or less, in boulder wash material.

Class C, about 300 feet, more or less, in boulder wash material.

Class D, about 300 feet, more or less, in boulder wash material.

Class E, about 200 feet, more or less, in boulder wash material.

Class F, about 100 feet, more or less, in boulder wash material.

(All the six foregoing classes in these specifications to be in what is called boulder wash material.)

Class G, fifteen hundred (1,500) feet more or less, in an indefinite number of holes in the bed rock, beneath the boulder wash or beneath the boulder wash encountered in the drill holes of Classes A, B, C, D, E, and F, or in any other holes in the bed rock from which the boulder wash material has been removed, the holes to be drilled vertically, or at an angle up to sixty degrees (60°) from a vertical line, and at such places as the Chief Engineer may designate upon either side of the dam site, or its vicinity, and below the elevation of 1,380 U.S.G.S. datum.

Each bid must be in duplicate and accompanied by certified or cashier's check, payable to the Chairman of the Board of Supervisors of the Los Angeles County Flood Control District for an amount equal to at least ten per cent (10%) of the amount bid, as a guarantee that the bidder, if successful, will enter into a contract satisfactory to the Board of Supervisors, and the successful bidder will be required to file good and sufficient bonds for the faithful performance of the contract and for the payment of laborers and materialmen.

The right is reserved to reject any and all bids not suitable to the best interest of the District.

Drawings, specifications, proposal blanks and other information may be obtained on application to the Clerk of the Board of Supervisors of Los Angeles County Flood Control District, Los Angeles, California.

OFFICIAL PROPOSALS

By order of the Board of Supervisors of the Los Angeles County Flood Control District, made November 15, 1923.

L. E. LAMPTON,
Clerk of the Board of Supervisors of the Los Angeles County Flood Control District.
By A. M. McPHERRON,
Deputy.

Date of first publication Nov. 17, 1923.
(50694)

Bids: Dec. 28.

Bridge

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commisson of New Jersey for the following:

Bids will be received at the Assembly Chamber, State House, Trenton, New Jersey, on Friday, December 28th, 1923, at the hour named below, and will be opened and read immediately thereafter.

BIDS AT 12:00 NOON (STANDARD TIME)

Construction of a bridge of 73 feet span and 30 feet roadway consisting of structural steel encased in concrete supported on concrete abutments with wing walls, including approaches of reinforced concrete on earth embankment, excavation of channel and removal of existing bridge over Passaic River, M. P. 32.2, State Highway Route No. 16, in the municipalities of Bernard and Passaic, Counties of Somerset and Morris.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids must be made on the standard proposal form in the manner designated therein and as required by the specifications for this work, same to be enclosed in sealed special addressed envelopes, bearing the name and address of the bidder and the work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application to Mr. John L. Vogel, Bridge Engineer, 772 Broad Street, Newark, New Jersey. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provsions of the said specifications conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

OFFICIAL PROPOSALS

Bids: Jan. 8.

Fire Escapes

Sonyea, N. Y.

Sealed proposals for Construction—Fire Escapes, at Craig Colony, Sonyea, N. Y., will be received by Mr. Percy L. Lang, President, Board of Managers, Craig Colony, Sonyea, N. Y., until 2 o'clock p.m. on Tuesday, January 8, 1924, when they will be publicly opened and read. Proposal shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4182. The right is reserved to reject any or all bids. Drawings and specifications may be examined at Craig Colony, Sonyea, N. Y., at the Department of Architecture, 18th Floor, Fuller Bldg., Broadway and 23rd Street, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: December 13, 1923.

Bids: Jan. 2.

Sewerage System

Long Branch, N. J.

Notice is hereby given that sealed proposals will be received by the Board of Commissioners of the City of Long Branch, New Jersey, for the building of a separate sewerage system, together with a pumping station, in the northerly section of the city, and will be opened and read at a meeting of the Board of Commissioners held at City Hall on Wednesday evening, January 2, 1924 at 8 o'clock, or as soon thereafter as may be called for.

The approximate amount of work to be done consists of 11,000 feet of main sewer, 5,000 feet of connections to the curb with necessary manholes and pumping station, all as shown on plans and specifications prepared by J. Wesley Seaman, City Engineer, which may be obtained by applying to the Engineer at his office, 192 Broadway, Long Branch, N. J., upon a deposit of $10, which will be refunded upon the return of the plans and specifications in good condition at the time the bids are received.

Bids must be made on the standard proposal form, in the manner designated therein and required by the specifications, and must be enclosed in sealed envelopes bearing the name and address of the bidder and marked "Bids for Sewer," and addressed to Frank C. Quinn City Clerk and must be accompanied by a certified check for not less than 10 per cent of the amount bid on the work, drawn to the order of Frank L. Howland, City Treasurer, or cash in equal amount.

The Board of Commissioners reserves the right to reject any or all binds if deemed to the best interest of the Board so to do.

Dated, Long Branch, N. J., December 13, 1923.

FRANK C. QUINN,
City Clerk.

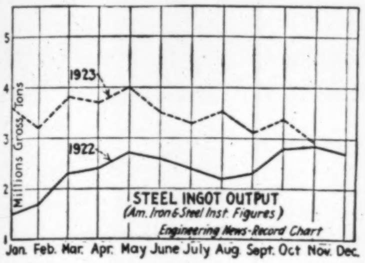
CONSTRUCTION NEWS

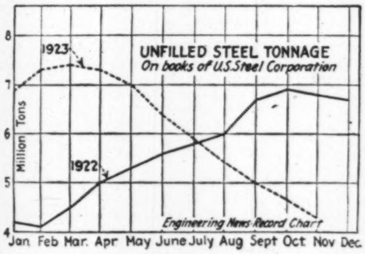
Engineering News-Record, December 27, 1923

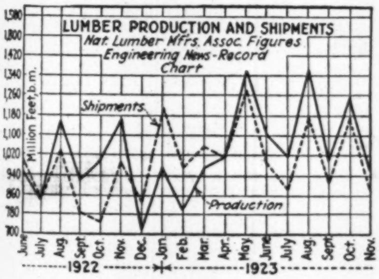
The Construction Barometer

Slower Pace in Industrial Activity—Production Conditions Exactly Opposite One Year Ago

THE reported slower pace in industrial activity is confirmed by the charted trends in iron, steel, lumber and cement production, as shown below. Pig-iron, steel ingot and lumber output declined considerably during November of this year, against an exactly opposite condition existing in November, 1922. From March to October, 1922, the unfilled steel tonnage steadily rose; during the same period this year it gradually dropped. Although unfilled tonnage declined during the last quarter of 1922, the drop from October to November of this year was unusually abrupt. Cement output, though lessened, conforms closely to the regular seasonal trend. November debits to individual accounts (Federal Reserve) showed only a slight drop from the preceding month, against a sharper decline last year. Payments of debts are normally heavier in the last three months of the year than during the preceding quarter.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Dec. 6	$9,806,000	$20,846,000	$30,652,000
Dec. 13	10,775,000	16,335,000	27,110,000
Dec. 20	22,207,000	20,068,000	42,275,000
3 weeks	$42,788,000	$57,249,000	$100,037,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

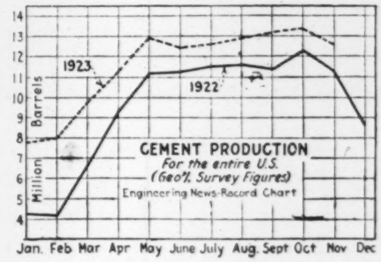
Week Ended	No.	Public Work	No.	Private Work
Dec. 6	20	$5,034,000	49	$14,770,000
Dec. 13	16	3,567,000	28	9,576,000
Dec. 20	17	7,988,000	28	16,008,000
3 Weeks	53	$16,589,000	105	$40,354,000

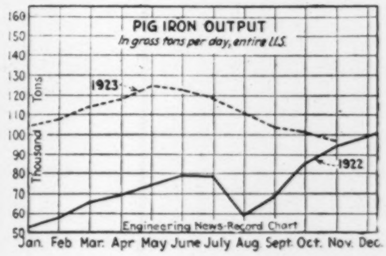
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

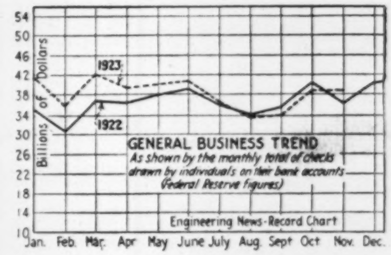
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Dec. 6	40	183	58	27	61
Dec. 13	38	177	50	33	56
Dec. 20	29	137	30	22	40

LUMBER LOWER—OTHER BASIC PRICES FIRM

	Quoted on Dec. 27, at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N. Y., M.ft.	58.00	59.00	Dec. 20
Fir, San Fran., M.ft.	38.00	41.00	Dec. 13
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 3	Erie, Pa.	Dec. 6
Jan. 3	Sacramento, Calif.	Dec. 27
Jan. 7	Ames, Ia.	Dec. 20
Jan. 8	Burbank, Calif.	Dec. 27
Jan. 10	Belzoni, Miss.	Dec. 20
Jan. 10	St. James, Mo.	Dec. 20
Jan. 14	North East, Pa. Adv. Dec. 27.	Dec. 27
Jan. 15	Oklahoma City, Okla. Adv. Dec. 20 and 27.	Dec. 20
Jan. 16	South Bend, Ind.	Dec. 20
Jan. 19	Charlottesville, Va. Adv. Dec. 27.	Dec. 27

SEWERS

Bids Close		See Eng. News-Record
Dec. 31	Granite City, Ill.	Dec. 27
Jan. 2	Long Branch, N. J.	Dec. 20
Jan. 2	Johnson City, N. Y.	Rec. 27
Jan. 3	Carrollton, Mo.	Dec. 27
Jan. 3	McKenzie, Tenn. Adv. Dec. 27.	Dec. 27

BRIDGES

Bids Close		See Eng. News-Record
Jan. 3	Robert Lee, Tex.	Dec. 27
Jan. 3	New Smyrna, Fla.	Dec. 27
Jan. 11	Seattle, Wash. Adv. Dec. 20 and 27.	Dec. 20
Jan. 22	St. Louis, Mo.	Dec. 27
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Jan. 7	Los Angeles, Calif.	Nov. 29
Feb. 7	Kingston, N. C.	Dec. 27

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Dec. 28	New York, N. Y.	Dec. 20
Dec. 29	Brooklyn, N. Y.	Dec. 20
Jan. 3	Senatobia, Miss.	Dec. 27
Jan. 17	Rochester, N. Y. Adv. Dec. 20 and 27.	Dec. 20
Jan. 18	Lake Charles, La. Adv. Dec. 27.	Dec. 27

STREETS AND ROADS

Bids Close		See Eng. News-Record
Jan. 2	Indiana	Dec. 20
Jan. 2	Nevada	Dec. 20
Jan. 2	Richmond Heights (St. Louis P. O.), Mo.	Dec. 27
Jan. 3	Albany, Ga.	Dec. 27
Jan. 3	Robert Lee, Tex.	Dec. 27
Jan. 3	Louisiana	Dec. 20
Jan. 3	North Kansas City, Mo. Adv. Dec. 20 and 27.	Dec. 20
Jan. 3	Buffalo, N. Y.	Dec. 27
Jan. 4	Alabama	Dec. 13
Jan. 7	Vicksburg, Miss.	Dec. 13
Jan. 7	California	Dec. 20
Jan. 7	Stockton, Calif.	Dec. 27
Jan. 7	California	Dec. 27
Jan. 7	Oroville, Calif.	Dec. 27
Jan. 8	Monticello, Ind.	Dec. 20
Jan. 9	Del Rio, Tex.	Dec. 27
Jan. 10	San Angelo, Tex.	Dec. 20
Jan. 11	Seattle, Wash.	Dec. 27
Jan. 11	Franklin, Tex.	Dec. 27
Jan. 14	Oilton, Okla.	Dec. 13
Jan. 15	Michigan	Dec. 6
Jan. 15	Michigan	Dec. 13
Jan. 15	Rock Springs, Tex.	Dec. 27
Jan. 15	Louisiana	Dec. 27
Jan. 22	St. Louis, Mo.	Dec. 27

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Jan. 8	Canton, N. Y.	Dec. 27
Feb. 1	Peoria, Ill.	Dec. 27
Apr. 30	Wellington, New Zealand	Dec. 6

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 31	Bryn Mawr, Pa.	Dec. 13
Dec. 31	Phila., Pa.	Dec. 13
Jan. 1	Williamson, W. Va.	Nov. 22
Jan. 1	Ft. Worth, Tex.	Dec. 20
Jan. 1	Wilkes Barre, Pa.	Dec. 20
Jan. 2	Bloomington, Ind.	Nov. 15
Jan. 3	New York, N. Y.	Dec. 20
Jan. 3	Tucson, Ariz.	Dec. 20
Jan. 3	Baltimore, Md.	Dec. 20
Jan. 3	Texarkana, Tex.	Dec. 20
Jan. 3	Columbia, Mo.	Dec. 13
Jan. 8	Wilson, N. C.	Dec. 20
Jan. 8	Brooklyn, N. Y.	Dec. 27
Jan. 8	New York, N. Y.	Dec. 27
Jan. 8	Bellaire (Jamaica P. O.), N. Y.	Dec. 27
Jan. 9	Baltimore, Md.	Dec. 27
Jan. 9	Denver, Colo.	Dec. 13
Jan. 10	Birmingham, Ala.	Dec. 13
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	Galveston, Tex.	Nov. 29
Jan. 14	Schuylerville, N. Y.	Dec. 13
Jan. 14	Galveston, Tex.	Dec. 27
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 4	Urbana, Ill. Adv. Dec. 13 to 27.	Dec. 13
Feb. 4	Columbus, O.	Dec. 27

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 29	Metal Work—Louisville, Ky. Adv. Dec. 6 to 27.	Dec. 6
Jan. 2	Post Office—Liberty, Mo.	Dec. 6
Jan. 2	Extension to Building—Keyport, Wash.	Dec. 20
Jan. 3	Gates—Washington	Dec. 6
Jan. 3	Lock Gates—Addison, Ky. Adv. Dec. 6 to 27.	Dec. 6
Jan. 3	Post Office and Custom House—Mineral Point, Wis.	Dec. 13
Jan. 9	Scow—Phila., Pa.	Dec. 20
Jan. 9	Storage and Recreation—Cape Hatteras, N. C.	Dec. 20
Jan. 9	Quarters and Boathouse—Poyners Hill, N. C.	Dec. 20
Jan. 9	Underpinning Foundations — Wash., D. C.	Dec. 20
Jan. 9	Remodeling—Norfolk, Va.	Dec. 27
Jan. 10	Steel Hulls — Vicksburg, Miss.	Dec. 6
Jan. 15	Filtration Plant, etc.—Wash., D. C. Adv. Dec. 20 and 27.	Dec. 20
Jan. 16	Scow and Barge—Milwaukee, Wis. Adv. Dec. 20 and 27.	Dec. 20
Jan. 16	Fuel Oil Storage—Mare Island, Calif.	Dec. 6
Jan. 19	Gates—Cincinnati, O. Adv. Dec. 27.	Dec. 27
Jan. 21	Post Office—State College, Pa. Adv. Dec. 27.	Dec. 27
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15
Feb. 6	Storehouse—Pearl Harbor, H. T.	Dec. 20

UNCLASSIFIED

Bids Close		See Eng. News-Record
Dec. 28	Bulkhead—Long Island City, N. Y.	Dec. 20
Dec. 28	Heating and Ventilating Apparatus—Brooklyn, N. Y.	Dec. 20
Jan. 3	Aluminum Steel Cored Cable, etc.—Melbourne, Australia	Nov. 1
Jan. 3	Ferry Boats—New Orleans, La.	Dec. 13
Jan. 7	Swimming Pool — Taylor, Tex.	Dec. 20
Jan. 9	Transmission Towers — San Francisco, Calif.	Dec. 20
Jan. 9	Wharf—Pembroke, Ont.	Dec. 27
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Dec. 31	Tractor, etc.—Pass Christian, Miss.	Dec. 27
Dec. 31	Pipe, etc.—Phila., Pa.	Dec. 27
Jan. 2	Gravel—Abbeville, La.	Dec. 27
Jan. 3	Cement—Wisconsin	Dec. 27
Jan. 7	Crushed Stone, etc.—Houston, Tex.	Dec. 27
Jan. 9	San Francisco, Calif.	Dec. 20

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Clinton—Plans 20 m.g. reservoir at White Creek. $106,775. W. G. Stone, Whitesboro, engr.

N. Y., Herkimer—Takes bids within week pumping equipment and motors for new well and water supply. $10,000. Engineer's name withheld. Address Municipal Comn. Noted Nov. 22.

W. Va., Martinsburg—Water Comn. plans additional reservoir. $30,000.

Fla., Cocoa — Plans waterworks system. $95,000. J. E. Craig, 427 King St., Jacksonville, engr.

Fla., Longwood — Had plans prepared waterworks system. $20,000. J. E. Craig, 427 King St., Jacksonville, engr.

Fla., St. Augustine—Making plans for obtaining supply of soft water, improving distribution system, and new pumping engines, etc. $300,000-$400,000. Bond election soon. J. E. Craig, 427 King St., Jacksonville, engr.

Fla., Sanford—Had plans prepared waterworks system, incl. 31 mi. mains, two-three m.g. pumping engines, soft water collecting system, $375,000; will vote on $845,000 bonds Jan. 11, for waterworks, electric and gas plants. J. E. Craig, 427 King St., Jacksonville, engr.

O., Cincinnati—Plans reservoir 400 ft. square, 30 ft. deep, 30 m.g. capacity, on Winton and North Bend Rds. $110,000. J. A. Hiller, City Hall, engr.

O., Youngstown — Mahoning Water Co. plans new mains and dams creating lakes for reserve supply. $200,000. W. F. Hopkins, supt.

Mich., Otsego—See "Streets and Roads."

Ill., Addison—Will probably take bids about Mar. 1, 4- to 10-in. mains. $25,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., Lebanon — Plans water supply and distribution system. Address W. C. Lang.

Kan., Russell—Voted $95,000 bonds for waterworks system. J. W. Murphy, city clk.

Mo., Miller—Alexander Bros., engrs., 535 West Commercial St., Springfield, takes bids about Jan. 1, improving waterworks here, for city. $16,250. Noted Sept. 13.

Mo., Thayer—Jan. 8, to vote on $55,000 bonds waterworks and distribution system. Alexander Eng. Co., Springfield, engrs. Noted Oct. 18.

Tex., Austin—Voted $300,000 bonds rapid sand filtration plant. J. B. Hawley, Cotton Exch. Bldg., Ft. Worth, consult. engr.

Tex., Mart—Jan. 15, to vote on $150,000 bonds water works system. Koch & Fowler, Central Bank Bldg., Dallas, engrs. Noted Aug. 23.

Okla., Chickasha — Election Dec. 28, to vote on $60,000 bonds for 10,000 ft. of 16 in. c.i. pipe line and motor driven pumping units. J. C. Milliken, Chickasha, engr.

Wash., Anacortes—Having surveys and estimates made for waterworks extensions, making Lake Campbell source of water supply for city. $100,000. A. Short, city engr.

Calif., Coronado (San Diego P. O.)—Coronado Water Co., Union Bldg., San Diego, plans to extend water system to outlying districts, will install electrically driven pumps for 7 wells. Project includes storage dam 55 ft. high, 650 ft. long on top. $100,000 or more. A. Ervast, Union Bldg., San Diego, engr.

BIDS DESIRED

Pa., North East—Jan. 14, by Boro. Council, 600,000 gal. per day filtration plant; adv. E. N.-R. Dec. 27.

Va., Charlottesville — Jan. 19, by B. A. Bennett, city mgr., 12 mi. 18 in. c.i. pipe line, tunnel, diversion dam, etc. Fuller & McClintock, 170 Bway., New York City, and L. H. Williamson, Natl. Bank Bldg., Charlottesville, engrs.; adv. E. N.-R. Dec. 27.

Ia., Dubuque—Taking bids 20 and 24 in. Class D and 8 and 12 in. Class B c.i. pipe and valves. $5,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs.

Tex., Hillsboro — Taking bids two 750 g.p.m. motor driven centrifugal pumps for fire use, 241 ft. head, 2 deep well pumps, 80 g.p.m., 250 ft. lift, 1 well pump 400 ft. lift, 60 g.p.m. T. A. Bullock, city engr.

Calif., Sacramento—Jan. 3, by H. G. Denton, clk., 57,000 ft. 6 in. c.i. mains.

BIDS RECEIVED

R. I., Providence — Water Supply Bd., City Hall, Dec. 19, clearing, grubbing, earth and rock excav. in preparation for Scituate Reservoir, in Scituate, from W. D. Winchell, 315 Stillman Bldg., Columbus, O., $251,265. Noted Nov. 22.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Oak Point and Viele Aves., etc., from Beaver Eng. & Contg. Co., 51 Chambers St., $9,993; Brinsmade and Calhoun Aves., etc., from C. De Blasio, 339 7th Ave., Mt. Vernon, $10,600. Noted Dec. 13.

Calif., Montecito — Montecito County Water Dist., Dec. 11, ditching, backfilling and laying water pipe for waterworks system, from J. Currie, 3120 Balboa St., San Francisco, $94,143.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, piping for pumping station, for Fire Dept., Lexington and Gay Sts., to H. A. Kries, 6 West Lombard St., $4,418. Noted Dec. 6.

O., Youngstown—Mahoning Water Co., 1 m.g. filtration plant at Burgess Lake, to Burnip Constr. Co., 223 East Broad St., Columbus, $100,000.

Ia., Grinnell—New well to C. B. Brant, Indianapolis, Ind., $23,850.

Ill., Forest Park—Artesian wells to S. B. Geiger, Old Colony Bldg., Chicago, $22,000.

Mich., Menominee—H. W. Blunder, city clk., installing one 2,500 gal. centrifugal pump, two 1,000 gal. centrifugal pumps, one 60 cycle generator, etc., to Commonwealth Electric Co., 417 Bway., St. Paul, Minn., $20,150. Noted Dec. 6.

Ont., Fort Erie—Constructing pumping station to F. F. Fry & Co., Ltd., 43 Scott St., Toronto, $18,596.

Sewers

PROPOSED WORK

Conn., Hartford—Street Dept. plans 2,000 ft. 10- to 20-in. vitr. clay sewers in Norwich and Wyllys Sts. $28,000. R. N. Clark, city engr.

Conn., West Hartford (Branch of Hartford)—Plans trunk line sewer, probably segmental block or concrete, Steele Rd. $45,000. G. H. Barton, chn. Bd. Sewer & Water Dept.

N. Y., Ilion—Plans disposal plant. $50,000-$60,000. Engineers name withheld.

N. Y., Rochester—Plans sewers in Longacre and Falleson Rds., Clinton and Edgemont Aves., Harding and Nye Sts. $34,200. Will mature in spring. C. A. Poole, City Bldg., engr.

N. C., Sanford—Making plans and soon takes bids 2 mi. extension to sewer system. $30,000. W. H. Fitts, mayor.

Fla., Cocoa — Plans sewerage system. $55,000. J. E. Craig, 427 King St., Jacksonville, engr.

O., Cincinnati—Plans election to vote on $200,000 bonds Millcreek sewer. F. Krug, City Hall, engr.

Mich., Detroit—Plans vitr. crock sewers, 2,310 ft. 12-18 in. in Laterals 4055 and 4056, 8,252 ft. 12-20 in. in Laterals 4057 and 4060, 7,928 ft. 12-24 in. in Laterals 4058 and 6125, 1,333 ft. 10-24 in. in Lateral 4059. G. Jerome, city engr.

Sewers (Continued)

Mich., Otsego—See "Streets and Roads."

Ill., Bensenville — Making preliminary plans 20,000 ft. 8- to 18-in. sanitary sewer and disposal plant, $200,000; 10- to 36-in. storm water sewer, $110,000. E. Hancock, 2047 Ogden Ave., Chicago, engr. Noted June 27.

Ill., Posen—Making preliminary surveys complete sewerage system and disposal plant. $200,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ark., Helena—Having preliminary plans prepared storm and sanitary sewers in downtown district. $60,000.

Tex., Ft. Worth—See "Streets and Roads."

Tex., Kerrville — Voted $78,000 bonds, sewerage disposal plant and sewer extensions. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engrs. Noted Nov. 29.

Okla., Chickasha — Election Dec. 28, to vote on $70,000 bonds for 10,000 ft. 24 in. vitr. clay outfall sewers and disposal plant. J. C. Milliken, Chickasha, engr.

Calif., Santa Monica — City plans joint outlet sewer from Topango to Hyperion for cities of Santa Monica, Los Angeles, Venice and Pacific Palisades Assn. To exceed $25,000.

Calif., Pasadena — Jan. 10, to vote on $125,000 bonds for sewer drain from municipal sewer farm to Rio Hondo Wasn.

Que., Montreal—Plans 2 x 3 brick sewers, 1,369 ft. in Belanger St. $13,030, 3,309 ft. in 14th Ave. $25,300, 3,354 ft. in 12th Ave. $26,430, 930 ft. in 15th Ave. $15,100, 7,137 ft. in. 11th Ave. $62,760, 1,135 ft. in. Dandurand St. $11,900, 3,486 ft. in 13th Ave. $26,970, 3,392 ft. in Lafond St. $25,480, 4,975 ft. in Tolhurst St. $35,534, 1,798 ft. in Henry Julien Ave. $10,907, 100 ft. in Clay St. $1,872. E. Gauthier, asst. city clk.

BIDS DESIRED

N. Y., Johnson City—Jan. 2, by Bd. Village Trustees 8,952 ft. 8- to 42-in. rein.-con. and vitr. clay sewers from Riverside Dr. along tracks of Delaware, Lackawanna & Western R.R. to Willow and Division Sts., Grand, Burbank, Farr and Lincoln Aves., $65,000. F. A. Tillman, Municipal Bldg., engr. Noted Dec. 13.

Tenn., McKenzie—Jan. 3, by Mayor and City Council, construction vitr. sewerage system and settling tanks. B. H. Klyce, 506 4th and 1st Natl. Bank Bldg., Nashville, engr.; adv. E. N.-R. Dec. 27.

Ill., Granite City—Dec. 31 approximately 5,000 lin.ft. sewers in Dists. 5 and 6. $54,000. W. W. Kerch, 1st Natl. Bank Bldg., engr.

Mo., Carrollton — Jan. 3, by City Clerk, City Hall, 6 mi. 6- to 21-in. sewers. $50,000. D. W. Frush, Carrollton, engr. Noted Aug. 9.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Dec. 19, temporary sewers in Clarendon Rd., from Tomasetti & Co., Inc., 1133 60th St., 78.5% engrs. est. ($32,785). Noted Dec. 13.

N. Y., New York — H. Bruckner, pres. Bronx Boro, Dec. 19, sewers in Zulette Ave., from MacDonald & Wilson Co., $17,937; Findlay Ave., from J. V. Timoney Constr. Co., 220 East 201st St., $11,502; Melville St., from F. Gasparine, $41,108; Rhinelander and Wilson Aves., from A. Gregorio & Co., $59,942 and $28,252 respectively. Noted Dec. 13.

Pa., Phila.—Sewers in **(1)** Bridge St. **(2)** 18th St. **(3)** Mifflin St. **(4)** Luzerne St. **(5)** Broad St. **(6)** Emily St. **(7)** Mitchell St. **(8)** Wagner St. **(9)** Madison St., from C. DiPasquali, 1215 South 17th St., **(1)** $6,218 **(4)** $2,133; A. DiSandro & Son, 39067 5th Ave., **(2)** $2,897 **(8)** $3,619; J. Lombardi, 601 Lincoln Bldg., **(5)** $2,284 **(7)** $3,914 **(9)** $3,608; McCoul Constr. Co., 5033 Duffield St., **(3)** $2,364; A. DiVito, Phila., **(6)** $3,766.

O., Toledo—W. T. Jackson, dir. Pub. Serv., Dec. 18, Relief Sewer 1432, incl. concrete bulkhead and 10,527 lin.ft. 30- to 96- in. (a) concrete segmental block (b) vitr. segmental block (c) monolithic concrete pipe, from Anderson & Campbell, 81 Petersboro St., Detroit, Mich., (a) $264,396; R. Mercier, Griswold St., Detroit, Mich., (b) $266,013; Graham & Henderson, Cleveland, (c) $288,656. Noted Dec. 6.

Calif., Morgan Hill—Sewerage system and disposal plant from Schultz Constr. Co., 46 Kearny St., San Francisco, $51,191. Noted Dec. 13.

CONTRACTS AWARDED

R. I., Providence—Reconstructing 250 ft. 48 in. brick sewer, etc., to W. V. Polleys & Co., 217 Turks Head Bldg. Noted Nov. 15.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, sewers in Fort Hamilton Parkway, engrs. est. $17,100, 80th St. $3,398, and East 28th St. $1,867, to C. F. Vacharias, 645 40th St., 78%, 90% and 98.7% of engineers est. respectively; Ferris St. $4,217, to Tomassetti & Co., 1133 60th St., 98%; Fort Hamilton Parkway between 83rd and 84th Sts. $1,813, Fort Hamilton Parkway between Bay Ridge Ave. and 68th St. $1,625, and Fort Hamilton Parkway between 72nd and 73rd Sts. $1,542, to Nazzarro & Querriero, 101.99%, 98% and 97.9% respectively; Douglass St. $1,200, and Ave. N $800, to R. Iovino, 84% each. Noted Dec. 13.

W. Va., Bluefield—C. E. Ridley, city mgr., 16 mi. sanitary sewers, ditching to Pace Constr. Co., Roanoke, Va.; concrete box culverts to C. A. Haggerty, 18 Negus St., Webster, Mass.; constructing sanitary and storm sewers, to J. R. Vaughan & Co., Roanoke, Va., total $349,775. Noted Nov. 22.

N. C., Raleigh—See "Streets and Roads."

La., Baton Rouge—Comn. Council, sewerage system to J. B. McCrary Co., Citizens and Savings Bank Bldg., Atlanta, Ga., $126,855.

Mich., Holland—Common Council at office R. Overweg, city clk., 1,900 ft. 60 in. and 350 ft. 3 ft. x 7 ft. concrete storm sewer, to Hammen & Co., 4612 Woodward Ave., Detroit, $38,200. Noted Nov. 15.

Waste Disposal

PROPOSED WORK

Tex., Austin—Voted $50,000 bonds for incinerator. C. E. Leonard, city engr. Noted Nov. 15.

CONTRACTS AWARDED

O., Willow (Brooklyn, P. O.)—F. Kohler, mayor, and Bd. Control of Cleveland, 500 ton garbage disposal plant, here, to C. O. Bartlett & Snow Co., French and Winter Aves., Cleveland, $930,000. Noted June 14, under "Cleveland."

Bridges

PROPOSED WORK

N. Y., Leroy—Plans 150 ft. 1 or 2 span bridge, 30 ft. wide, two 6 ft. walks on each side over Oatka Creek. $50,000. Engineers name withheld.

Ga., Macon—Comrs. Bill Co. plan bridge over Stone Creek. $50,000.

Wis., Kaukauna—City plans 2 rein.-con. bridges over Fox River. $80,000 for both. Harrington, Howard & Ash, 1012 Baltimore St., Kansas City, Mo., engrs.

Missouri—State Hy. Dept., Jefferson City, rejected bids Nov. 27, one 37½ ft. rein.-con. deck girder, two 20 ft. and three 18 ft. rein.-con. slab spans, etc., over tracks of Chicago & Alton R.R., State Project Route 2, Sect. 6A, Jackson Co. Noted Dec. 6.

Wash., Arlington—Snohomish Co. (Everett), takes bids about Jan. 1, bridge over Stillaguawamish River, here, steel and concrete, one 210 ft. and one 100 ft. span, piling approach, 5 ft. sidewalks. $70,000. M. M. Caldwell, Central Bldg., Seattle, engr. Noted June 7 under "Everett."

California—State Hy. Dept., Sacramento, making plans 400 ft. concrete bridge, six 60 ft. spans, 21 ft. roadway, over Cottonwood Creek, Shasta and Tehama Counties. R. M. Norton, state highway engr.

California—State Hy. Dept., Sacramento, plans bridge over Chowchilla River, Madera Co. To exceed $25,000. County will appropriate $13,000 toward cost. R. M. Morton, state highway engr.

Que., St. Anne de Bellevue—Provincial Government, Quebec, plans 1,382 ft. steel bridge from here to Isle Perrot, rein.-con. floor, asphalt roadway, 4 ft. concrete sidewalks, concrete or stone wall approaches, also space for Canadian Pacific and Canadian Natl. Ry. tracks. $450,000. C. Denis, Shaughnessy Bldg., Montreal, engr.

B. C., Vancouver — Plans to reconstruct portion of Connaugh Bridge, 350 ft. steel deck plate girder, 60 ft. wide. $120,000. F. L. Fellowes, city engr.

BIDS DESIRED

Fla., New Smyrna—Jan 3, by Comrs. Volusia Co., (DeLand), steel draw bridge over Indian River, concrete pivot pier, creosoted pile trestles, 45,000 cu.yd. earth embankment, 400 cu.yd. concrete, also creosoted timber trestle bridge across Callalera Creek, 9,500 cu.yd. excav. $100,000. N. A. Hobard, Lutz Bldg., engr.

Mo., St. Louis — Jan. 22, by Bd. Pub. Serv., 208 City Hall, rein.-con. bridge to carry Gravois Ave. over River Des Peres, removing 5,130 cu.ft. old masonry, 4,630 cu.yd. grading, 33,270 cu.yd. excav., 90,100 cu.ft. concrete, 398,200 lb. reinforcing, 18,550 sq.ft. brick paving, 5,965 sq.ft. walks, etc. $106,000. L. R. Bowen, 301 City Hall, engr.

Tex., Robert Lee—Jan. 3, by E. J. Stockton, judge Coke Co., 237 ft. bridge over Oak Creek, one 70 ft. steel span, concrete piers and approaches. $26,000. J. E. Beavers, Bronte, co. engr.

BIDS RECEIVED

Tex., McKinney—Collin Co., 6 bridges on State Highway 6, rein.-con. pile trestles, concrete girders and steel spans, forty-three 20 ft., one 80 ft., four 31 ft. and one 43 ft. spans, from Brown-Abbott Co., Wilson Bldg., Dallas, $81,447. Noted Dec. 6.

CONTRACTS AWARDED

North Carolina — State Hy. Comn., Raleigh, bridging **(S. P. means State Project)** rein.-con. bridges and culverts on **S. P. 791 A**, Yadkin Co, to Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $40,046; **S. P. 237 A**, Johnston Co., to T. Dameron & Sparling, Nashville, $56,885; **S. P. 513**, Caswell Co., to R. W. Curtis, Lynchburg, Va., $66,643; **S. P. 148**, Hertford and Gates Counties, to Roanoke Iron & Bridge Co., Roanoke, Va., $134,648; **S. P. 912**, Cherokee Co., to W. T. Moore, Andrews, $100,270. Noted Dec. 13.

Ga., Savannah—State and Chatham Co., draw span of bridge over Savannah River, here, to Virginia Bridge & Iron Co., Roanoke, Va., $28,000.

Fla., Orlando—Orange Co. bridge over west fork of St. Johns River, 700 ft. superstructure, one 100 ft. steel span, concrete abutments, to Austin Bros. Bridge Co., 1813 Clarence St., Dallas, Tex., $39,515.

Ohio—See "Streets and Roads."

Wis., Hubbleton—State Hy. Dept., Madison, bridge, here, Project 316, Jefferson Co., to Widell Co., First Natl. Bank Bldg., Mankato, Minn., 1,905 cu.yd. Class A concrete $23.25, etc., total $50,909.

Missouri—State Hy. Dept., Jefferson City, constructing bridges over stream, De Kalb Co., over stream, Buchanan Co., over Castor River, Madison Co., and over Morgan Branch, De Kalb Co., to M. E. Gillioz, Monett, $6,051, $9,946, $25,947 and $7,792 respectively, over Little River Diversion Channel, and over Drainage Ditch, Cape Girardeau Co., to List & Weatherly Constr. Co., $416 Ry. Exch. Bldg., Kansas City, $135,633 and $7,450 respectively, over stream, Pettis Co., to Bertman & Menefee, Sedalia, $2,582, over Coon Creek, Taney Co., to Easley Bros., Aurora, $8,644, over Robins Draft, Howell Co. ,to Muskogee Contg. Co., Tulsa, Okla., $12,624, over Cow Branch, Atchison Co., to G. W. Condon, 510 Farnum Bldg., Omaha, Neb., $11,786. Noted Dec. 6.

Ore., Seaside—Rein.-con. bridge, three 50 ft. spans, 50 ft. wide, on Bway. over Necanicum River, to J. H. Tilman Co., Portland, $27,437.

Ont., Niagara Falls—See "Unclassified."

Dams

PROPOSED WORK

Mich., Marquette — See "Industrial Works."

Calif., Coronado (San Diego P. O.)—See "Waterworks."

BIDS DESIRED

N. Y., Kingston—Feb. 7, by Bd. Water Comrs., City Hall, addition to Coopers Lake Dam, 2,500 cu.yd. earth fill, 410 cu.yd. rein.-con., etc. $40,000. H. Barker, 36 State St., Albany, engr.

Railways

PROPOSED WORK

Connecticut—Connecticut Co., State St., Hartford, plans double tracking Park Rd. from Prospect Ave. to Main St. in West Hartford (Hartford P. O.) $50,000, and Blue Hills Ave., Hartford. $25,000.

Virginia—Atlantic Coast Line R.R., Wilmington, N. C., plans to expend $1,415,000 for various improvements between Richmond, Va., and Jacksonville, Fla., incl. buildings, signal appliances, tracks and other structures. J. E. Willoughby, Wilmington, N. C., ch. engr.

Kentucky—Chesapeake & Ohio R.R. Co., 82 3East Main St., Richmond, Va., plans 4 mi. third track from Ashland to Russell. $125,000. H. Frazier, ch. engr.

CONTRACTS AWARDED

Texas—North Texas Traction Co., 3rd and Main Sts., Ft. Worth, extension to

Railways (Continued)

Riverside carline, to Stone & Webster, 147 Milk St., Boston, Mass. $25,000.

California—Municipal Railway System of Eureka, 460 tons 70 lb. rails to Rolph-Mills Co., 149 California St., San Francisco, $52.50 per ton; 325 tons high T rails and joint plates, to U. S. Steel Products Co., Rialto Bldg., San Francisco, $59.43 per ton and $4.42 per cwt. Noted Dec. 20.

California—Southern Pacific R.R. Co., 65 Market St., double tracking 3 units of railroad between Truckee and Summit, in Sierra Nevada mountains, to Utah Constr. Co., Phelan Bldg., San Francisco.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Ft. Lauderdale—Broward Co. election Jan. 5, to vote on $50,000 bonds to complete New River Inlet.

Minn., Caledonia—Houston Co. preparing plans 1,292,644 cu.yd. excav., 63,500 cu.yd. excav. for pumping station installation of 80,000 gal. per minute capacity, in County Drain and Conservancy Dist. 1. $428,000. Central States Eng. Co., Muscatine, Iowa, engrs.

Texas—Gulf, Colorado & Santa Fe R.R., Galveston, having plans prepared 145 mi. heavy steel railway from Sweetwater to Lometa. $1,000,000. F. Merritt, Union Sta., Galveston, ch. engr.

Wash., Grand Dalles—North Dalles Irrigation Dist. had preliminary plans prepared and will probably take bids about Feb. 1, for system to irrigate 5,000 acres land, near here. Water to be taken from Klickitat River, main supply line 12 mi. canal, 8 mi. flume and several short inverted siphons and tunnels. $425,000. Election in January to vote on bonds. W. J. Roberts, 616 Puget Sound Bank Bldg., Tacoma, engr.

Calif., San Diego—Vista Irrigation Dist. plans to vote bonds for distribution system from Henshaw Dam and distributed to every 40 acre tract within Vista Irrigation Dist., incl. 16 mi. main canal, concrete lined, and concrete and steel pipes. J. B. Lippincott, Central Bldg., Los Angeles, consult. engr.

Calif., Ventura—Ventura Co. D. D. 2, plans election to vote on $300,000 bonds for drainage and irrigation system for approximately 20,000 acres, incl. levees, canals and pumping plants. C. Petit, Ventura, engr. Noted Dec. 6.

BIDS DESIRED

Miss., Senatobia—Jan. 3, by Bd. Drainage Comrs. Tate-Panola D. D. 1, Tate and Panola Counties, at Court House, 309,400 cu.yd. excav. in main canal, 90,000 cu.yd. excav. Partee Canal, 22,000 cu.yd. excav. enlarging old ditch in Panola Co. Southern Eng. Co., Clarksdale, engrs. Noted Nov. 15.

La., Lake Charles — Jan. 18, by Police Jury Calcasieu Parish, Court House, constructing Sects. 3 and 5 of navigation channel. F. Shutts, parish engr.; adv. E. N.-R. Dec. 27.

O., Cleveland — Winterbottom-Connelly Co., 17316 Madison Ave., taking bids 40,000 cu.yd. trench excav. on drainage system.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, dredging 15,000 cu.yd. scow measurement in Gowanus Canal, and 20,000 cu.yd. in Wallabout Canal, to W. E. Potter, $14,535 and $15,980 respectively; 40,000 cu.yd. in Newtown Creek, to J. McSpirit, $25,600; 40,000 cu.yd. foot of 64th St., to Columbia Dredging Corp., 30 Church St., New York, $11,160. Noted Dec. 20.

Tex., Dallas—Levee Impvt. Dist. 9, ditching, etc., to M. H. Edmonson, Greenville, $54,000.

Calif., Manteca—South San Joaquin Irrigation Dist., 542,000 sq.ft. concrete canal gunite lining, to J. S. Greaves, Oroville, $0.084 per yd.; 50,000 sq.ft. asphalt lining, to Hewitt-Davenport, San Francisco, $0.093 per sq.ft. Owner to furnish materials. Noted Nov. 29.

B. C., Vancouver—Canadian Pacific Ry., Windsor Sta., Montreal, Que., dredging mud from bottom of inlet and filling in with rock and gravel for foundation of new pier, 75,000 cu.yd. floating dredgework and 400,000 yd. rock and gravel, to Northwestern Dredging Co., 510 Hastings St. W., $60,000.

Streets and Roads

PROPOSED WORK

Conn., Hartford—Plans paving Sigourney St., Asylum and Franklin Aves., asphalt on concrete; Capitol Ave., asphalt or concrete on concrete; Westbourne Parkway, Commerce, Ridgefield and Vine Sts., concrete; also macadamizing 15 streets. Total $387,000. R. N. Clark, city engr.

Conn., New Britain—Plans paving Wells St., bituminous macadam. $25,000. J. D. Williams, city engr.

N. Y., Rochester—Plans paving Farragut St., willite, $31,000, about ¾ mi. Middlesex Rd., 20 ft., asphalt, $33,500; curbing, grading and paving ½ mi. Haloid, Dana, Boxart, Castleman and Scheib Sts., $25,000; 6 ft. widening, setting back curb to conform and repaving Monroe Ave., brick, $50,000. Will mature in spring. C. A. Poole, City Bldg., engr.

Pa., Wilkes-Barre—Plans to pave, grade and curb 1 mi. Northampton, Priestly, Reese, Berlin, Sylvanus, Dana, Moyallen, New Empire, Meade and Sheridan Aves. $40,000. B. K. Finch, city engr.

North Carolina—State Hy. Comn., Raleigh, rejected bids Nov. 27, grading and topsoiling 16.9 mi. State Project 912, Cherokee Co., $150,000; grading and bridging 7.02 mi. State Project 952-B, Jackson Co., $60,000; concrete or asphaltic paving 8.2 mi. State Project 318, Brunswick Co., $246,000. Will readvertise shortly. C. M. Upham, comr. Noted Dec. 13.

N. C., Burlington—Soon lets contract additional street and sidewalk paving. $25,000. E. B. Horner, mayor.

Fla., Arcadia—De Soto Co. election soon to vote on $45,000 bonds for road from Arcadia-Manitee Co. line; $35,000 No. 2, North Arcadia-Nocatee Rd.; $30,000 for road from end of brick to Highlands Co. line; $30,000 to complete Carlston Field Rd.

Fla., Ft. Lauderdale—Broward Co. election Jan. 2, to vote on $250,000 bonds for roads. H. C. Davis, Ft. Lauderdale, engr.

Ala., Birmingham—Plans chirt and asphalt paving and some grading on 10 blocks 21st, 22nd, 23rd Sts., North Ave., 13th Ave. N., and 15th St. S. $105,315.

Ala., Selma—Sold $50,000 bonds paving Church St.

La., Vernon — Jackson Parish election Jan. 9, to vote on $250,000 bonds to build 2 additional improved highways under supervision of State Hy. Comn., Reymond Bldg., Baton Rouge, one highway from Ruston to Columbia, and other Jackson-Enos Monroe Highway.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, plans to construct 809 mi. road, 16 and 18 ft., mostly gravel, concrete and bituminous macadam, $8,000,000. J. G. Creveling, highway comr.

O., Cleveland—Cuyahoga Co. plans brick paving Northfield Akron Rd. $158,200. F. Lander, Court House, engr.

Ind., Shelbyville—Shelby Co. plans concrete paving 29,532 sq.yd. Lydia Jones Rd. $74,000. G. C. Oltman, Shelbyville, engr.

Mich., Otsego—Voted $80,000 bonds for paving work, $10,000 bonds for watermains and $5,000 for sewers.

Ill., Cairo — Making preliminary plans grading, concrete paving, concrete curbing etc., various streets. $45,000. G. F. Dewey, 610 Ohio St., engr.

Ill., Elmhurst—Making preliminary plans grading, curbing, guttering and bituminous macadam paving about 11,000 ft. in Cummings Addition, $120,000; 2nd St., 49,000 sq.yd. bituminous macadam on concrete, 39,000 lin.ft. concrete curbing. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., La Grange—Making preliminary plans grading, curbing, guttering and surfacing 7,000 ft. in northwest section, 14,000 lin.ft. concrete curb, 14,000 sq.yd. concrete, etc., $75,000; 3,000 ft. Maple, Benton and 9th Sts., 6,000 lin.ft. concrete curb, 10,000 sq.yd. concrete base, 10,000 sq.yd. either hot mix, Kentucky rock or asphalt surfacing. $35,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wisconsin—Following are county appropriations for roadwork during 1924. Sawyer Co. $46,419, E. J. Collett, Hayward comr.; Outagamie Co. $207,987, A. G. Brusewitz, Appleton, comr.; Waukesha Co. $104,898, C. J. Hahn, Waukesha, comr.

Wis., Hudson—St. Croix Co. appropriated $69,092 for road work during 1924. J. Caffrey, Hammond, comr.

Wis., Shorewood (Milwaukee P. O.) — Making plans concrete paving ¾ mi. Riverside Dr., 24 ft. $25,000. H. A. Schmitt, Village Hall, engr.

Ia., Cedar Falls — Will probably take bids in January, paving 10 blocks or more of Lincoln and North Franklin Sts. To exceed $30,000. C. H. Streeter, city engr.

Kan., Leavenworth — Leavenworth Co. having plans prepared paving 3.8 mi. roads. $30,000. L. C. Clark, Leavenworth, engr.

Wyo., Cheyenne—Will probably take bids in January 7,600 ft. grading, curbing, guttering, paving, etc., 24 blocks in Pershing Heights Dist., incl. Warren, House, 1st, 2nd, 3rd, 4th and 5th Sts., 40 ft. $100,000. J. A. Bruce, Cheyenne, engr.

Mo., Hannibal—Soon takes bids grading, concrete curbing, guttering, 6 in. rein.-con. surfacing 6,015 sq.yd. Hill St. from Main to 3rd Sts., 4th to 3rd Sts., 5th to 7th Sts., and Front to Main Sts., also alley in Block 41. $22,500-$25,000. W. R. Gettler, City Hall, engr. Noted Nov. 15.

Mo., St. Louis—Soon takes bids grading 2,365 cu.yd. Nashville St., $3,500; grading and surfacing 3,090 sq.yd. Pennsylvania St. and Indiana Ave., warrenite on concrete, $17,750; grading, surfacing, concrete curbing, guttering 6,615 sq.yd. Ivanhoe St., willite or bitulithic on concrete, $37,500; resurfacing 14,200 sq.yd. 9th and Penrose Sts., bitulithic on concrete, $39,500. W. W. Horner, 300 City Hall, engr.

Mo., Springfield — Making preliminary plans widening about 5 blocks Traffic St. from 18 to 50 ft. $75,000.

Tex., Austin—Travis Co. voted $1,500,000 for bituminous macadam paving, gravel surfacing and bridging state highways and county roads, 16 ft. and 18 ft. surfacing. O. Leonard, co. engr. Noted Nov. 15.

Tex., Batesville — Zavalla Co. election soon to vote on approximately $100,000 bonds roads in La Pryor Dist.

Tex., Denton—Denton Co. making plans grading and gravel surfacing 8 mi. State Highway 39 from Justin Rd. to Wise Co. line, 16 ft., $76,000; soon takes bids grading and gravel surfacing 6 mi. State Highway 39 from Little Elm to Collin Co. line, 16 ft., $45,000. H. T. Brewster, co. engr.

Tex., Ft. Worth—Baker & Von Zuben, engrs., Ellison Bldg., making plans walks and sewers, etc., for Riverside Park, 300 acre addition to Ft. Worth. $75,000-$100,000. Owners name withheld.

Tex., Hillsboro — Voted $15,000 bonds paving 2nd St., brick or bituminous. Total cost approximately $40,000. Property owners to pay ⅔ of cost. T. A. Bullock, city engr.

Tex., Karnes—Karnes Co. voted $125,000 bonds grading and surfacing roads. O. N. Powell, Kenedy, engr.

Tex., Sinton—San Patricio Co. voted $25,000 bonds highway improvement. F. M. Percival, Rockport, co. engr. Noted Nov. 29.

Okla., Lexington—Plans grading and paving 5 blocks Main St. and McLean Ave., 7,000 sq.yd. concrete, 3,600 lin.ft. curbing, etc. $30,000. Engineer not selected.

Okla., Stillwater—Plans grading and paving 11 blocks Main and 14th Sts., 7,950 sq.yd. concrete, 5,800 lin.ft. curbing, 3,000 cu.yd. excav. $38,000. C. A. Wood, Stillwater, engr.

Ore., Portland—Plans widening 9 blocks in business district. $2,348,193. O. Laurgaard, city engr.

California—State Hy. Dept., Sacramento, making plans paving 9 mi. Stockton Rd., San Joaquin Co., concrete; from Manteca to south boundary, concrete, and from Manteca to French Camp, concrete or asphalt, both San Joaquin Co.; reconstructing and paving Rincon Grade, Santa Barbara Co., concrete; resurfacing 12 mi. Redwood Highway between Santa Rosa and Willowbrook, Sonoma Co.; constructing 6 mi. Tahoe-Ukiah Rd. west of Sutter City, Sutter Co. R. M. Morton, state highway engr.

California—State Hy. Comn., Sacramento, making plans paving approximately 12 mi. in Calabassas Dist., Los Angeles Co. R. M. Morton, state highway engr.

California—State Hy. Dept., Sacramento, making plans gravel surfacing 38 mi. Pollock-Dunsmuir Rd., Siskiyou Co. R. M. Norton, state highway engr.

Calif., Chico—Will take new bids paving various streets. $150,000. Former contract rescinded. F. A. Lammiman, city engr.

Calif., Colton—Had plans prepared improving 9th St., 235,054 sq.ft. 5 in. concrete pavement with ⅜ in. surface, 1,328 sq.ft. walks, etc.

Calif., Fresno—Fresno Co. (Fresno) and Monterey Co. (Salinas) plan to improve 29 mi. San Lucas-Coalinga Highway. To exceed $800,000. C. P. Jensen, Fresno, and H. Cozzens, Salinas, county road surveyors.

Calif., Lodi—Had plans prepared improving portions Garfield Ave., Harold St., etc., 217,031 sq.ft. grading, 206,590 sq.ft. 2½ in. asphaltic concrete base with 1½ in. warrenite bituminous surface, 16,060 sq.ft. concrete gutters and 12,048 lin.ft. concrete curb. To exceed $48,000. L. F. Barzellotti, city engr.

Calif., Los Angeles—Los Angeles Co. soon takes bids improving 4.06 mi. Las Flores Canyon Rd., Rd. Dist. Impvt. 181; grading, rolling and oiling 16 ft. roadway, etc. To exceed $63,000.

Calif., Mill Valley—Had plans prepared improving Old Mill St., Lovell Ave., etc., 4,624 cu.yd. grading, 121,007 sq.ft. 5 in. concrete pavement, 19,044 sq.ft. macadam pavement, 2,730 lin.ft. concrete curb and gutter, 2,758 sq.ft. concrete gutter, etc. J. C. Oglesby, Cheeda Blk., San Rafael, engr.

Streets and Roads (Continued)

Calif., Oakland—Alameda Co. plans rock surfacing and oiling Redwood extension of Skyline Blvd. $25,000. G. A. Posey, co. surv.

Calif., San Fernando—Plans 85,000 sq.ft. 6 in. asphaltic concrete paving, laying concrete curbs, walks and gutters, and installing ornamental lighting system on various streets. To exceed $25,000. G. H. Schwabland, city engr.

Calif., Santa Ana—Orange Co. plans to improve Yorba Bridge Rd., 48,600 sq.ft. 5 in. asphaltic concrete pavement, 1,500 cu. yd. gravel shoulders, etc. J. L. McBride, co. road comr.

P. C., Vancouver—Voted $500,000 bonds for permanent surfacing various streets. F. L. Fellowes, city engr. Noted Nov. 1.

BIDS DESIRED

N. Y., Buffalo—Jan. 3, by Commissioner Pub. Wks., Municipal Bldg., paving and repaving Highgate and Copsewood Aves., Freeman and Rhode Island Sts., vitr. brick or asphalt on 6 in. concrete. To exceed $40,000. C. E. P. Babcock, Municipal Bldg., engr.

Ga., Albany—Jan. 7, paving 7 blocks Jefferson St., 15,430 sq.yd. 1½ in. sheet asphalt surfacing, 1,200 tons black binder. P. F. Whittier, dir. pub. wks.

Louisiana—Jan. 15, by State Hy. Dept., Baton Rouge, 5.43 mi. State Project 336-A, Opelousas-Ville Platte Highway, St. Landry Parish, also furnishing 7,650 cu.yd. washed gravel or alternate 10,200 cu.yd. sand clay gravel. J. M. Fourmy, ch. engr.

Ill., Elmhurst—Taking bids and opens same about Jan. 15, grading curbing and paving 27,000 ft. Spring Rd., 22 ft., 54,000 lin. ft. concrete curb, 67,000 sq.yd. cement concrete, vibrolithic concrete, warrenite or asphaltic concrete. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Mo., Richmond Heights (St. Louis, P. O.) —Jan. 2, by G. H. Skillman, city clk., 7409 La Veta Ave., grading, concrete curbing, guttering and paving 17,600 sq.yd. Bellvue Ave., 3 in. trap rock asphalt penetration on 6 in. macadam. $60,000. F. Pitzman, 615 Chestnut St., St. Louis, engrs.

Mo., St. Louis—Jan. 22, by Bd. Pub. Serv., 208 City Hall, rein.-con. paving 130,000 sq. yd. roads for St. Louis Training School for Feeble Minded. $43,000. L. R. Bowen, 301 City Hall, engr. Noted Dec. 13.

Tex., Del Rio—Jan. 9, by W. F. Littleton, judge Val Verde Co., grading and gravel surfacing 12.74 mi. State Highway 12, Federal Aid Project 392, 16 ft. Noted Nov. 8.

Tex., Franklin—Jan. 11, by J. Reid, judge Robertson Co., grading and gravel surfacing 9.74 mi. State Highway 43 A, 16 ft. $77,261. L. A. Peterman, Hearne, engr.

Tex., Robert Lee—Jan. 3, by E. J. Stockton, judge Coke Co., grading, etc., 14.47 mi. State Highway 70, 16 ft., $40,000; 11.477 mi. State Highway 70, 16 ft., $42,000. J. E. Beavers, Bronte, co. engr.

Tex., Rock Springs—Jan. 15, by W. E. Simpson Co., engrs., 414 N. B. C. Bldg., San Antonio, highway improvement, 17.13 mi. macadam road, 16 ft., for Edwards Co. $154,000. Noted Dec. 6.

Wash., Seattle — Jan. 11, by Bd. Pub. Wks., paving, curbing, etc., Jackson St. et al., 20,000 sq.yd. vitr. brick block on 9 in. concrete, 10,000 sq.yd. (street railway portion) vitr. brick block on 7 in. concrete. $475,000. J. D. Blackwell, city engr.

California—Jan. 7, by State Hy. Comn., Sacramento, improving 13.1 mi. Shoup Ave. to west city limits of Los Angeles, Los Angeles Co., 52,000 cu.yd. unclassified excav., 21,080 cu.yd. Class A concrete pavement, 385 cu.yd. Class A concrete in structures, 37,970 sq.yd. reinforcing steel in pavement, etc. R. M. Morton, state highway engr.

Calif., Hanford—Regrading and repaving with asphaltic concrete portions 6th, 7th, 8th, Douty and Irwin Sts., from California Constr. Co., Hanford, $48,867.

Calif., Oroville—Jan. 7, by Supervs. Butte Co., extending 5.1 mi. Oroville-Quincy Rd. Will be graveled at later date. H. H. Hume, co. engr.

Calif., Stockton—Jan. 7, by A. L. Banks, clk., grading, curbing and paving portions East Worth, Worth, East Anderson Sts., etc., 7,116 lin.ft. concrete curb and gutter, 77,878 sq.ft. 4 in. crushed rock base with 2 in. asphaltic concrete surface. W. B. Hogan, city engr.

BIDS RECEIVED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Dec. 18, granite block repaving 1st Ave. and West Bway., from J. Meehan & Son, 74 Cortlandt St., $47,070 and $88,801 respectively. Noted Dec. 13.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Dec. 19, grading, curbing and laying sidewalks, etc. on Reservoir Pl., from L. Di Minna, $5,176; grading, etc. Tyndall Ave., from I. F. Cavaluzzo, 1538 Walton Ave., $16,040; sheet asphalt repaving East 188th St., from Interboro Asphalt Co., 2306 Creston Ave., $8,295. Noted Dec. 13.

Pa., Ebensburg—Comrs. Cambria Co., 12,244 ft. Ligonier Pike, rein.-con., from E. R. Vipond, 604 Penn St., Hollidaysburg, $124,631; 15,000 ft. Reade Twp., vitr. brick on concrete, from Burnside Constr. Co., Burnside, $156,943.

Pa., Nanty-Glo—Boro. Council, concrete paving 2,477 lin.ft. 2nd St. from J. L. Elder, Ebensburg, $49,799.

Md., Baltimore—Bd. Park Comrs., Lexington and Gay Sts., 50,000 cu.yd. grading and filling at Mt. Royal Reservoir, Mt. Royal and North Aves., from H. O. Firor & Co., 1707 West Pratt St., $0.59.

N. Y., New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., reconstructing pavement, curbs and headers on south clearance roadway alongside approach of Williamsburg bridge, from Sicilian Asphalt Paving Co., 41 Park Row, $31,143. Noted Dec. 13.

Tex., Henderson—Rusk Co. grading and gravel surfacing 7.63 mi. State Highway 15-A, State Aid Project 419, 16 ft., from Rusk Co., c/o J. T. Watson, co. judge, Henderson, $45,501.

Tex., Houston — Harris Co., bituminous topping Katy Rd., from Uvalde Rock Asphalt Co., Bankers Mort. Bldg., Uvalde rock asphalt 1½ in. $1.15, 1 in. $0.85; Hayden & Austin, Santa Fe and Runnels Sts., inverted penetration 2 course $0.60, one course $0.30. Engrs. est. to exceed $25,000. Noted Nov. 29.

Tex., McKinney—Collin Co. grading and surfacing with rein.-con., 6.19 mi. State Highway 6, Federal Aid Project 402, 18 ft., from Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, $220,119. Noted Nov. 29.

Ariz., Tucson—Grading, curbing and paving Speedway between Stone and Campbell Aves. and between Campbell Ave. and Tucson Blvd., 87,150 sq.yd. sub grade, 55,920 sq.yd. paving, 16,504 lin.ft. 14 in. concrete curb, 63,370 sq.ft. concrete sidewalk, etc., from Borderland Constr. Co., Tucson, 3½ in. asphaltic concrete base, 1½ in. asphaltic or Warrenite surface, $158,725; Tucson Co., Tucson, 5 in. concrete $182,087, 4 in. Willite $162,137.

Calif., Los Angeles — Improving Vernon Ave. from Van Ness to Mesa Dr., from W. Liddington, 420 East 60th St., grading lump sum $4,990, 166,477 sq.ft. concrete pavement $0.2325, bituminous base pavement $0.12, 125 ft. curb $0.70, 2,452 ft. house sewers $1.50, etc., rein.-con. culvert $340.

Calif., San Bruno—Grading, paving and building sewers in Elm, Cypress, Acacia, Sts., etc., in Huntington Park, 120,000 sq. ft. asphaltic concrete base with Warrenite surface, from Municipal Impvt. Co., 306 12th St., Oakland $90,224. Noted Dec. 13.

Calif., Santa Rosa—Sonoma Co. grading 38.53 mi. Jenner-Mendocino Co. Highway 240,000 cu.yd. excav., etc., from J. M. DeLucca, 5500 Kales Ave., Oakland, $181,526. Noted Dec. 6.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, asphalt paving Carroll and Crown Sts., to Borough Asphalt Paving Co., 1301 Metropolitan Ave., $7,107 and $21,415 respectively. Ave. D, also paving and repaving Glenwood Rd. and 87th St., asphalt, to Brooklyn Alcatraz Asphalt Paving Co., 1301 Metropolitan Ave., $26,765, $34,051 and $9,508 respectively; asphalt paving 14th St., to Uvalde Asphalt Paving Co., 1 Bway., New York, $71,430, Wilson Ave., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $32,813; grading, curbing and flagging Ave. D, to C. Bennett Contg. Co., 414 Rutland Rd., $18,621. Noted Nov. 29 and Dec. 13.

Pa., Waynesburg — Comrs. Greene Co. concrete paving 3,044 ft. road from Sycamore towards Ninervah, to Reed & Moore, Waynesburg, $41,640. Noted Dec. 20.

W. Va., Buckhannon—Upshur Co., grading and concrete paving 7.04 mi. Clarksburg Pike to Barbour County line, to Marshall & Gillooly, Elkins, $354,675. Noted Nov. 22.

North Carolina—State Hy. Comn., Raleigh, improving roads (**S. P. means State Project**) grading and concrete paving 7.32 mi. **S. P. 457-B**, Orange Co., to L. L. Tindall, Waterford, Wis., $230,338, 5.85 mi. **S. P. 852**, McDowell Co., to A. J. Wardrep, Holsten Bank Bldg., Knoxville, Tenn., $216,325; grading and sand asphalt paving 4.94 mi. **S. P. 571**, Moore Co., to Wesco Co., Chattanooga, Tenn., $81,679; grading, concrete paving and bridging 4.65 mi. **S. P. 666**, Richmond Co., to G. R. Martin & Co., Salisbury, $159,138; grading and asphaltic paving 13.12 mi. **S. P. 275**, Sampson Co., to Highway Eng. & Contg. Co., Selbyville, Del., $266,038, 2.01 mi. **S. P. 557**, Montgomery Co., to W. F. Bowe, Jr., 541 Broad St., Augusta, Ga., $63,187; grading 13.4 mi. **S. P. 791-A**, Yadkin Co., to W. E. Graham, Mt. Ulla, $76,288, 5.03 mi. **S. P. 648-A**, Lincoln Co., to G. Ginn, Inc., Gastonia, $27,580; grading and topsoiling 16.34 mi. **S. P. 513**, Caswell Co., to N. L. Teer, Durham, $115,618; grading 9.88 mi. **S. P. 646-A**, Lincoln Co. and grading and topsoiling 6.83 mi. **S. P. 750-B**, Stokes Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $32,416 and $111,141 respectively. Noted Dec. 13.

N. C., Raleigh — Paving various streets asphalt on concrete base, curbing, guttering, storm sewers, etc., to R. G. Lassiter & Co., Citizens Bank Bldg., $425,000. Noted Nov. 15.

Georgia—State Hy. Dept., East Point, surfacing sheet asphalt 2 mi. Albany-Americus Rd., Federal Aid Project 298, Daugherty Co., to Sam Finley Co., 212 West North Ave., Atlanta, Ga., $35,224; with macadam 2.66 mi. Blue Ridge-Copperhill Rd., Federal Aid Project 358, Fannin Co., to Nicholas Constr. Co., 1 La France, Atlanta, $64,572.

Ohio — Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 3 mi. Sects. "C and I' Chardon-Madison Rd., Geauga Co., concrete, to G. A. Stein, Niles, $49,309; 0.979 mi. Sect. "Caledonia" Marion-Galion Rd., Marion Co., bituminous macadam, asphalt and brick, also 0.0625 mi. Sect. "Caledonia" Marion-Galion Rd., Marion Co., brick, to W. K. Drake, Marion, $51,017 and $3,655 respectively; 4.095 mi. Sect. "W-Englewood" Part of "X" National Rd., Montgomery Co., Kentucky rock asphalt, to Losey Rd. Constr. Co., Kenton, $122,414; 0.457 mi. Sect. "D" Canton-Steubenville Rd., Stark Co., brick, to P. Christensen, 1355 Yale Ave., N. W., Canton, $23,085; 1.493 mi. Sects. "B-1 and B-2" Alliance-Minerva Rd., Stark Co., brick (use 80% old brick) to G. W. Hadley, Goldberg Bldg., Canton, $49,547; 0.984 mi. Sect. "I-1" Bucyrus-Upper Sandusky Rd., Wyandot Co., brick, to G. B. Walther, 425 Amer. Bank Bldg., Lima, $37,693. Noted Dec. 20.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.554 mi. Sect. "B" Marietta-Athens Rd., Athens Co., rein.-con., to Mariner & Co., Athens, $85,738. Noted Dec. 20.

Indiana—State Hy. Comn., Indianapolis, improving roads (**F. A. means Federal Aid**) concrete paving 7.511 mi. Dixie Bee Rd., F. A. 35, Sect. A, and F. A. 64, Sullivan Co., to W. D. Hutchinson, Indianapolis, $150,665; 8.309 mi. Lafayette Pike, F. A. 40, Sect. B, to G. T. Miller, Lebanan, $162,245; 8.788 mi. Sect. A, Michigan Rd., Marion and Shelby Counties, and 8.705 mi. Sect. B, Shelby Co., F. A. 45, to Davis Constr. Co., Tipton, $171,008 and $187,981 respectively, engrs. est. $195,427 and $229,198 respectively; 6.128 mi. Bluff Rd., Sect. A, F. A. 63, Marion Co., to F. Cunningham, 2161 North Meridian St., Indianapolis, $135,536, engrs. est. $147,082; 6.678 mi. Bluff Rd., Sect. B, F. A. 63, to Morgan and Johnston Counties, to F. J. Tillman, 555 Cramer St., Milwaukee, Wis., $154,570, engrs. est. $180,479; 10.39 mi. Bluff Rd., Sect. C, Morgan Co., F. A. 63, to Dill Bros., Arcanum, O., $281,794, engrs. est. $319,706; 6.208 mi. Dixie Bee Line Rd., Sect. A, F. A. 65, Gibson Co., to Kerr & Murphy, Bloomington, $131,710, engrs. est. $137,297; 6.969 mi. Range Line Rd., Sect. A, F. A. 70, Miami Co., to Gluss Bros. & Co., Hamler, O., $135,205, engrs. est. $156,717; 7.847 mi. Range Line Rd., Sect. B, F. A. 70, Miami Co., to C. T. Cain, Bluffton, $169,631, engrs. est. $193,551; 6.299 mi. French-Lick Rd., Sect. G, F. A. 16, Dubois Co., to Foulks Constr. Co., 705 Ohio St., Terre Haute, $128,497, engrs. est. $147,770, gravel base course on 5.595 mi. Tell City-English Rd., Sect. D, F. A. 19, Perry Co., to Harshman & Jarrell, Frankfort, $54,383, engrs. est. $59,043; grading 3.484 mi. Sect. A, Salem-Palmyra Rd., F. A. 23, Washington Co., and 4.204 mi. Sect. D, Salem-Palmyra Rd., F. A. 23, Washington Co., to Maggard & Maggard, Austin, $19,636 and $36,722 respectively, engrs. est. $25,045 and $46,226 respectively. Noted Dec. 6.

Ind., Wabash—Wabash Co., paving Lee A. Carr Rd., 17,328 sq.yd. asphalt on concrete, to Citizens Paving Co., Kokomo, $55,435. Engrs. est. $62,000. Noted Dec. 20.

Michigan — State Hy. Dept., Lansing, grading and surfacing 6.012 mi. Assess-

Streets and Roads (Continued)

ment Dist. Rd. 280, Tuscola and Huron Counties, 41,879 cu.yd. excav., 42,311 sq. yd. gravel, to J. Bright, Pigeon, $45,158. Noted Nov. 22.

Kan., Kansas City—Paving ½ mi. Federal Aid Project 174, concrete, to Somers-Hall Constr. Co., Newton, $32,000.

Ark., Little Rock—Grading and surfacing 25,750 sq.yd. State St. from West 10th to West 20th Sts., warrenite on concrete, to M. D. L. Cook, Southern Trust Bldg., $85,528. Noted Nov. 22.

Tex., Austin—Travis Co. grading 5.57 mi. State Highway 2; 24 ft., to Evans & Greathouse, c/o J. A. Greathouse, 1706 West 6th St., $11,112; drainage structures on same, to R. G. Buckner & Sons, Gonzales, $13,255. Engrs. est. $26,804. Noted Dec. 20.

Tex., Ennis—Paving 57 blocks Dallas and various other streets, Warrenite bitulithic, to Central Bituminous Co., Praetorian Bldg., Dallas, $3 per sq.yd.

Tex., Vernon—Wilbarger Co. rein.-con. surfacing 38,255 sq.yd. State Highway 5, etc., to J. P. Soty, Vernon, $105,508. Noted Dec. 13.

Tex., Wichita Falls—Wichita Co. grading and surfacing with conglomerate gravel and asphalt topping 5 mi. Electra-North Rd., 16 ft., to J. E. Ward & Co., 714 Linz Bldg., Dallas, $74,000. Engrs. est. $75,000.

Okla., Marlow—Grading and paving 14 blocks Bway. and Main Sts., 13,900 sq.yd. concrete, 11,260 lin.ft. curbing, 5,000 cu.yd. earth, excav., etc., to Stephens Constr. Co., Marlow $60,001. Noted Dec. 13.

Idaho—Dept. Pub. Wks., Div. Highways, Boise, grading and surfacing 8.56 mi. Coeur d'Alene-Yellowstone Trail between Kellogg and Wallace, Shoshone Co., Federal Aid Project 73-A, to Shoshone Co., Wallace, 24,739 cu.yd. solid rock excav. $1.60, 29,494 cu.yd. earth excav. $0.37, 15,897 cu.yd. surfacing $1.50, etc., total $81,260; to H. H. Boomer, Ziegler Bldg., Spokane, Wash., 31,014 cu.yd. channel change $0.40, 143,003 station yards overhaul $0.04, etc., total $20,746.

Calif., Colton — Improving C and South 8th Sts., to Hall-Johnson Co., P. O. Box 51, Lynwood, 191,000 sq.ft. 2 in. course Willite pavement $0.224, 1,752 ft. curb $0.56, 1,450 sq.ft. walks $0.18; and 84,500 sq.ft. 4 in. Willite pavement $0.222, 3,630 ft. 5 in. Willite pavement $0.253, 1,500 sq.ft. walks $0.18, 1,398 lin.ft. curb $0.56. Noted Dec. 13.

Calif., Oroville — Butte Co. improving Route 17, Sect. A, Humboldt Rd., to M. C. Polk, Chico, $26,150 using commercial stone.

Industrial Works

PROPOSED WORK

Mass., Somerset—Montaup Electric Co. organized by officials of Fall River Electric Co., 85 North Main St., Fall River, Blackstone Valley Gas & Electric Co., 231 Main St., Pawtucket, R. I., and Edison Electric Illuminating Co., 42 Main St., Brockton, plans electric generating plant and transmission system, here. $7,500,000.

Mass., Worcester—Machine Shops—H. Mandell, 33 Derby St., having plans prepared by H. L. Meacham, 571 Main St., two 2 story, 60 x 125 ft., Foster St. $60,000.

N. Y., Binghamton—Warehouse—W. H. Yager Co., Water and Henry Sts., plans 5 story, 100 x 100 ft., Lewis St. Will mature in spring.

N. Y., Buffalo—Factory—Morrison Sheet Metal Wks., 26 East North St., having plans prepared by G. M. Wolfe, 1377 Main St., 2 story, 150 x 250 ft., rein.-con., brick and steel, St. Paul St. $190,000.

N. Y., Buffalo — Foundry — Kensington-Davis Corp., 144 Kensington Ave., having plans prepared 1 story, 140 x 300 ft., rein.-con., brick and steel, Kensington Ave. $140,000. Austin Co., 16112 Euclid Ave., Cleveland, O., engrs.

N. Y., Utica—Plant—Utica Gas & Electric Co., 222 Genesee St., having plans prepared by T. E. Murray Co., engrs., 55 Duane St., New York City, 250,000 hp. steam plant, to include two 33,000 hp. units, etc. Will mature in spring.

N. Y., Penn Yan—Factories—Finger Lakes Canning Co., Monell St., plans 2 story, 40 x 144 ft. and 2 story, 50 x 50 ft. factories. $60,000. Will mature in spring.

Pa., Phila.—Mill—Concordia Silk Mills, Allegheny and Bourdenot Sts., having plans prepared by E. A. Stopper, Fuller Bldg., 2 story and basement, 66 x 105 ft. rein.-con. and brick, plain foundation, Allegheny and Boudenot Aves. $100,000.

Virginia—Railway Buildings—See "Railways."

W. Va., Fairmont — Plant — Owens Bottling Co. plans addition. $40,000.

N. C., Asheville — Garage — Asheville Overland-Knight Co., Inc., having plans prepared by Smith & Carner Asheville, 4 story garage containing 100,000 sq.ft. floor space. $300,000.

N. C., Asheville—Plants—Sayles Finishing Plant, Inc., plans to construct cotton, silk finishing and bleaching plants, along Swannanoa River, near here. $2,000,000. H. Parker, secy.

N. C., Greenville—Gas Plant—City plans large gas plant. $100,000. Address E. E. Williams, c/o Municipal Water & Light Comn.

Fla., Sanford—Electric and Gas Plants—See "Waterworks."

La., New Orleans—Warehouse—Louisville & Nashville R.R., 229 St. Charles St., plans storage warehouse, $750,000.

Tenn., Columbia—Factory—Crissey Tire and Rubber Co., plans 2 story, 100 x 350 ft. factory. $150,000. R. W. Crissey, c/o owner, archt.

Tenn., Copperhill—Plant—Tennessee Electric Power Co., Chattanooga, having preliminary surveys made plant on Ocoee River, near here, to develop 15,000 hp.

Tenn., Knoxville — Foundry — Day-Evans Iron Wks., Inc., plans 1 story, 75 x 160 ft. $55,000.

Tenn., Martin—Warehouse—Stafford Milling Co. plans to rebuild cotton gin and warehouse recently destroyed by fire. $60,000.

Tenn., Nashville—Packing Plant—Nenhoff Packing Co., 1308 Adams St., plans 5 story, rein.-con. addition. $150,000.

Ky., Paducah—Foundry—Shelton Brothers Fdry. Co. plans 1 story foundry. $40,000.

O., Cleveland — Assembly — Ford Motor Co., c/o A. L. Schmitt, Highland Park, Detroit, Mich., plans 1 story, 300 x 1,000 ft., brick and steel, here. A. Kahn, Marquette Bldg., Detroit, Mich., archt.

O., Cleveland — Factory and Garage — Curtiss-Ambler Realty Co., The Arcade, having plans prepared by G. K. Ferrington Co., 4900 Euclid Ave., 1 story (ultimately 2 story 60 x 160 ft., brick and steel, ? Prospect Ave. $50,000. Auto Electrical Maintenance Co., 943 Chester Ave., lessee.

O., Cleveland—Garage—L. Duchon, 3045 Essex Rd., Cleveland Heights, having plans prepared by A. F. Janowitz, 811 Prospect Ave., 1 story, 60 x 170 ft., brick, Perkins Ave., here. $50,000.

O., Cleveland—Garage—I. Margolin, 2496 Derbyshire Rd., Cleveland Heights, plans 2 story, concrete, brick and steel, Chester Ave., here. $60,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland—Garage and Commercial—C. F. Neuberger, c/o Statler Hotel, plans 1 and 4 story, brick, steel and concrete, on lot 60 x 190 ft., 1905 Prospect Ave. $100,000. A. F. Janowitz, 811 Prospect Ave., archt. and engr.

O., Cleveland—Plant and Office—E. H. Ferguson, c/o H. Laronge, 319 Williamson Bldg., plans 2 or 3 story, brick, steel and concrete, East 49th St. and Superior Ave. $100,000. Engineer and architect's name withheld.

O., Conneaut — Factory — Graham Clay Products Co., c/o B. J. Graham, pres., 627 Guardian Bldg., Cleveland, having preliminary plans prepared by H. K. Ferguson Co., 14900 Euclid Ave., Cleveland, 1 and 2 story, brick and steel, here. $100,000. Noted Oct. 18.

O., Dayton—Factory—Duro Pump & Mfg. Co., East Monument Ave., having plans prepared by Schenck & Williams, Mutual Home Bldg., 4 story and basement, 80 x 200 ft., rein.-con. and brick, plain foundation, Amelia St. $175,000.

Ind., Angola—Plant—Standard Body Co. plans addition to plant. $200,000.

Ind., Bedford—Mill—Interstate Cut Stone Co. plans 1 story, 125 x 450 ft., brick and steel. $600,000. Private plans.

Ind., Bloomington—Garage—N. Hill plans 2 story and basement, 70 x 132 ft., rein.-con. and brick. $50,000. J. L. Nichols, Bloomington, archt.

Ind., Hartford City—Factory—Overhead Door Co. plans 1 story factory. $40,000.

Mich., Marquette—Power Plant—Voted $275,000 bonds for 2 story, brick and steel power plant, plain foundation, also dam in Dead River. Orbison & Orbison, 812 College Ave., Appleton, Wis., engrs. Noted Sept. 20. Noted under "Dams" Oct. 25.

Wis., Clintonville—Garage—A. O. Haase having plans prepared 2 story, 30 x 50 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation. $45,000. Private plans.

Wis., Kenosha — Garage — City having plans prepared by J. M. Albers, City Hall, 2 story, 50 x 90 ft. rein.-con., brick and steel garage and repair shop, plain foundation. $40,000.

Wis., Madison—Power House—Madison Gas & Electric Co., c/o J. St. John, mgr., 100 North Fairchild St., plans brick and steel addition to power house, will install 2 new boilers each 1,000 hp. and one 5,000 kw. turbine. Engineer not selected.

Wis., Milwaukee—Factory—Koehring Co., 31st and Concordia Sts., rejected bids 1 story, 122 x 360 ft., brick and steel factory, plain foundation. Will readvertise later. Van Ryn & De Gelleke, 114 Grand Ave., archts.

Wis., Shullsburg—Factory—Farmers Cooperative Co., R. F. D., plans 2 story, brick and tile factory, plain foundation. $40,000. Private plans.

Wis., Wausau—Factory—Wausau Parts Mfg. Co., c/o W. A. Schoefield, mgr., plans 2 story, 60 x 90 ft., brick and rein.-con. factory, plain foundation. $50,000. Engineer and architect not selected.

Minn., St. Paul—Warehouse and Storage—Central Supply Co., 1514 11th Ave. S., Minneapolis, had plans prepared by Toltz, King & Day, 1410 Pioneer Bldg., 3 story and basement, 100 x 100 ft., rein.-con. and brick, University Ave. and Griggs St. $125,000.

Mo., Nevada—Plant—Vernon Asphalt Co. plans plant. $75,000. Engineer and architect not selected.

Mo., St. Louis — Warehouse — Westinghouse Electric Mfg. Co., 717 South 12th St., plans 3 story, rein.-con and brick addition. $150,000.

Mo., Taskee Station—Plant, etc.—I. W. Rodgers and H. E. Springer, Poplar Bluff, having preliminary plans prepared concentrate mill and washer, power plant, etc., with trams to carry ore from building to building, here. $200,000. Private plans.

Ark., Dumas—Saw Mill—J. V. Stimson Hardwood Lumber Co., New South Memphis, having preliminary plans prepared concrete and timber mill, 50,000 ft. daily capacity. $50,000. Private plans.

Tex., Dallas—Wholesale—Crowdus Drug Co., Commerce St., having plans prepared by Whitson & Dale, Medical Arts Bldg., 5 story and basement, 125 x 213 ft., concrete and brick, Orange and McKinney Sts. $200,000.

Tex., Dallas—Warehouse and Office—Morton Investment Co., Jefferson Hotel, having plans prepared by Finn & Dunne, Magnolia Bldg., 2 story and basement, (with foundation to carry 5 story) brick and concrete, Jackson St. $85,000.

Tex., Ft. Worth—Factory—Parker Brown Co., 1302 Pacific Ave., plans addition to factory, Pacific Ave. $80,000.

Tex., Ft. Worth—Warehouse—Bergman Produce Co., 239 West 15th St., plans 200 x 200 ft. concrete and brick warehouse, Railroad Ave. $50,000. Engineer and architect not announced.

Okla., Tulsa—Laundry—Clipson Cleaning & Dyeing Co., 915 South Main St., plans 2 story and basement, 96 x 115 ft., rein.-con. and brick. $200,000. Private plans.

Ore., Portland—Warehouse—J. I. Case Threshing Machine Co., Miller Bldg., Racine, Wis., having plans prepared 4 story, 100 x 186 ft., rein.-con., plain foundation, East Clay, 1st and 2nd Sts., here. $150,000. Will take bids in spring. Private plans. Address W. G. Davis, pres.

Wash., Cle Elum—Sub Station—Puget Sound Power & Light Co., Stuart Bldg., Seattle, plans concrete substation, to cover area 200 ft. sq., 5,000 kw. capacity, here. $160,000.

California—Cold Storage—Natl. Ice & Cold Storage Co., Postal Telegraph Bldg., San Francisco, having plans prepared by Davis-Heller-Pearce Co., Delta Bldg., Stockton, six 2 story plants, rein.-con., in Vallejo, Hayward, Hollywood, Riverside, Tropico and another location to be determined. $30,000-$50,000 each.

Calif., Alhambra—Factory—Amer. Liquid Meter Co., 405 West Rose Rd., San Gabriel, interested in company recently organized which plans factory, first unit to exceed $75,000.

Calif., Emeryville—Garage—Cozzens-Ball, Inc., 48th St. and San Pablo Ave., Oakland, having plans prepared by F. Soderberg, 276

Industrial Works (Continued)

Perkins St., Oakland, 1 story, rein.-con., San Pablo Ave., here. $85,000.

Calif., Pasadena—Light and Power Plant—Plans election to vote on $250,000 bonds for extensions to municipal electric light and power plant, incl. new substation, power equipment, transmission lines, pumping plants, etc.

Calif., San Diego — Warehouse, etc. — Dohrmann Commercial Co., Geary and Stockton Sts., having preliminary plans prepared 4 story, fireproof, 7th and C Sts. To exceed $100,000.

Calif., San Francisco—Factory—J. D. and A. B. Spreckels Securities Co. (Western Sugar Refining Co.) 2 Pine St., had plans prepared concrete and steel factory, 23rd St. $200,000. Foundation work will be done by day labor. Steel to Pacific Rolling Mill Co., 17th and Mississippi Sts., $99.79 per ton.

Calif., San Francisco—Plumbing and Heating Shop—Lawson & Drucker, 450 Hayes St., plans 2 story, rein.-con., Tehama St. $40,000. Private plans.

Calif., San Francisco—Warehouse—L. R. Lurie, 315 Montgomery St., having plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 1½ story, brick, south of Market Dist. $42,000.

Ont., Wiarton—Garage and Repair Shop—McCrabbs Garage plans to rebuild garage and repair shop recently destroyed by fire. $40,000.

N. B., St. Stephen—Paper Plant—Hollingsworth & Whitney Co., 185 Devonshire St., Boston, Mass., plans paper plant, machine shop, power unit, etc., brick, along St. Croix River, here. $300,000. Private plans.

B. C., Vancouver—J. Hanbury and associates, 4th Ave. and Granville St., plans central heating plant to utilize waste material from lumber mills in False Creek area and piping steam to city business area. $1,000,000. Engineer not selected.

BIDS DESIRED

N. Y., Canton—Poultry—Jan. 8, by R. C. Ellsworth, secy. St. Lawrence University, poultry buildings for New York State School of Agriculture. $55,000.

N. J., Camden—Machine Shop—Dec. 26, by E. F. McClintock, master carpenter, Pennsylvania Offices, Camden, 1 story, 86 x 150 ft., brick and steel, plain foundation, Clinton, here, for Pennsylvania R.R., Broad St. Station, Phila. $75,000. W. H. Cookman, Broad St. Station, Phila., archt.

Md., Baltimore—Substation—Dec. 27, by United Realty Co., Continental Trust Bldg., 1 story, 27 x 66 ft., concrete and brick, plain foundation, 313-15-17 North Payson St. $40,000. Private plans. G. Wannegal, asst. supt. power.

O., Cleveland—Garage—See "Buildings."

O., Lorain—Factory—J. Spang Baking Co., c/o J. Spang, 2701 Barber Ave., Cleveland, taking bids 2 story and basement, brick and steel, here. $50,000. E. Huberty, 8017 Whitethorn Ave., Cleveland, archt.

Ill., Chicago—Auto Service and Garage—D. S. Klafter, archt., 64 West Randolph St., receiving bids 1 story, 150 x 150 ft., fireproof, Lawrence and Ridgeway Aves., for A. Natlin, c/o architect. $75,000.

Ill., Chicago—Dye House—J. H. Klafter, archts., 127 North Dearborn St., receiving bids 1 and 2 story, 50 x 125 ft., fireproof, Wentworth and 4th Pl., for Almore Dye House Co., c/o archt. $40,000.

Ill., Chicago—Factory—L. E. Russell, archt., 25 North Dearborn St., receiving bids 4 story, 60 x 150 ft., fireproof, addition, for Chicago Pottery Co., 1924 Clybourn St., $150,000.

Ill., Peoria—Packing Plant—Feb. 1, by B. H. Stephens, archt., 37 West Van Buren St., Chicago, 3 story, 112 x 250 ft., brick and concrete, Water St., here, for McDonough Packing Co., Sawyer St. $200,000.

Wis., Kenosha—Factory—P. Pirsch & Co., Fairfield Ave., taking bids 1 story, 100 x 200 ft. concrete factory, plain foundation. $60,000. Private plans.

Calif., Los Angeles—See "Unclassified."

CONTRACTS AWARDED

Mass., Brockton—Substation, etc.—Edison Electric Illuminating Co., 42 Main St., 2 story substation, transformers and equipment at Dupont Circle; 4½ transmission line from here to East Bridgewater; also equipment, extensions and rearrangement of switching equipment at East Bridgewater Station, to Stone & Webster, Inc., 147 Milk St., Boston. Total $785,000.

R. I., Phillipsdale (Branch of Providence)—Factory—Amer. Electrical Wks., 1 story, 80 x 280 ft., steel, in Phillipsdale Dist., to Stone & Webster Inc., 147 Milk St., Boston. Engrs. est. $100,000.

R. I., Providence — Warehouse — Orrin Jones Co., 59 Central St., 6 story, 45 x 76 ft., brick and steel, Central St., to Central Eng. & Constr. Co., Main St., Pawtucket, $1[illegible],000.

N. Y., Cranesville—Power House—Adirondack Power & Light Co., 511 State St., Schenectady, 1 story, 145 x 200 ft., brick and steel addition, plain foundation, here, to J. T. Turner & Sons, Schenectady, $275,000.

N. Y., Long Island City—Factory—Nedwell Building Corp., c/o Baker & Ludwig, archts. and engrs., 9 Jackson Ave., 6 story, 60 x 100 ft., rein.-con., brick and steel, plain foundation, Hoffman Blvd., to Pritz & Stone, Grand Central Terminal, New York. Archts. est. $180,000.

N. Y., Palmyra—Power Station—R. K. Fuller, comr. Canals & Waterways, Albany, power station at Lock 29, here, Contr. 193, to T. H. Ryan, Inc., 184 Cleveland Ave., Buffalo, $63,600. Noted Nov. 15.

Pa., Phila.—Factory—V. H. Smith & Co., 2nd and Green Sts., 5 story, 30 x 85 ft. rein.-con. and brick, plain foundation, Spring Garden and Phillip Sts., to E. Atkins, 249 South 24th St., $65,000.

Pa., Phila.—Garage—W. Golder, c/o L. B. Rothchild, 215 South Broad St., 1 story, 75 x 167 ft. brick and steel garage, plain foundation, 1019 Arch St., to Golder Constr. Co., 274 South 20th St., $40,000.

Pa., Phila.—Sales and Garage—R. J. Seltzer, 1423 Locust St. will build 1 story, 50 x 265 ft. brick and steel, plain foundation, 3427-3429 North Broad St., by day labor. $50,000.

Pa., Phila.—Tank Shop—General Electric Co., River Rd., Schenectady, N. Y., 1 story, 125 x 250 ft. brick and steel, plain foundation, 69th and Elmwood Aves., to White Constr. Co., 95 Madison Ave., New York City, $200,000.

Tenn., Nashville—Packing Plant—Neuhoff Packing Co., 1308 Adams St., 4 story and basement, 45 x 100 ft., brick and concrete addition, to Foster-Creighton Co., 4th and 1st Natl. Bank Bldg., approximately $150,000.

O., Cleveland—Garage and Commercial—Auto Electrical Maintenance Co., c/o H. E. Page, 943 Chester Ave., 1 story, 62 x 278 ft. brick and steel, 2332 Prospect Ave., to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $75,000.

O., Dayton—Auto Repair Shop—See "Buildings."

O., Dayton—Sales, etc.—E. F. Kimmel, Ludlow Bldg., 3 story and basement, 66 x 130 ft., sales and auto repair shop, rein.-con. and brick, plain foundation, North Jefferson St., to I. F. Weber & Co., 809 Commercial Bldg., $100,000.

Mich., Detroit—Plant—Natl. Ice Co., 245 Congress St., 1 story, brick and steel plant, plain foundation, Sterritt Ave., to Pine & Munnecke, 103 Marquette Bldg., $40,000.

Ill., Chicago—Auto Service and Garage—J. J. Wright Motor Co., 353 East 55th St., 1 story, 105 x 180 ft., fireproof, near Princeton Ave. and 55th St., to R. S. Woods, 12 West 55th St., archts. est. $70,000.

Ill., Chicago—Auto Sales and Service—L. Bromberg, 1252 North Oakley Blvd., 1 story, 103 x 250 ft., fireproof, 3250-56 Milwaukee Ave., by day labor. $100,000. A. M. Ruttenberg, 64 West Randolph St., archt. Noted Sept. 13.

Ill., Chicago—Garage—W. E. Garage Co. c/o Halperin & Braun, archts., 19 South La Salle St., 2 story, 96 x 125 ft., fireproof, 1830-38 West Madison St., to H. Janisch & Co., 1813 Winona Ave. Archts. est. $90,000.

Wis., Madison — Garage, etc. — Madison Medical Assn., c/o R. S. Ingersoll, Lakeside St., will build 2 story, 45 x 100 ft. rein.-con., brick and steel garage, laundry and boiler house, plain foundation, by day labor. $50,000. F. Riley, Conklin Bldg., archt.

Wis., Madison—Mill—L. J. Schultz Co., 1326 West Washington Ave., 2 story, 41 x 72 ft., factory and mill, brick, plain foundation, Regent St., to G. Nelson, 1118 West Jackson St. Archts. est. $40,000.

Wis., Milwaukee—Warehouse—Meredith Bros. Co., 1043 Kinnickinnic Ave., will build 1 story, 40 x 142 ft., brick and timber, plain foundation, Washington St., by day labor. $45,000.

Kan., Topeka — Plant — Southwestern Serum Co., 21st and Mosley Sts., 1 story, 100 x 125 ft. and 2 story, 50 x 80 ft., rein.-con. and brick, East 21st St., to Clickmer Constr. Co., Hutchinson. Archts. est. $50,000.

Neb., Omaha—Laundry—Kimball Laundry Co., 3 story and basement, 15th and Jones Sts., to P. Kiewits Sons, 908 Omaha Natl. Bank Bldg., $150,000.

Mo., Moberly—Plant—Polar Wave Ice & Fuel Co., 3626 Olive St., 83 x 250 ft., rein.-con. and brick, 50 ft. high, to Bell Bros. Constr. Co., Moberly. Archts. est. $125,000. Noted Dec. 13.

Mo., St. Louis—Foundry—Warren Steel Casting Co., 3400 Maury Ave., 1 story, 60 x 200 ft. foundry, to E. Lund Constr. Co., Merchants-Laclede Bldg. Archts. est. $60,000. Noted Nov. 22.

Mo., St. Louis—Laundry—Cascade Wet Wash Co., Texas and Victor Sts., 1 and 2 story, 125 x 247 ft., rein.-con. and brick, Ohio Ave., to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg. Archts. est. $75,000. Noted Mar. 1.

Mo., St. Louis—Plant—St. Louis Terra Cotta Co., 5811 Manchester Ave., will build 1 story, 63 x 145 ft., 80 x 160 ft., and 95 x 450 ft. plants, and 5 kilns, brick and sheet iron, Oleatha St., by day labor. $75,000. Private plans.

Ark., Forrest City—Hardware—Vaccaro-Drobmyer Co., will build 2 story and basement, 109 x 150 ft., by day labor under supervision of J. L. Gatling, archt., Madison Ave. Bldg., Memphis, Tenn. Noted Nov. 22.

Ark., Hot Springs—Garage—M. J. Henderson, c/o Arkansas Trust Co., 621 Central St., will build 3 story, 110 x 159 ft., brick, rein.-con. and steel garage, by day labor under supervision S. M. Frank, archt., Hot Springs. $50,000.

Tex., Ft. Worth—Factory—Parker Brown Mfg. Co., East Front and Oak Sts., brick and concrete factory, East Front St., to C. F. Hodge, Keene Bldg., $79,000.

Wash., Sumner—Power Station—Puget Sound Power & Light Co., 4th unit in White River hydro-electric plant, incl. 20,000 kva. generator, transformers, circuit breakers, 1,800 ft. steel penstock and addition to building, to Stone & Webster, Inc., 147 Milk St., Boston. $1,060 000.

Calif., Los Angeles—Garage—California Co., 626 South Spring St., 1 story, 110 x 135 ft., brick, Temple St. near Alvarado St., to Benet & Co., 416 Beverly Dr., Beverly Hills, percentage basis. Checker Taxi Cab Co., 846 Bway., lessee.

Calif., San Francisco—Warehouse—J. W. Bender Roofing Co., Monadnock Bldg., 1 story, rein.-con., Alabama and 19th Sts., to Lindgren-Swinerton Co., Standard Oil Bldg., $42,000.

Buildings

PROPOSED WORK

N. Y., Buffalo—Church—Bley & Lyman, archts., 250 Delaware Ave., take bids about Feb. 1, rein.-con., brick and stone, Main St., for St. Joseph Roman Catholic Church, 1238 Main St.

N. Y., Long Island City—Church—Church of St. Patrick, c/o R. J. Reilly, archt. and engr., 50 East 41st St., New York, having plans prepared brick, steel and stone, plain foundation, Academy St., here. $150,000.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., making sketches brick, steel and stone, plain foundation, Grand Concourse. $350,000. Owner's name withheld.

N. Y., New York—Apartment—S. Liberman, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., having plans prepared brick, steel and stone, plain foundation, 189th St. and Audubon Ave. $275,000.

N. Y., New York—Church and Hall—Roman Catholic Church of St. John Nepomak, c/o J. C. Van Pelt, archt. and engr., 126 East 59th St., having plans prepared, brick, steel and stone, plain foundation, 1st Ave. and 68th St. $400,000.

N. Y., New York—Turkish Bath—P. D. R. T Constr. Corp., c/o Gronenberg & Leuchtag, archts. and engrs., 32 Union Sq., having plans prepared 8 story, 75 x 98 ft., brick, steel and stone, plain foundation, 121-12[illegible] West 46th St. $350,000.

N. Y., Webster—School—Voted $370,000 bonds school, South Ave. Will mature in spring. Noted Dec. 6.

N. J., Glen Ridge—School—Bd. Educ. had plans prepared by F. Goodwille, 56 West 45th St., New York City, brick, High St. $190,000.

Pa., Chestnut Hill (Phila. P. O.)—Dormitory—G. D. Weisener having plans prepared by H. Trumbauer, Land Title Bldg., Phila., 2 story, 40 x 75 ft. stone dormitory, and 1½ story, 60 x 420 ft. stable, at Erdenheim. $150,000.

Pa., Lancaster—School—School Bd. having plans prepared by C. E. Urban, Woolworth Bldg., 3 story and basement, 169 x

Buildings (Continued)

211 ft. brick, steel and stone, plain foundation. $400,000.

Pa., Merion (Phila. P. O.)—Apartment—Merion Apartment Co., c/o Smullen & Berry, 217 South Broad St., Phila., having plans prepared by T. B. Lippincott, 11 South 16th St., Phila., 3 story and basement, 40 x 290 ft. with 2 wings 40 x 75 ft. and 40 x 100 ft. brick, plain foundations, Idris Rd. $500,000.

Pa., Phila. — Wynnefield-Taylor, Pelham Court, Germantown, (Phila. P. O.), having plans prepared by T. B. Lippincott, 11 South 16th St., 7 story and basement, 48 x 128 ft., rein.-con., brick and steel, plain foundation, Lincoln Dr. and Emlen St. $450,000.

Pa., Wilkes-Barre—Bank—Heights Deposit Bank, East Market and Hancock Sts., having plans prepared 4 story, 40 x 100 ft. rein.-con. and steel, East Market St. $150,000. Architect not selected.

W. Va., Huntington—Court House—Cabell Co. rejected bids Nov. 26, 3 story, 65 x 107 ft. addition, rein.-con. $150,000. Will readvertise.

W. Va., Morgantown—High School—Jan. 22 to vote on $600,000 bonds for high school. W. S. John, secy. Bd. Educ. Noted Dec. 6.

W. Va., Welch—School—Big Creek Dist. Bd. Educ., plans 3 school buildings. $150,000.

N. C., Greensboro — Municipal — Sold $200,500 bonds new municipal building. P. C. Painter, city mgr.

N. C., Hickory—School—Sold $340,000 bonds new school.

Ala., Birmingham—Office—E. M. Elliott, 1214 Virginia Ave., plans 8 or 10 story, 100 x 150 ft., 5th Ave. and 23rd St. $500,000. Architect and engineer not selected.

Miss., Biloxi—School—Voted $100,000 additional bonds for 3 ward buildings. $100,000 previously available.

Tenn., Knoxville — Temple — Kerbela Shrine Temple plans to construct temple. $350,000. Engineer and architect not selected.

Tenn., Morristown—School—Bd. Educ. for Negroes, Methodist Episcopal Church, plans 3 industrial school buildings. $150,000.

Ky., Dawson Springs — Hospital — National Hospital of Church of Christ, plans 3 story hospital. $500,000. Engineer and architect not selected.

Ky., Louisville — Temple — Union Labor Temple Co., Inc., having plans prepared by Weakley & Hawes, C & S Bldg., 5 story, 75 x 200 ft., steel frame, Main St. $350,000.

O., Carey—Church—A. M. Fish, pastor, having plans prepared by Ogden & Gander, archts. and engrs., 17 Steuben St., Albany, N. Y., 1 story, 80 x 200 ft., stone and timber, plain foundation. $250,000.

O., Cleveland — Apartment Hotel — M. Goodman, c/o S. H. Kleiman Co., Natl. City Bldg., having plans prepared by N. Petti, Williamson Bldg., 4 story and basement, 88 x 150 ft., brick East 20th St. $150,000.

O., Cleveland — Apartment — S. Koslen, 1077 East 97th St., having plans prepared by M. Weis, 617 Union Bldg., 3 story, brick, East 93rd St. $200,000.

O., Cleveland — Apartment — S. Koslen, 1077 East 97th St., having plans prepared by M. Weis, 617 Union Bldg., 4 story, brick, East 82nd St. $300,000.

O., Cleveland — Apartment — M. Morris, 1829 Grasmere Ave., having plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story and basement, 39 x 145 ft., brick and timber, East 77th St. south of Euclid Ave. $150,000.

O., Cleveland — Apartment — T and R Constr. Co., c/o J. Shafran, 12109 Union Ave., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story, 37 x 157 ft., brick and timber, East 88th and East 90th Sts. $150,000.

O., Columbus — Medical Science — Bd. Trustees Ohio State University having plans prepared by J. N. Bradford, Ohio State University, 4 story and basement, 50 x 125 ft., rein.-con. and brick addition, campus. $200,000.

O., Garfield Heights (Bedford P. O.)—School—Bd. Educ., Turney Rd., having plans prepared by W. H. Nicklas, 1900 Euclid Ave., Cleveland, 2 story, brick, metal lumber and concrete addition. $190,000.

O., Wooster—Community—Wooster College plans college community building. $200,000.

Ind., Ft. Wayne—Temple—Mispah Temple, A. A. O. N. M. S., having revised plans prepared by G. Mahurin, Lincoln Life Bldg., 5 story and basement, 146 x 165 ft. $600,000. Noted Sept. 7.

Ind., Indianapolis — Bank and Office — Guardian Realty Co., Meyer-Kiser Bank, plans 4 story and basement, rein.-con. and brick, Indiana Ave. $150,000. Vonnegut, Bohn & Mueller, Indiana Trust Bldg., archts.

Ind., Indianapolis—Schools—Bd. School Trustees plans 2 story and basement, West Washington St., $500,000, Vonnegut, Bohn & Mueller, Indiana Trust Bldg., archts.; 2 story and basement high school, North Meridian St., $1,500,000, Kopf & Woolling, Indiana Pythian Bldg., archts.; 2 story and basement, colored high school, North West St., $500,000, Harrison & Turnock, Bd. of Trade Bldg., archts. All brick, steel and rein.-con. Noted Jan. 11.

Ind., South Bend—College—St. Marys College plans 3 story and basement, rein.-con. and brick. $150,000. M. Carroll, 614 Ridge Arcade, Kansas City, Mo., archt.

Mich., Highland Park (Detroit P. O.)—School—Bd. Educ. having plans prepared by Burrowes & Eurich, 2631 Woodward Ave., Detroit, 2 story and basement, 64 x 200 ft. rein.-con., brick, steel and stone addition to Ford School, 2nd and Midland Aves. $160,000.

Mich., Jackson—Hotel—General Organization Co. plans hotel, $1,000,000. Engineer and architect not selected.

Ill., Chicago—Apartment—C. J. Carey, 227 East Superior St., plans 6 story, 48 x 148 ft., fireproof, 117 East Walton St. $250,000. Fugard & Knapp, 219 East Superior St., archts.

Ill., Chicago—Apartment—S. & J. Handelsman, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., plans 3 story, 125 x 150 ft., fireproof, 1332-42 South Harding St. $200,000.

Ill., Chicago—Apartment—C. F. Henry, c/o R. F. France, archts., 155 North Clark St., plans 3 story and basement, 140 x 200 ft., fireproof, Malden and Sunnyside Aves. $600,000.

Ill., Chicago — Apartment — N. Kaplan, c/o Rawson & Eisenberg, archts., 5 North La Salle St., plans 3 story and basement, fireproof, Cottage Grove Ave. near 42nd St. $150,000.

Wis., Appleton — Hotel — Conway Hotel Co., Oneida St., having plans prepared by M. Tullgren & Sons, 425 East Water St., Milwaukee, 6 story and basement, 60 x 75 ft., brick and concrete addition, plain foundation. $150,000.

Wis., Bloomington—School—Joint Dist. 3 having plans prepared by E. Tough, East Mifflin St., Madison, 2 story and basement, 68 x 100 ft., brick, tile and concrete, plain foundation. $150,000.

Wis., Cross Plains—School—St. Francis Catholic Congregation, c/o E. J. Kersteny, pastor, having plans prepared by F. L. Kronenberg, Carroll Bldg., Madison, 2 story and basement, 73 x 110 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Eau Claire—Exchange—Wisconsin Telephone Co., 418 Bway., Milwaukee, plans 3 story, brick and concrete, plain foundation. East Grand Ave., here. $150,000. Engineer and architect not selected.

Wis., Eau Claire — High School — Bd. Educ., c/o J. E. Barron, secy., plans 4 story, rein.-con., brick and steel, plain foundation. Election soon to vote on $200,000 bonds. Architect not selected.

Wis., Kenosha—Bank and Office—Merchants & Savings Bank, 252 Main St., having preliminary plans prepared by Lindl, Lesser & Schutte, 82 Wisconsin St., Milwaukee, 4 story and basement, 50 x 85 ft., brick and concrete, plain foundation. $200,000.

Wis., Madison—City Hall and Court House—City and Dane Co., c/o W. G. Woodward, chn., 17 West Main St., having plans prepared by Claude & Starck, Badger Annex, 4 story, rein.-con., brick and steel, plain foundation. $175,000.

Wis., Madison—School—Bd. Educ., 22 West Dayton St., having plans prepared by E. Tough, Washington Bldg., 2 story, 50 x 95 ft. rein.-con., brick and steel addition to Randolph School, plain foundation, Spooner Ave. $200,000.

Wis., Menasha—Church—First Congregational Society, c/o W. H. Miner, chn. building com., 330 Park St., plans 2 story, brick and tile, plain foundation. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Apartments—J. Hunholz, 2310 Vliet St., plans three 8 story and basement, brick and concrete, plain foundations, Martin St. $350,000 each. Engineer and architect not selected.

Wis., Milwaukee — High School — Our Lady of Mercy Academy, 705 Natl. Ave., having plans prepared by Brust & Philipp, 405 Bway., 3 story and basement, concrete, brick and tile, plain foundation, 22nd and Mitchell Aves. $400,000.

Wis., Rhinelander—High School—School Bd. soon takes bids 3 story and basement, brick, tile and concrete, plain foundation. $445,000. Smith, Reynolds & Brandt, Dempsey Bldg., Manitowoc, archts.

Wis., Shorewood (Milwaukee P. O.) — School Dist. 4, c/o W. Siekert, clk., having plans prepared by Herbst & Kuenzli, 114 Grand Ave., 3 story and basement, brick, tile and concrete, plain foundation, Oakland Ave. $280,000.

Wis., Wausau—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, having preliminary plans prepared by M. Tullgren & Sons, 425 East Water St., Milwaukee, 8 story and basement, brick and concrete, plain foundation, 3rd and Scott Sts. $800,000.

Wis., Wauwatosa—High School—Township and city election Jan. 4, to vote on $400,000 bonds 2 story and basement Union High School. Engineer and architect not selected.

Wis., West Bend—High School—School Dist. 1, having revised plans prepared by Foeller, Schober & Stephenson, Nicollet Bldg., Green Bay, 2 story and basement, brick, tile and concrete, plain foundation. $200,000.

Wis., Wyocena—Asylum—Columbia Co. c/o S. C. Cushman, supt., having plans prepared by Claude & Starck, Badger Annex, 2 story and basement, 50 x 166 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Ia., Ames—School -State Bd. Educ., Des Moines, having plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, 3 story and basement, rein.-con., brick and stone, at Iowa State College, here. $200,000. W. H. Gemmill, secy.

Minn., Minneapolis — Hotel — Calhoun Beach Holding Co., c/o H. S. Goldie, treas., 929 Plymouth Bldg., soon takes bids and opens same after Jan. 1, 6 story superstructure, 120 x 250 ft., with 3 wings, rein.-con., brick and tile, West Lake St. and Dean Blvd. $1,300,000. Former bids rejected. A. Rose, 1007 Builders Exchange, archt. Noted Aug. 2 under "Unclassified."

Minn., Wells—School—Bd. Educ. plans 2 story and basement, rein.-con., brick and tile. $150,000. L. M. Buscho, clk. Engineer and architect not announced.

Kan., Lawrence—Hotel—W. E. Simons, c/o Eldridge Hotel, having preliminary plans prepared by W. E. Hulse & Co., Stamey Hotel Bldg. ,Hutchison, 6 story and basement, 42 x 117 ft., rein.-con., brick and stone. $200,000.

S. D., Watertown—Court House—Codington Co. plans 3 story and basement, rein.-con., brick and stone. $300,000. Engineer and architect not announced.

Mo., St. Louis—Administration—Southwestern Bell Telephone Co., Bway. and Locust Sts., having preliminary plans prepared 20 story and basement, 109 x 229 ft., rein.-con., brick, steel and stone, Pine St. $3,500,000. Private plans.

Mo., St. Louis—Exchange—Southwestern Bell Telephone Co., Bway. and Locust St., having preliminary plans prepared 7 story and basement (equal in height to 11 story), 110 x 130 ft., rein.-con., brick, steel and stone, Chestnut St. $750,000. Private plans.

Tex., Austin—Schools—Voted $500,000 bonds for erection of new junior high school, ward school and additions to present schools. Engineer and architect not selected. Noted Nov. 15.

Tex., Cleburne—Hotel—R. A. Johnson, Jacksonville, plans 4 story, brick and concrete, James St. $150,000. Engineer and architect not announced.

Tex., Ft. Worth — Library — Texas Christian University takes bids early in 1924, for 2 or 3 story, concrete and brick, on campus. $150,000 E. M. Waite, pres. Engineer and architect not announced.

Tex., San Antonio—Auditorium—City receiving competitive sketches auditorium, rein.-con., brick, stone and marble, Romana and North St. Marys Sts. Additional $200,000 bonds voted, total cost $700,000. Noted Oct. 11.

Okla., Blackwell — Hall and Store — Masonic Lodge making preliminary plans 3 story, 100 x 140 ft., Main St., $175,000. Architect not selected.

Okla., Guthrie — High School — Voted $280,000 bonds 3 story, 165 x 180 ft., rein.-con. and brick, plain foundation, Noble St. Hawk & Parr, Magnolia Bldg., Oklahoma City, engrs.

Okla., Oklahoma City—Medical Arts and Bank—Medical Assn. & Security Natl. Bank, 109 North Bway., having plans prepared by Layton, Smith & Forsyth, 906 Baniff Bldg., 12 story and basement, 75 x 140 ft., rein.-con., brick and stone. $800,000.

Wash., Tacoma—Temple—Masonic Corp., c/o B. W. Coiner, 516 Bankers Trust Bldg., had sketches prepared and takes bids early in spring, 10 story, 125 x 175 ft., rein.-con., Bway. and St. Helens St. $400,000. Engineer and architect not selected. Noted June 22.

Ore., Salem—High School—W. C. Knighton, archt., United States Bank Bldg., Portland, takes bids about March 21, 2 story.

Building (Continued)

90 x 120 ft., rein.-con., here, for Bd. Educ. $190,000.

Calif., Long Beach—Lodge and Commercial—Masonic Lodge having plans prepared by Davies & Baume, Long Beach, 4 story, 50 x 150 ft., brick, Pine Ave. $170,000.

Calif., Los Angeles—Apartment—R. V. New, c/o L. A. Smith, archt., Lily-Fletcher Bldg., having plans prepared 4 story and basement, brick, 11th St. near Lake St. $150,000.

Calif., Los Angeles — Apartment — R. Roland, having plans prepared by Walker & Eisen, Pacific Finance Bldg., 13 story and basement, 100 x 150 ft., rein.-con. and brick, Wilshire Blvd. and Ardmore Ave. $1,500,000.

Calif., Los Angeles—Memorial Hall—Los Angeles Co. plans approximately 5 story, steel and rein.-con. To exceed $300,000. Will be occupied by Amer. Legion.

Calif., Pacioma—Bank and Store—Suburban Estate Co., c/o B. Bloser, archt., Consolidated Realty Bldg., Los Angeles, having preliminary plans prepared 1 story, 160 x 163 ft., brick, Sherman Way.

Calif., San Diego—Schools—Election Jan. 15 to vote on $400,000 bonds for elementary schools and $850,000 for junior high school. W. Angier, secy. City Bd. Educ. Noted Aug. 23.

Calif., San Francisco—Apartment—S. L. Peiser, 130 Palm Ave., having prepared by Macdonald & Couchot, 234 Pine St., 5 story and basement, rein.-con., Jackson St. near Buchanan St. $150,000.

Calif., San Francisco—High Schools—City and San Francisco Co. having plans prepared by J. Reid, Jr., city archt., 1st Natl. Bank Bldg., for Durant High School, $150,000 or more, Park-Presidio High School, $150,000 or more, South End High School, $150,000 or more, Lowell High School, $150,000 or more.

Que., Montreal—Office—Chamber of Commerce, St. Gabriel St., plans 4 story, office, St. James and St. Gabriel Sts. $300,000.

Ont., Ottawa—School—Pub. School Bd. having plans prepared by W. C. Beattie, c/o Elgin St. School, for 2 story and basement, rein.-con. and brick, plain foundation, Warren Ave. $200,000.

BIDS DESIRED

N. Y., Bellaire (Jamaica P. O.)—School—Jan. 8, by Superintendent Bd. Educ, 500 Park Ave., New York, P. S. 109, brick, steel and stone, plain foundation, 92nd Ave. and 213th St., here. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., Brooklyn—School—Jan. 8, by Superintendent Bd. Educ., 500 Park Ave., New York, P. S. 201, brick, steel and stone, plain foundation, 12th Ave. and 80th St., here. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. and engr. Noted Dec. 21, 1922.

N. Y., New York—Church—J. Gregory, archt. and engr., 49 West 45th St., taking bids and opens same about Jan. 5, brick and stone, plain foundation, University Ave., for Calvary Methodist Episcopal Church. $400,000. Noted Oct. 11.

N. Y., New York—School—Jan. 8, by Superintendent Bd. Educ., 500 Park Ave., P. S. 80, brick, steel and stone, plain foundation, East Mosholu Parkway. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

Md., Baltimore—School—Jan. 9, by Bd. Awards, 3 story and basement, 111 x 211 ft., concrete and brick, plain foundation, Jackson Sq., Fairmont Ave. and Fayette St. $700,000. T. W. Pietsch, American Bldg., archt. H. Massart, 328 North Charles St., engr. H. G. Perring, superv. engr.

O., Cleveland—Apartment and Garage—L. Cahn, 10615 Grantwood Ave., taking bids two 3 story and basements, 47 x 190 ft. apartments, and 40 x 120 ft. garage brick, 735 East 105th St. $225,000.

O., Columbus—Hall—Feb. 4, by Richards, McCarty & Bulford, archts., 584 East Broad St., 5 story, 120 x 130 ft., brick and terra cotta, East State St., for Knights of Columbus, 6th and State Sts. $500,000.

O., East Cleveland (Cleveland, P. O.)—Apartment—M. Stein, 511 Schofield Bldg., Cleveland, taking bids 2 story and basement, 102 x 126 ft., brick, Page Ave., here. $160,000. A. F. Janowitz, 811 Prospect Ave., Cleveland, archt.

Ind., Hammond—Hospital—D. X. Murphy & Bro., archts., Louisville Trust Bldg., Louisville, Ky., taking bids and open same about Feb. 1, 4 story, 46 x 288 ft., rein.-con., for Franciscan Sisters of the Poor. $300,000. Noted Nov. 29.

Mich., Detroit—Mercantile—Dec. 28, by Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., 15 story and basement, 100 x 244 ft. rein.-con., brick and steel, plain foundation, Gratiot Ave., for J. L. Hudson Co., Gratiot Ave. and Farmer St.

Mich., Flint—School—Dec. 28, by A. J. Wildanger, secy. School Bd., 2 story and basement, rein.-con., brick and steel, plain foundation, Padasena Ave. $300,000. Malcomson, Higginbotham & Palmer, 1219 Griswold St., Detroit, archts.

Ill., Chicago — Apartment — Dubin & Eisenberg, archts., 14 West Washington St., receiving bids 3 story and basement, 60 x 178 ft., fireproof, Greenview and Lunt Aves., for Rosen & Coine, c/o architects. $150,000.

Ill., Chicago—Apartment—W. C. Presto, archt., 111 West Washington St., receiving bids 3 story and basement, 84 x 125 ft., fireproof, Albany and Lawrence Sts. $150,000. Owners name withheld.

Wis., Madison—Chapel—Balch & Lippert, archts., Gay Bldg., taking new bids 4 story, 65 x 88 ft. rein.-con., brick and steel, plain foundation, for German Methodist Church, 110 South Congress St. $150,000. Former bids rejected. Noted Nov. 29.

Wis., Milwaukee — Apartments — Beach Realty Co., 53 Patton Bldg., taking bids two 4 story and basement, 50 x 130 ft., brick, tile and concrete, plain foundations, Irving Pl. $165,000 for both. Private plans.

Wis., Milwaukee—Bank and Office—Dick & Bauer, archts., 811 State St., taking bids on foundation and excavation work for 2 story, 30 x 65 ft. and 67 x 70 ft., brick and concrete, North Ave., for Northwestern Bank Bldg., c/o J. G. Reutermann, 114 Grand Ave. $150,000.

Wis., Milwaukee—Hotel—Leiser & Holst, archts., 105 Wells St., taking bids and opens same about Jan. 1, 3 story and basement, 77 x 145 ft., brick, tile and concrete, plain foundation, 6th and Grand Sts. $200,000. Owners name withheld.

Tex., Galveston—Laboratory—Jan. 14, by State Bd. Regents, Bd. Educ. Bldg., Austin, 3 story and basement, 84 x 144 ft., rein.-con., brick and stone, Ave. B and 9th St., here. $350,000. Herbert M. Green Co., 619 North Texas Bldg., Dallas, archts.

Calif., Long Beach—Club—J. Morgan, archt., Merchants Exch. Bldg., San Francisco, receiving bids 5 story and basement, rein.-con. building for Y. W. C. A., here. $400,000.

BIDS RECEIVED

N. J., Asyla (Grenloch P. O.)—Hospital—Camden Co. (Camden) Dec. 17, group of buildings, here, from T. M. Gibbs Constr. Co., 215 South Broad St., Phila., $1,149,018. Noted Nov. 29 under "Camden."

N. J., Camden—High School—C. Adams, archt., 2038 Spruce St., Phila., Pa., Dec. 17, Cramer Junior High School, 3 story and basement, 80 x 153 ft., rein.-con., brick and steel, plain foundation, 29th and Federal Sts., here, for Bd. Educ., from G. Bachmann, 19 North 30th St., $185,969. Noted Dec. 13.

Ind., Ft. Wayne—School—Bd. School Trustees, 2 story and basement, 162 x 170 ft., rein.-con. steel and brick, from N. Frantz, Silver Lake, $150,000. Archts. est. $200,000. Noted Nov. 29.

Wis., Racine — Memorial Auditorium — Memorial Hall Com., 1 and 2 story, 180 x 200 ft., brick and concrete, from A. Kappel, 526 Wisconsin St., $173,913.

CONTRACTS AWARDED

Mass., Boston—School—City, 2 story and basement, 50 x 120 ft. rein.-con. and brick, wood pile foundation, Bluehill Ave., to be known as "Roger Walcott School," to McDonald & Imhof, 164 Dudley St., $259,000. Noted Nov. 8.

Mass., Hyde Park (Boston P.O.)—Police Station—Pub. Wks. Dept., Boston, 2 story and basement, 79 x 140 ft., brick, granite and limestone, wood pile foundation, Hyde Park Ave., to Alco Contg. Co., Inc., 43 Tremont St., Boston, $181,916. Noted Nov. 22.

N. Y., Brooklyn — Apartment — Sayco Realty Co., c/o McCarthy & Kelly, archts. and engrs., 159 Remsen St., will build brick, steel and stone, plain foundation, Lincoln Rd., here, by day labor. $600,000.

N. Y., Brooklyn—High School—Bd. Educ., 500 Park Ave., New York, James Madison High School, brick, steel and stone, plain foundation, Bedford Ave. from Ave. P to Quentin Rd., here, to Turner Constr. Co., 242 Madison Ave., New York, $2,045,000. Noted Dec. 13.

N. Y., New York—Apartment—E. Brandt, c/o Springsteen & Goldhammer, archts., and engrs., 32 Union Sq., will build brick, steel and stone, plain foundation, 188th St. and Wadsworth Ave., by day labor. $200,000.

N. Y., New York—Apartment—I. Kraft, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build brick, steel and stone, plain foundation, 189th St. and Amsterdam Ave., by day labor. $1,500,000.

N. Y., New York—Apartment—S. Williams, c/o G. G. Miller, archt. and engr., 1482 Bway., will build brick, steel and stone, plain foundation, 109th St. and 5th Ave., by day labor. $300,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., addition to P. S. 36, brick, steel and stone, Black Rock and Castle Hill Aves., Bronx Boro, to G. Colon & Co., 81 East 125th St., $347,000. Noted Dec. 13.

Pa., Phila.—Store—Heyman Bros., 215 South Broad St., 2 story and basement, 115 x 120 ft., steel, limestone and terra cotta, plain foundation, 1721-1729 Chestnut St., to J. Schnabel, Denckla Bldg., $200,000.

Tenn., Lebanon—Schools—City Bd. Educ., 2 buildings, 2 story and basement, brick and concrete, to Dunnavant Constr. Co., Nashville, Est. cost $150,000. Noted Dec. 13.

Ind., South Bend—Office—Tuttle Corp., 119 West Washington St., 8 story and basement, 56 x 122 ft., rein.-con., steel and brick, Colfax St., to Bedford Stone & Construction Co., Fletcher Savings & Trust Bldg. Archts. est. $700,000.

Ill., Chicago—Apartment—A. D. Schuler, 4634 North Kedzie Ave., 3 story and basement, 84 x 125 ft., rein.-con., brick and steel, fireproof, Sacramento and Lawrence Sts., to A. Haack, 1427 North Sawyer St. Archts. est. $150,000.

Ill., Oak Park—Apartment—M. P. Morrissey, 140 South Dearborn St., Chicago, apartment on Oak Park and Erie Sts., here, to Anderson & Winblad, 6235 South Michigan Ave., Chicago. Archts. est. $750,000.

Ia., Cedar Falls—Dormitory—State Bd. Educ., Des Moines, general contract 3 story and basement, rein.-con., brick, tile and stone addition to Iowa State Teachers College, here, to Tapager Constr. Co., Albert Lea, Minn., $120,167. Noted Dec. 20.

Mo., Kansas City—Medical Arts—Jackson Co. Medical Society, general contract 14 story and basement, rein.-con. and steel, 34th St. and Bway., to Reyburn Eng. & Constr. Co., 609 Waldheim Bldg.

Mo., St. Louis — Church — Washington-Compton Presbyterian Church, Washington and Compton Aves., 2 story, 128 x 128 ft., brick and stone, 5 North Skinker Rd., to Wimmer Constr. Co., Victoria Bldg. Archts. est. $150,000.

Ark., Ft. Worth—Convent—Scholostria Convent, 3 story and basement, 42 x 178 ft. and 43 x 52 ft., rein.-con., brick and stone, general contract to Majors & Scheer, Sapulpa, Okla. Est. cost $200,000.

Tex., Galveston—Schools—Bd. Educ. general contracts, Goliad School, to Standard Constr. Co., West Bldg., Houston, $182,000; Ball High School and additions to Sam Houston and David Crockett schools to Walsh & Burney, Calcasieu Bldg., San Antonio, total $327,612; plumbing, sewering and gas fitting combined jobs, to A. H. Schafer, 217 North St. Marys St., San Antonio, $37,454; heating and ventilating, combined jobs, to Kennison Bros., Dallas, $56,500. Noted Nov. 1.

Tex., Port Arthur — Temple — Masonic Lodge 3 story, rein.-con., brick and stone, to Hickey & Montgomery, 1402 Main St., Dallas, $168,900. Noted Nov. 1.

Wash., Tacoma — Hotel — Citizens Hotel Corp., 601 Tacoma Bldg., 10 Story, rein.-con., 9th and Bway., to Pratt & Watson, P. S. Bank Bldg., $1,195,559.

Calif., San Francisco—Exchange—Pacific Telephone and Telegraph Co., 333 Grant Ave., 3 story and basement, Class A construction, Bush and Larkin Sts., to Monson Bros., 251 Kearney St., $225,000. Noted Dec. 6.

Ore., Portland—School—School Dist. 1, general contract 2 story, 100 x 310 ft., rein.-con., plain foundation, East 51st and Belmont Sts., to Hanson, Hammond & Clist, Portland, $161,913. Noted Oct. 25.

Calif., Los Angeles — Market — Youngs Market Co., 3 story and basement, 140 x 150 ft., rein.-con., 7th St. and Union Ave., to Weymouth Crowell Co., 2026 West 9th St., $400,000.

Calif., Los Angeles—Market and Loft—Youngs Market Inc., 216 South Spring St., 3 story and basement, rein.-con. and brick 7th and Union Aves., to Weymouth-Crowell Co., 2026 West 9th St., $350,000.

Federal Government Work

PROPOSED WORK

W. Va., Huntington—Quarterboat—U. S. Engineer rejected bids one 5 x 26 x 80 ft. steel quarterboat. Noted Nov. 8.

Ala., Florence—Cranes—U. S. Engineer, Florence, plans to purchase two 159 ton cranes for Wilson Dam.

Ky., Owensboro—Castings—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 44 tons c.i. castings for lock valves at Dam 46, Ohio River, here.

Federal Government Work (Continued)

Ind., Leavenworth—Cement—U. S. Engineer, P. O. Box 72, Louisville, Ky., plans to purchase 10,000 bbls. cement for Dam 44, Ohio River, here.

BIDS DESIRED

Pa., State College—Post Office—Jan 21 by Treas. Dept., Wash., D. C., construction, complete incl. mechanical equipment, U. S. Post Office, here; adv. E. N.-R. Dec. 27.

Va., Norfolk—Remodeling—Spec. 4912—Jan. 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling officers quarters at Marine Corps Base, here. Noted Oct. 4.

O., Cincinnati—Gates—Jan. 19 at office U. S. Engineer, furnishing and erecting gates for Lock 34, Ohio River; adv. E. N.-R. Dec. 27.

BIDS RECEIVED

D. C., Wash.—Bungalows—Dept. of Interior, construction complete, 7 bungalows at St. Elizabeth's Hospital, (1) work complete, from G. G. Loehler Co., Franklin Bank Bldg., 10th and Pennsylvania Ave., (1) $71,600 (2) $60,800; C. Colonna, P. O. Box 154, Hampton, Va., (1) $72,050 (2) $58,664. Noted Nov. 22.

CONTRACTS AWARDED

Ala., Florence—Cement—U. S. Engineer, Florence, furnishing 115,000 bbls. cement for use at Wilson Dam as follows: to Atlas Portland Cement Co., B-M Bldg., Birmingham, 63,334 bbls. f.o.b. Leeds, $2.25; to Signal Mountain Portland Cement Co., James Bldg., Chattanooga, Tenn., 20.000 bbl. f.ob. Chattanooga, $2.11; to Lehigh Portland Cement Co., Birmingham, 31,666 bbl. f.o.b. Boyles, $2.25. Noted Nov. 29.

La., New Orleans—Steel Hull—U. S. Engineer, 1 steel hull for derrick-boat, to Jahncke Dry Dock, Inc., New Orleans, $18,690.

Ky., Owensboro—Lumber—U. S. Engineer, P. O. Box 72, Louisville, furnishing lumber for Dam 46, f.o.b. here, as follows: Lot (1) 125.000 ft. No. 1 yellow pine s.i.s.-i.e., to Daly Lumber Co., 905 Andrews Bldg., Cincinnati, O., $34 per M; Lot (2) 24,000 ft. No. 1 yellow pine rough, to Great Southern Lumber Co., Todd Bldg., Louisville, $35; Lot (3) 52,000 ft. Deuse merchantable yellow pine s4s, to Nicola, Stone & Myers Co., Hattiesburg, Miss., $44.30.

Wash., Puget Sound—Dredging—Spec. 4708—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging approximately 68,000 cu.yd. place measurement, Navy Yard, here, to Puget Sound Bridge and Dredging Co., Central Bldg., Seattle, $48,750. Noted Nov. 1.

Unclassified

PROPOSED WORK

Trestle, etc.—East Boston (Boston P. O.), **Mass.**—Boston Sand & Gravel Co., 88 Broad St., Boston, plans timber trestle, 250 ft. long, supporting traveling crane and belt conveyor with coal hoist mounted at one end. Cost incl. equipment. $40,000-$50,000. Private plans.

Transmission System—Somerset, Mass.—See "Industrial Works."

Park and Fish Hatchery — Burlington, Conn.—State Dept. of Fish & Game, Hartford, plans large park and fish hatchery, here.

Lighting Standards, etc.—Louisville, Ky.—Bd. Park Comrs. plan 75 lighting standards, etc. on Western Parkway. $25,000. A. A. Kreiger, city engr.

"White Way"—Louisville, Ky.—Bd. Pub. Wks. plans "White Way" system on 6th and 7th Aves. $25,000. A. A. Krieger, city engr.

Coaling Station — Russell, Ky. — Chesapeake & Ohio R.R. Co., 823 East Main St., plans 800 ton rein.-con. coaling station, here. $40,000. H. Frazier, ch. engr.

Power Development—Logansport, Ind.—J. A. Shafer, 1008 Odd Fellows Bldg., plans power development, incl. dam, on Wabash River, 6 mi. below here. To exceed $25,000.

Retaining Wall — Chicago, Ill. — South Park Comrs., 57th St. and Cottage Grove Ave., retaining wall along approaches to 23rd St. viaduct, to B-W Constr. Co., 720 Cass St., $42,850. Noted Nov. 22.

Street Lighting—Cuba City, Wis.—Having plans prepared ornamental street lighting system, concrete posts, cable, etc., $25,000. J. A. Clark, 15 North 4th St., Minneapolis, Minn., engr. Noted Nov. 8.

Grain Elevator—Milwaukee, Wis.—I. C. Lyman, 93 Michigan St., plans to rebuild brick and concrete grain elevator, plain foundation, recently destroyed by fire. $100,000. Engineer and architect not selected.

Gas Distribution System — Coffeyville, Kan.—Plans election to vote on $500,000 bonds for gas production and distribution system. T. R. Marshall, city engr.

Lighting System—St. Joseph, Mo.—Election in January to vote on $500,000 bonds electric lighting system. W. K. Seitz, city engr. Noted Sept. 20.

Dock—South St. Louis (St. Louis P. O.) **Mo.**—Natl. Lead Co., International Life Bldg., St. Louis, plans terminal dock on Mississippi River, at Canary Plant, here. To exceed $25,000.

Rock Crushing Plant—Colusa, Calif.—Colusa Sand and Rock Co., having plans prepared gravel and rock crushing plant, incl. spur tracks. Will install rock crusher, compressors, storage bins, motors, transformers and will probably be in market for dragline excavator.

Golf Course — Pasadena, Calif. — City plans election to vote on $125,000 bonds for golf course.

Transmission Lines, etc.—Pasadena, Calif.—See "Industrial Works."

Ornamental Lighting System—San Fernando, Calif.—See "Streets and Roads."

Transmission Line — Quebec — Electric Service Corp., Power Bldg., Montreal, plans 4,400 volt transmission line in municipalities of St. Felix de Valois and St. Jean de Matha, distance of 7 miles.

BIDS DESIRED

Dike, etc.—Los Angeles, Calif.—Petroleum Export Co., 423 Pacific Electric Bldg., receiving bids 850 ft. rein.-con. dike, 8 ft. high; one 50 x 100 ft. and one 50 x 75 ft. steel and corrugated iron warehouses, etc.

Wharf — Pembroke, Ont. — Jan. 9, by Dept. Pub. Wks., Ottawa, reconstructing concrete bulkhead 689 ft. long, 100 ft. return wall, gravel fill, wharf slips, dredging basin and channel 70,000 cu.yd. sand, muck and clay, gravel road, moving existing warehouse, and old pilework wharf approach 1,120 ft. long. $100,000. K. M. Cameron, engr.

BIDS RECEIVED

Transmission Line, etc.—Brockton, Mass.—See "Industrial Works."

Heating and Ventilating Apparatus — Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, Dec. 19, heating and ventilating apparatus, in P. S. 99, East 9th St. between Aves. K and L, here, from Gillis & Geoghegan, 537 West Bway., New York, $44,229; in P. S. 142, Rapelyea St., here, from D. J. Rice, 405 Lexington Ave., New York, $46,970. Noted Dec. 20.

Heating and Ventilating Apparatus — New York, N. Y.—Bd. Educ., 500 Park Ave., Dec. 19, heating and ventilating apparatus in P. S. 60, 12th St. and Ave. A, from Raisler Heating Co., 129 Amsterdam Ave., $98,765. Noted Dec. 20.

Pavilions—New York, N. Y.—Bellevue & Allied Hospital, 415 East 26th St., Dec. 20, general contract pavilions F and G of new Bellevue Hospital, from George A. Fuller Co., 949 Bway., $2,940,700; heating work, from T. F. Hall, Inc., 405 Lexington Ave., $260,716; plumbing, from T. E. O'Brien, Inc., 6311 5th Ave., Brooklyn, $448,000. Noted Nov. 29.

CONTRACTS AWARDED

Car Sheds—Wichita Falls, Tex.—Wichita Tract, concrete and brick car sheds, to C. M. Balkowski, Morgan Bldg., $40,000.

Tunnel — Niagara Falls, Ont. — Queen Victoria Park Comn., extending scenic tunnel under Horse Shoe Falls, here, to J. H. McKnight Co., 88 St. David St., Toronto, $36,000, also 2 concrete bridges at Dufferin Islands, to R. H. H. Blackwell, 86 Clinton Ave., Toronto, $21,000.

Materials and Equipment

PROPOSED WORK

Tractor—Utica, N. Y.—Park Bd. plans to purchase tractor caterpillar type. $5.000.

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Sawyer Co., $4,000 incl. 3 light trucks, patrol graders, etc., E. J. Collett, Hayward, comr.; Outagamie Co. $20,000 incl. larger grader, small tools, etc., A. G. Brusewitz, Appleton, comr.; Waukesha Co. $27,500 incl. tractor and crushing outfit, C. J. Hahn, Waukesha, comr.; Ashland Co. $10,000, incl. 3 patrol graders, one 12 ft. blade with back sloper and ditcher.

Road Machinery—Arcadia, Fla.—De Sota Co. election Jan. 7, to vote on $10,000 bonds for road building machinery.

Structural Steel — Chicago, Ill. — Illinois Central R. R., 135 East 11th Pl., plans to purchase 350 tons structural steel for bridges. F. L. Thompson, ch. engr.

Road Machinery — Hudson, Wis. — St. Croix Co. appropriated $10,000 for road machinery, incl. patrol graders. J. Caffrey, Hammond, comr.

Road Machinery — Manitowoc, Wis. — Manitowoc Co. takes bids about Feb. 1, 2 motor trucks, 1 patrol tractor, 3 patrol graders, 1 heavy grader and 5 wheel scrapers. $25,000. J. Connell, highway comr.

Dragline Excavator—Colusa, Calif.—See "Unclassified."

BIDS DESIRED

Pipe, etc.—Phila. Pa.—Dec. 31, by T. F. Armstrong, purch. agt., 312 City Hall, furnishing lengths c.i. pipe, Class 112, 50,000 lbs. pig lead, Class 111, fire hydrants, Class 113, all foregoing for Water Bureau, 175,000 gal. fuel oil, Class 115, 6,500 cu.yd. asphalt, 2,500 tons crushed slag, 2,500 tons binder stone, Class 116, etc., for Bureau of Highways.

Dredge — Savannah, Ga. — Jan. 10, by Comrs. Chatham Co. and ex-officio judges, furnishing land dredge.

Tractor, etc.—Pass Christian, Miss.—Dec. 31, by Bd. Supervs. Harrison Co., Court House, one crawler type factor and one 7 ft. grader with needed attachments.

Gravel—Abbeville, La.—Jan. 2, by J. E. Broussard, pres. Police Jury Vermillion Parish, 13,000 cu.yd. washed gravel and 5,000 cu.yd. sand clay gravel, 40% metal retained on ¾ in. sieve.

Tractor and Shovel—Granite City, Ill.—F. J. Lewis Mfg. Co. in market for caterpillar tractor and shovel, complete outfit.

Cement—Wisconsin—Jan. 3, by State Hy. Comn., at Capitol Annex, Madison, 1,023,000 bbl. Portland cement for delivery during 1924. A. R. Hirst, state highway engr.

Clam Loader—Pittsburg, Kan.—Du Bois Constr. Co., in market for clam loader for handling cement, sand and crushed rock.

Crushed Stone—Houston, Tex.—Jan. 7, by Comrs. Court Harris Co., 10,000 tons crushed stone, 10,000 tons gravel, 5,000 cu. yd. shell for highway construction and repairs. $50,000. Howe & Wise, co. engrs.

Crushing plant, etc.—Salado, Tex.—L. Harrington & Co., engrs., Houston Bldg., San Antonio, receiving bids and opens same about Jan. 1, equipment for new crushing plant, incl. 75 hp. pumper, screens and bins, 300 yd. sand washer, 75-100 hp. boiler, bucket line probably 2 yd. size, hoisting engine and appurtenances, for Salado Gravel Co., Salado. Noted Dec. 20 under "Industrial Works."

Paving Mixe —Okmulgee, Okla.—J. E. Parks (contractor) receiving bids large steam concrete paving mixer.

BIDS RECEIVED

Pipe—Montreal, Que.—Furnishing 207 tons 20 in. and 71.5 tons 16 in. pipe for spring delivery and 535 tons 20 in., 256.1 tons 16 in. and 568.75 tons 30 in. pipe for winter delivery, from Kennedy & Co., 288 Beaver Hall Hill, $46.50 per ton.

CONTRACTS AWARDED

Inorganic Dust, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 1,200 tons inorganic dust, to Limestone Products Corp. of America, 17 West 42nd St., New York, $6,420; 6,000 cu.yd. asphalt sand, to T. E. McCormick, 810 Lincoln Rd. Flatbush, $7,800; 2,500 cu.yd. gravel or broken stone, to Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, $6,125. Noted Nov. 29.

Lumber—Atlantic, Ia.—Cass Co., furnishing 300,000 ft. bridge lumber and 17,000 ft. red cedar to Standard Bridge Co., City National Bank Bldg., Omaha, Neb., $27.22. Noted Nov. 22.

Lumber—Marengo, Ia.—Iowa Co., 240,000 ft. bridge lumber, to Wheeler Lumber St., Des Moines, $37. Noted Nov. 29. Bridge and Supply Co., 200 Southwest 9th

Steel Bars, etc.—Mason City, Ia.—Cerro Gordo Co., 15 tons ⅝ in. round steel reinforcing bars and 3,024 ft. 12 in. corrugated metal culvert to Ft. Dodge Culvert and Steel Co., Ft. Dodge, $3.115 per cwt. Noted Nov. 29.

Plank and Piling—Onawa, Ia.—Monona Co., 5 cars full sawn fir bridge plank and 1 car cedar piling to Blencoe Farmers Elevator Co., Blencoe, plank $39.50, piling $41.50. Noted Nov. 29.

Bridge Material—Vinton, Ia.—Benton Co., 120,000 ft. No. 1 rough fir bridge lumber, to W. W. Saylor, Waverly, $39.

Crushed Rock, Gravel, etc. — Portland, Ore.—Furnishing crushed rock gravel, etc., (1) at contractors' bunkers (2) delivered at city paving plant to City Motor Trucking Co., 291 Hawthorne Ave., (1) 500 cu.yd. 3 in. and 500 cu.yd. 1 in. crushed rock $1.80, 100 cu.yd. 2 in. crushed gravel $1, 200 cu.yd. rock screenings $2, 200 cu.yd. concrete sand and 200 cu.yd. masons sand $1; (2) 500 cu.yd. 3 in. and 5,860 cu.yd. 1 in. crushed rock $1.75, 900 cu.yd. crushed gravel $1, 2,980 cu.yd. rock screenings $1.90, 800 cu.yd. concrete sand $0.90 and 7,780 cu.yd. masons sand $0.95.

Steel Pipe—San Bernardino, Calif.—Furnishing 6,000 lin.ft. 4 in. and 5,000 lin.ft. 3 in. wrought steel pipe to Mark-Lally Co., 2nd and Clementina Sts., San Francisco, $51 and $31.10 respectively.

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Engineering News-Record

A CONSOLIDATION OF ENGINEERING NEWS, ENGINEERING RECORD, AND THE CONTRACTOR

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A Banner Construction Year in Prospect

WITH the end of the present year at hand, the thoughts of engineers and contractors turn to 1924. What is the prospect for construction during the next twelve months?

The answer, according to the forecast of *Engineering News-Record's* Construction News Department is:

$5,000,000,000

This sum, if costs remain at their present level, will be spent on building and general construction in the United States during 1924, according to the best estimates now available. In other words, if no unforeseen events occur to upset calculations, a banner construction year is in sight.

Assuming that this huge sum will be expended on various classes of work in the same ratio as obtained during 1923, the figures are as follows:

The Construction Prospect for 1924

Streets and roads	$1,250,000,000
Industrial building	350,000,000
Commercial building	1,350,000,000
Residential building	550,000,000
General construction	1,500,000,000
Total	$5,000,000,000

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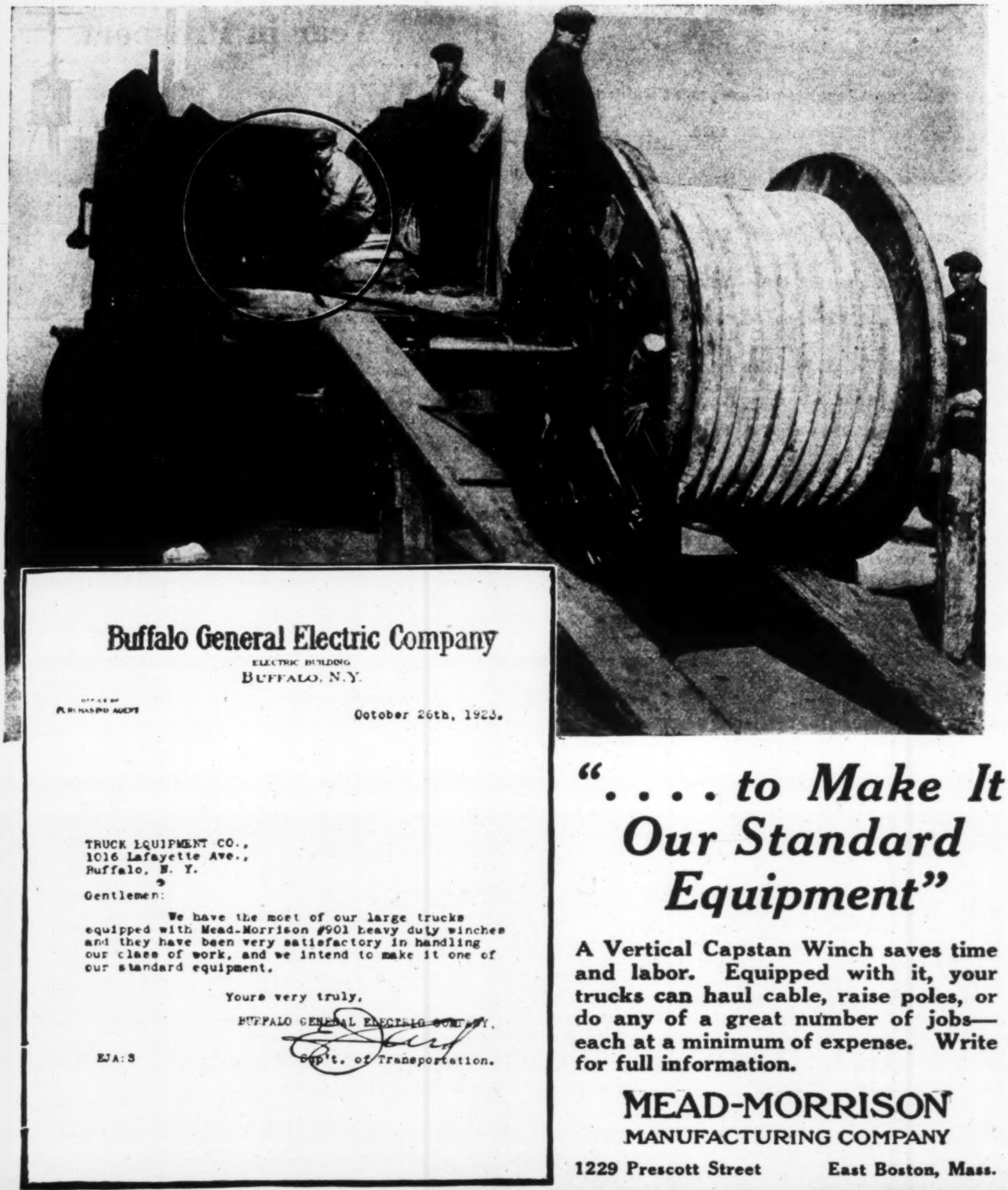

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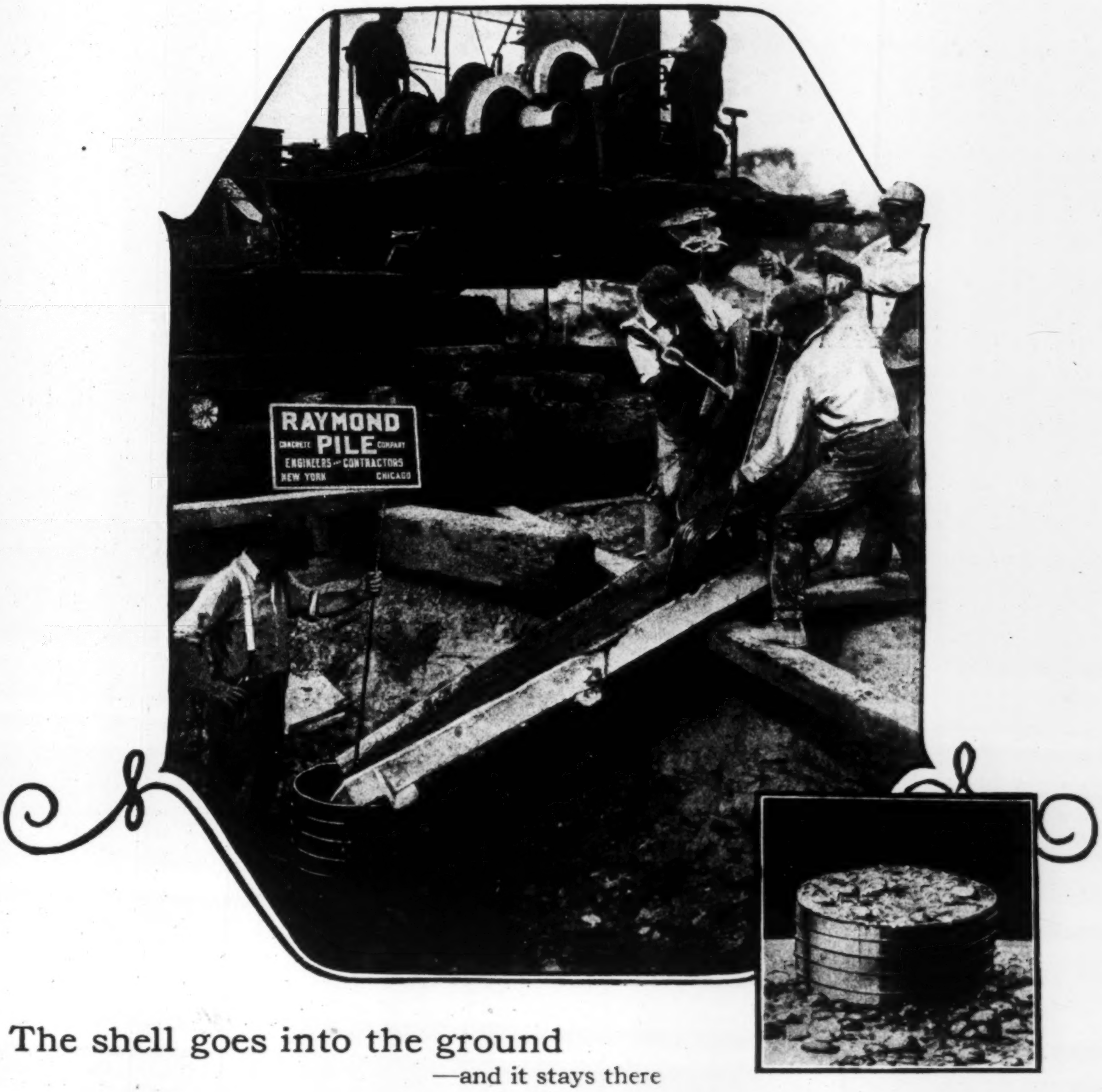
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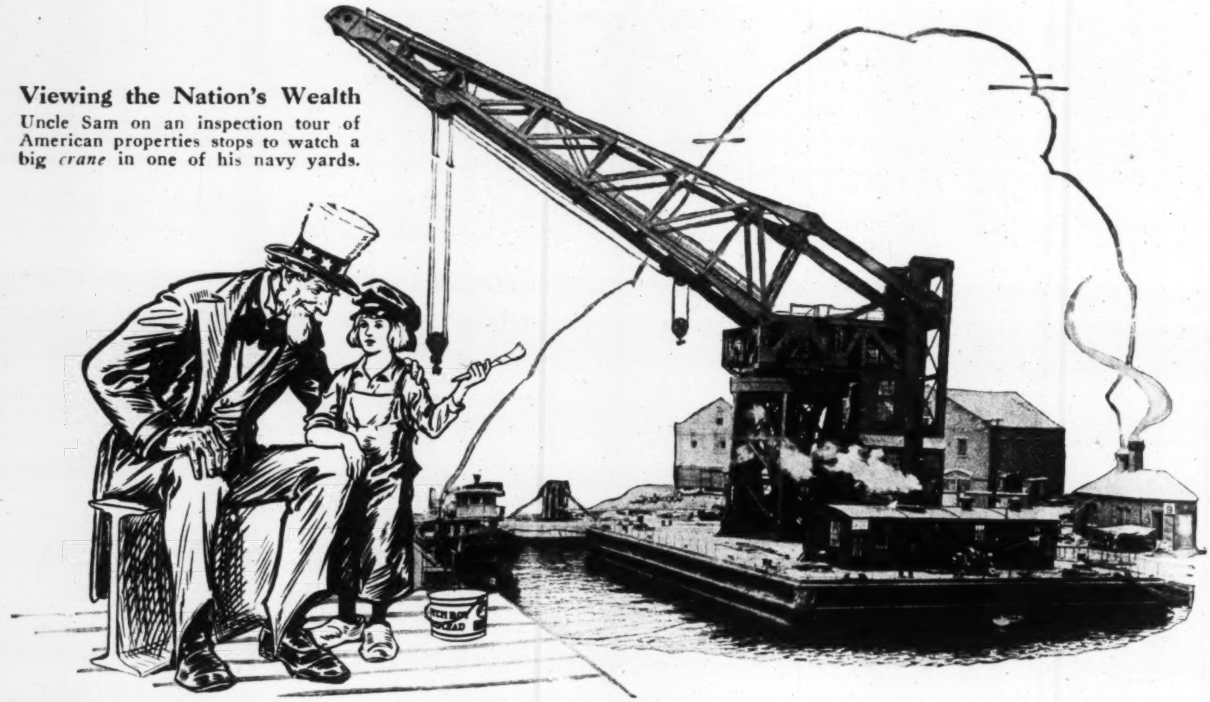

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"That floating crane can handle tons as easily as an elephant tosses straw. But neither its size, nor its power, can save it from ultimate destruction from rust—if its metal isn't protected!"

This 150-ton floating crane couldn't lift a rust-mortgage

UNPROTECTED metal surfaces soon become plastered with rust-mortages. Every engineer knows what that means. The metal has been robbed of a certain part of its strength. What has been lost can't be recovered, but further loss can be stopped and future loss can be prevented—*by red-lead.*

Red-lead has for many years been recognized as metal's best protection against rust. It is the standard protection. Rust can't form where there is a well-maintained coat of red-lead.

Because it is pure red-lead, Dutch Boy red-lead supplies complete protection to metal surfaces against rust. Rust never holds a mortgage on metal that is guarded by Dutch Boy.

Dutch Boy red-lead sticks tight to clean metal. It forms a tough, elastic coating which expands and contracts with the metal without cracking or checking. It becomes almost a part of the metal's surface. Dutch Boy red-lead costs no more than other good paints. In fact, its cost is materially decreased by its unusual spreading power.

You can get Dutch Boy red-lead as a paste and also in liquid form ready for the brush. The *liquid* comes as straight, untinted red-lead for shop painting and priming coats. It is also tinted to greens, browns and black for finishing coats. The untinted *paste* can be tinted to any dark color.

For the complete protection of metal surfaces, specify Dutch Boy red-lead by name—then stop. There is no "or equivalent."

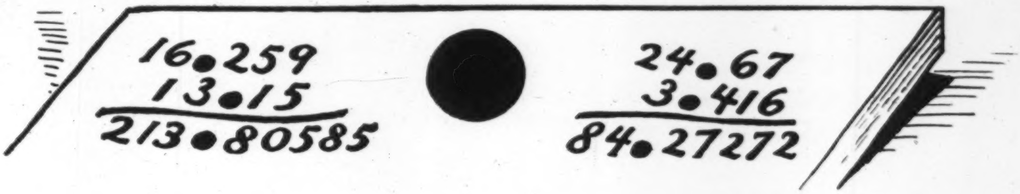
Write for Painting Helps No. 5.

"Save the surface and you save all"-Paint & Varnish

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State St.; Buffalo, 116 Oak St.; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 820 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 485 California St.; Pittsburgh National Lead & Oil Co. of Pa., 316 Fourth Ave.; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.

Dutch Boy Red-Lead



Accurate Decimal Points

SUPPOSE you had a Scratch Pad with Decimal Points printed on it. Then when you wrote the two factors of a decimal multiplication with the whole numbers to the left of the points and the decimals to the right, the correct answer would automatically appear, *accurately pointed off.*

Such a Scratch Pad would be valuable to you. Accuracy of decimals is equally as important as accuracy of figures.

The Monroe Calculating Machine gives you Proven Results, *accurately pointed off,* in just the same way. As you "write" the two factors of any problem in the machine, you immediately read the Proven Answer, with the decimal point in the correct place.

Ask to see why users say "the Monroe is the finest Scratch Pad ever given a clerk." The coupon below simplifies your request.

Monroe Automatic—Marks a new era in Mechanical Calculating and Adding. A portable, electrically-operated machine for use either on desk or stand.

To Add or Multiply, simply touch the Plus (+) Bar. To Subtract or Divide, simply touch the Minus (—) Bar. The Proven Answers automatically appear with split-second speed.

Monroe Standard Model—Every feature of the Standard Monroe is conducive to speed with absolute accuracy. A forward turn of the crank to add or multiply; a backward turn to subtract or divide.

Special Models to fit individual requirements—British Currency Model, Fraction Models, etc., on which all ordinary calculations may also be performed.

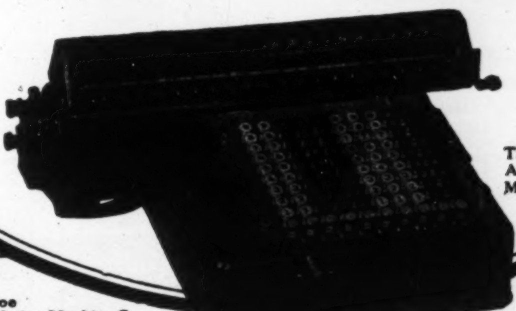
There are Offices rendering Monroe Service at all Principal Points in the U. S. and Canada and throughout the World.

MONROE

REG. TRADEMARK

**Adds
Subtracts**

**Multiplies
Divides**



**The 20-Place
Automatic
Model**

**Monroe
Calculating Machine Co.,
Woolworth Building,
New York**

***"If you need a thing you pay for it
—whether you buy it or not"***

Without cost or obligation (check as desired):

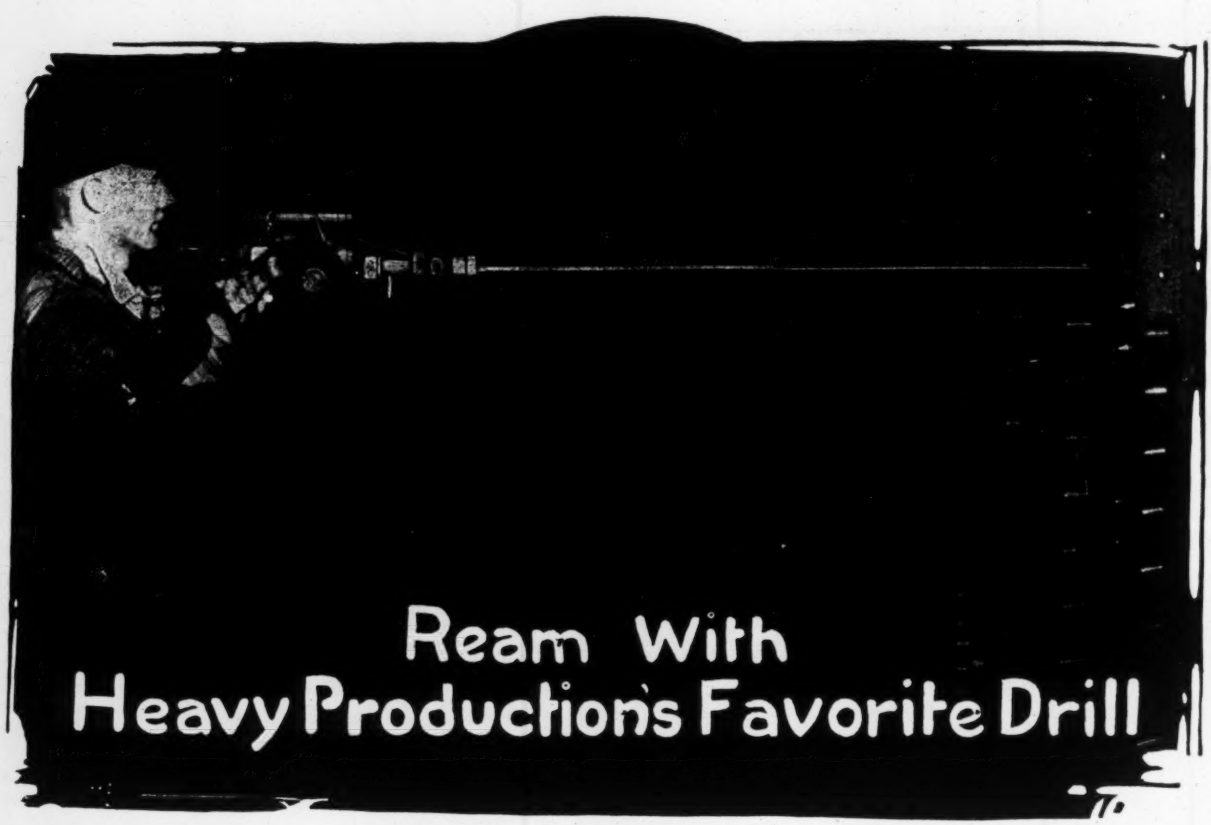
☐ Send further information on: ☐ Arrange for demonstration of:

☐ Automatic Model ☐ Standard Model ☐ Fraction Models ☐ British Currency Model

*Firm Name*__________ *Individual*__________

*Address*__________ *City*__________ *State*__________

E. N.-R. 12-27-23



BOILER makers, car builders and structural steel fabricators alike express their preference for Little Giant Electric Drills when used on reaming and tapping operations.

This mark of distinction has been given to Little Giants because they are successfully meeting their requirements in hundreds of boiler and car shops, structural steel plants and other industries where the gruelling work encountered is a fit test for any tool.

The economy, service and dependability of Little Giant Electric Drills is attributed to their design and construction. Large overload capacity, low temperature rise, high efficiency and long life are a few of their many points of superiority that mean economical operation over a period of years.

You can use one or more of these Little Giant Electric Drills profitably on your reaming and tapping work. Bulletin 891 describes them in detail. Write for your copy.

Chicago Pneumatic Tool Company

6 East 44th Street, NEW YORK, N. Y.

Sales and *Service Branches all over the World

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*Boston
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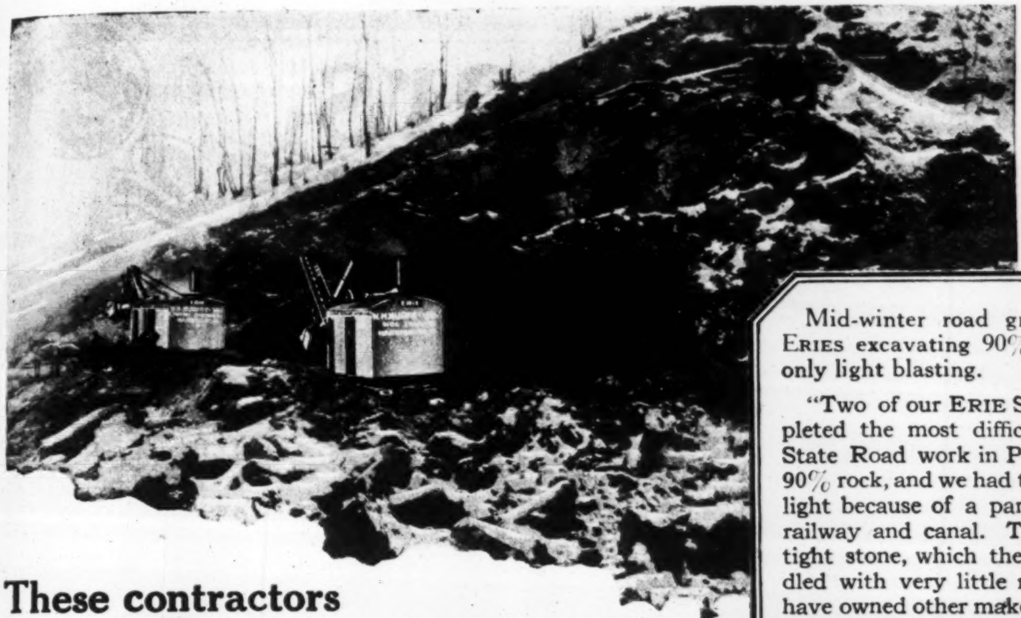
Canadian Pneumatic Tool Company, Ltd., Montreal, manufacturers of Chicago Pneumatic products in Canada.

EL-56

BOYER PNEUMATIC HAMMERS · · LITTLE GIANT PNEUMATIC AND ELECTRIC TOOLS
CHICAGO PNEUMATIC AIR COMPRESSORS · · VACUUM PUMPS · · PNEUMATIC HOISTS,
GIANT OIL AND GAS ENGINES ROCK DRILLS · · COAL DRILLS

CHICAGO CP PNEUMATIC

LITTLE *Electric* **GIANT** *Tools*



These contractors held their good men all winter —*at a profit*

Of course it pays well to hold on to good men who know your ways. Steady employment, 12 months a year, attracts the best class of skilled labor and common labor.

You have often seen a *permanent organization* beat the lowest costs that can be gotten with transient labor, that is hired for only a single "season."

Every winter there are more contractors holding their best men together by working right through cold weather, *and making money doing it.* In some cases the profit-per-yard has run higher than the same contractors were able to make during the warm months of the same year, when keen competition bid the prices way down.

There have been very good results on winter cellar excavation, trench digging, stripping gravel pits, quarries, and shale pits, road grading that is fairly heavy, ditching, etc.

The ideal machine for cold weather is the ERIE Shovel— because of its greater digging power, and its steady reliability. Actual records kept by experienced owners show that their ERIES cost only ⅓ as much to keep up as other makes of shovels that they have used— with A CORRESPONDING SAVING IN WORKING TIME.

Write and tell us what kind of winter work you are figuring on. We will send records of similar work, in full detail— showing you just what can be done.

Mid-winter road grading; two ERIES excavating 90% rock, with only light blasting.

"Two of our ERIE Shovels completed the most difficult piece of State Road work in Pennsylvania, 90% rock, and we had to shoot very light because of a parallel electric railway and canal. This left large tight stone, which the ERIES handled with very little repairs. We have owned other makes of shovels, but since we bought our first ERIE, we would have nothing else."— *R. C. Murphy, W. H. Murphy & Sons, Harrisburg, Pa.* (5 ERIES)

Removing snow for street department at a good rental figure

C. C. Kilby, owner of the "A" ERIE above, saved the city of Hartford, Conn., 50% to 60% of the costs of removing 4 to 5 feet of ice and snow— and found profitable work for his shovels.

This ⅜ cu. yd. ERIE and 3 five-ton trucks did the work of 50 laborers and 10 teams, and did it quicker.

Mr. Kilby writes: "We are greatly pleased with the work of our three ERIES; have found them very fast, with plenty of power for heavy work."

ERIE STEAM SHOVEL CO., Erie, Pa., U. S. A.

Incorporated 1883; formerly BALL ENGINE CO. Builders of ERIE Shovels and Cranes
Branch Offices: Boston New York Philadelphia Pittsburgh Atlanta Chicago
Representatives throughout the U. S. A.

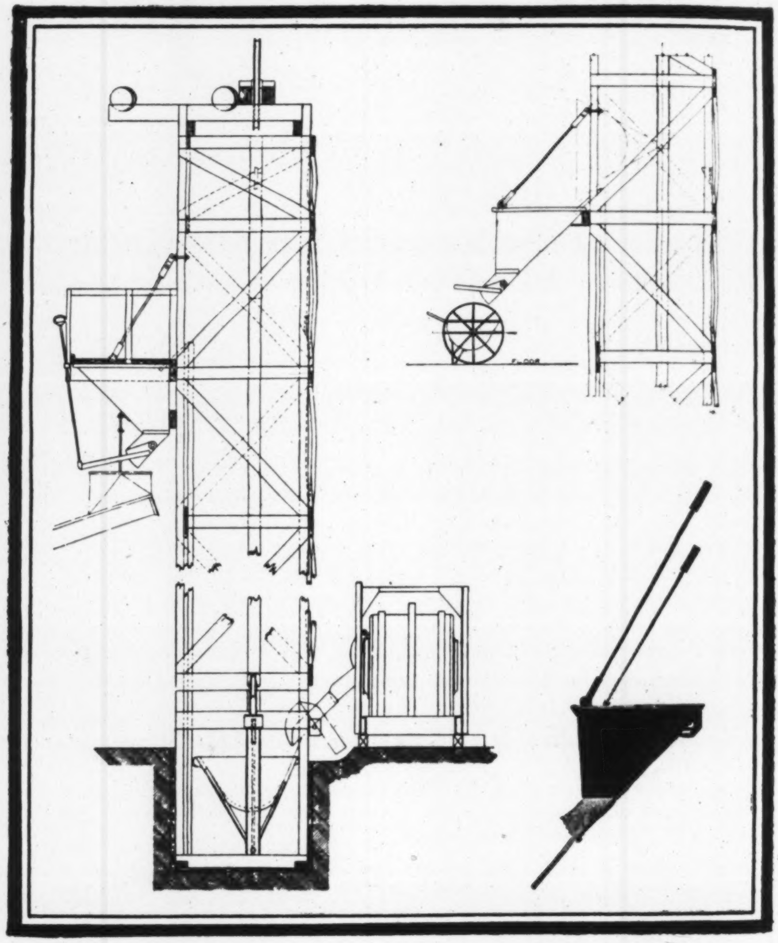
ERIE Revolving Shovels

Laying Water Main: Any ERIE Shovel can be changed over in a few hours to a crane like the above, shown placing 36-ft. sections of steel water main pipe, Akron, Ohio. Also handled 10-ton valves. Operating a clamshell bucket, it did the backfilling. One of 3 ERIES owned by P. F. Connolly Co., Cleveland.

"On this cellar cut we bucked frost with our "A" ERIE with wonderful success," *writes the Chas. H. Fry Construction Co., Erie, Pa.* "We have also had remarkable results with this ½ cu. yd. ERIE digging shale rock, which would be tough digging for a much heavier shovel."

For 20 years Ransome HOIST BUCKETS

A
20 year
leader



For over two decades the Ransome Hoist Bucket has been prominent on the big concrete jobs throughout the world. It is used in conjunction with a straight back tower bin for a chuting installation or with a sloping back bin with cart distribution. The bucket operates quickly in a direct vertical lift. One of its great advantages is that no harm is done to the tower or bucket if the bucket is accidentally hoisted above the dumping point.

Its *simple and sturdy construction* makes each year's demand greater. Bulletin 202 gives complete information.

RANSOME CONCRETE MACHINERY CO.
1750 Second Street, Dunellen, N. J.
Manufacturers of Mixers, Pavers, Pneumatic Mixers, Chuting Plants, Hoist Buckets, Bins, Cars, Carts, etc.

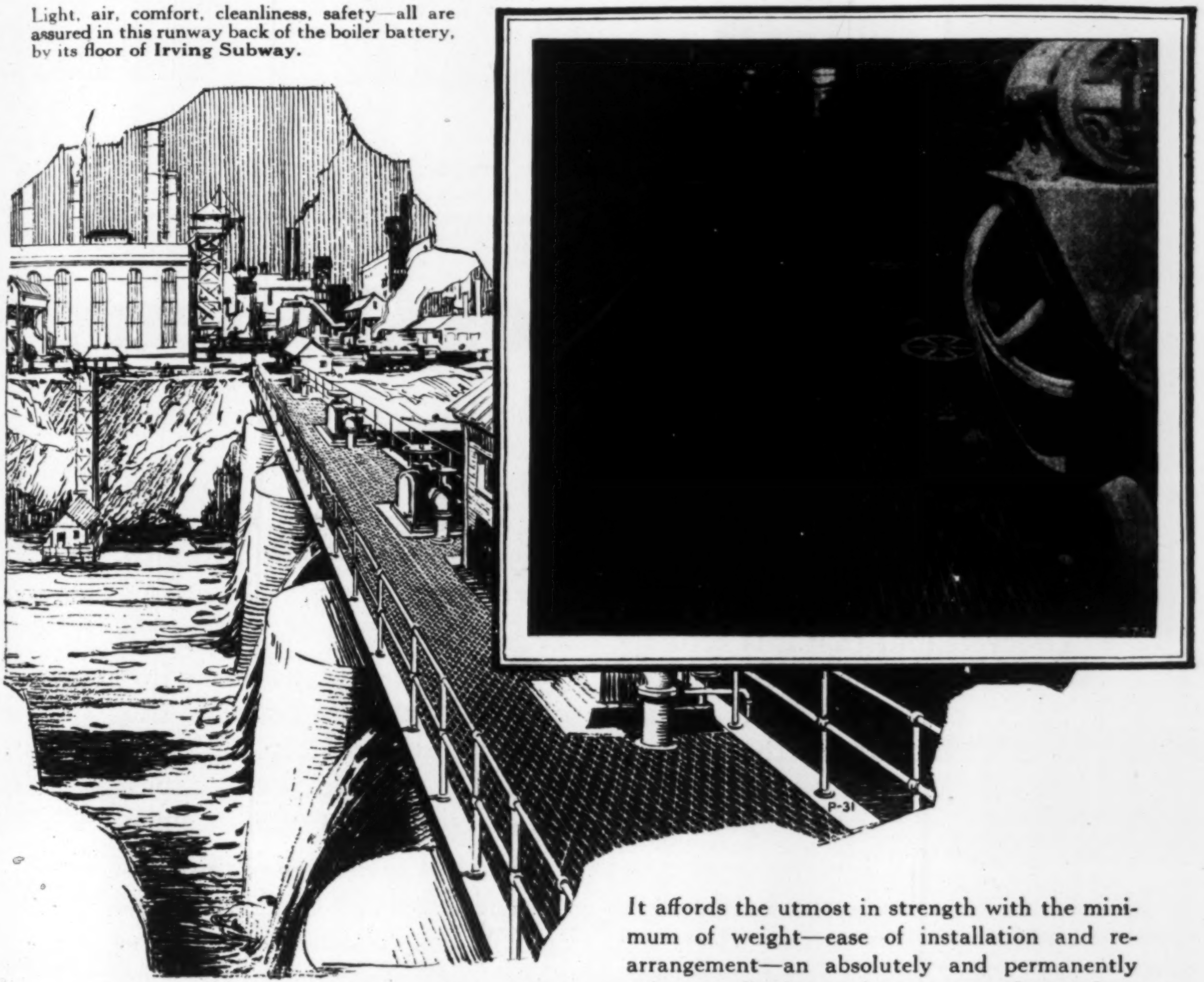
IRVING SUBWAY

TRADE MARK

(PATENTED) REG. U.S. PAT. OFF.

THE FIREPROOF VENTILATING FLOORING

Light, air, comfort, cleanliness, safety—all are assured in this runway back of the boiler battery, by its floor of **Irving Subway.**



In dark, cramped places or out in the open—for narrow runways and walkways or for wide spaces—for indoor service or outdoor exposures—for every industrial purpose where safety, durability and economy count—**Irving Subway** offers advantages no other flooring affords.

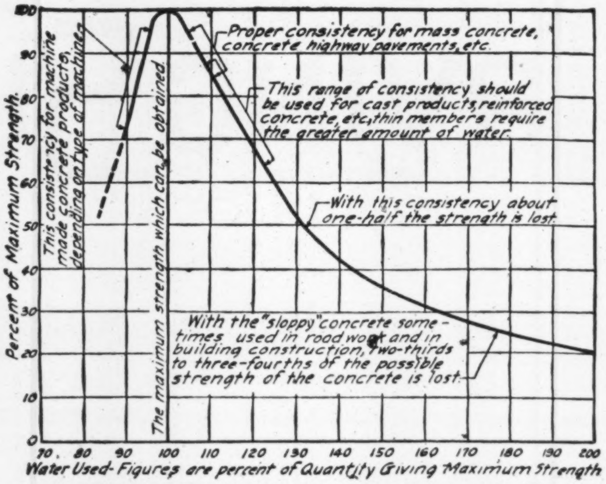
It affords the utmost in strength with the minimum of weight—ease of installation and rearrangement—an absolutely and permanently safe, non-slipping surface—a smooth, comfortable footing to walk or work or wheel upon—the time-proofness, wear-proofness of steel—and (biggest factor of all, in value) the experience and responsibility of the oldest and largest manufacturers of open metallic flooring. Write for Catalog 4A5 and specify **Irving Subway.**

IRVING IRON WORKS CO.

LONG ISLAND CITY, N.Y., U.S.A.

7

When One Pint of Water Wastes Two Pounds of Cement



Effect of Quantity of Mixing Water on the Compressive Strength of Concrete

NOTE: In general construction, the maximum strength can rarely be obtained, but it is possible to obtain 70 to 90 per cent of the maximum strength without additional expense by restricting the quantity of mixing water.

Observe this curve closely. It shows impressively the effect of the quantity of mixing water on the strength of concrete.

It is now known that excess mixing water, not only weakens concrete, but that it is actually wasteful of cement. One pint of water more than necessary in a one-bag batch decreases the strength and resistance to wear as much as though two or three pounds of cement were left out.

Here is a fact, which if brought home to the superintendent and the foreman, can be of great practical value in raising quality on the job.

Wouldn't you like to have, right at hand for quick reference, a practical manual which tells how the quantity of mixing water can be closely controlled, so as to give concrete greater strength without using any more cement?

Then write today for our free booklet, "Concrete Data for Engineers and Architects." We will be glad to send you extra copies for superintendents and foremen.

Take full advantage of the service the Portland Cement Association has to offer. One of the District Offices of the Association is always near you. Get acquainted with it.

PORTLAND CEMENT ASSOCIATION

A National Organization
to Improve and Extend the Uses of Concrete

Atlanta
Birmingham
Boston
Chicago
Dallas
Denver
Des Moines
Detroit
Helena
Indianapolis
Jacksonville
Kansas City
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Memphis
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Minneapolis
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New York
Parkersburg
Philadelphia
Pittsburgh
Portland, Oreg.
Salt Lake City
San Francisco
Seattle
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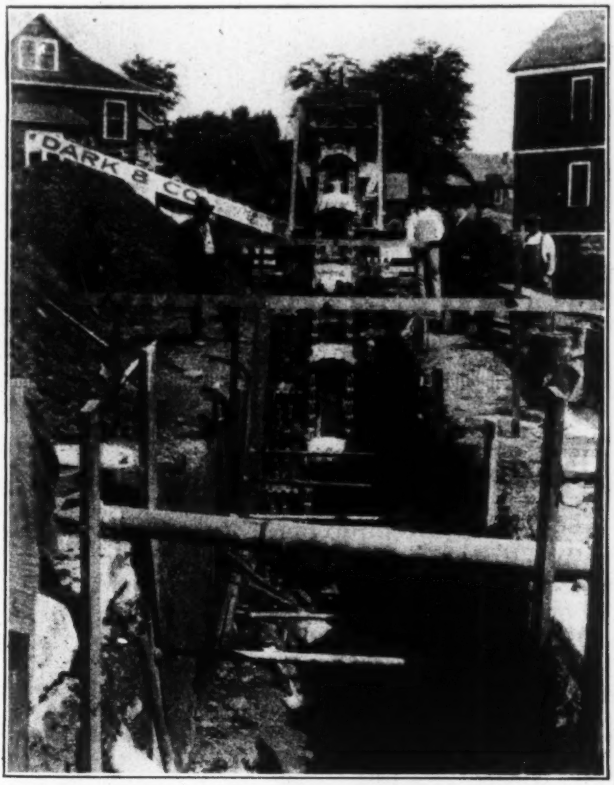
Vancouver, B.C.
Washington, D.C.

AUSTIN
MACHINERY
"MOVES THE EARTH-
MIXES THE CONCRETE"
TRADE MARK

Economies in Trench Excavation are effected by the Equipment you employ



Efficiency comes from Experience. And experience is not gained on the drafting board but on the job under actual working conditions.

Every Austin Trench Excavator has back of it forty years of "On-the-Job" experience.

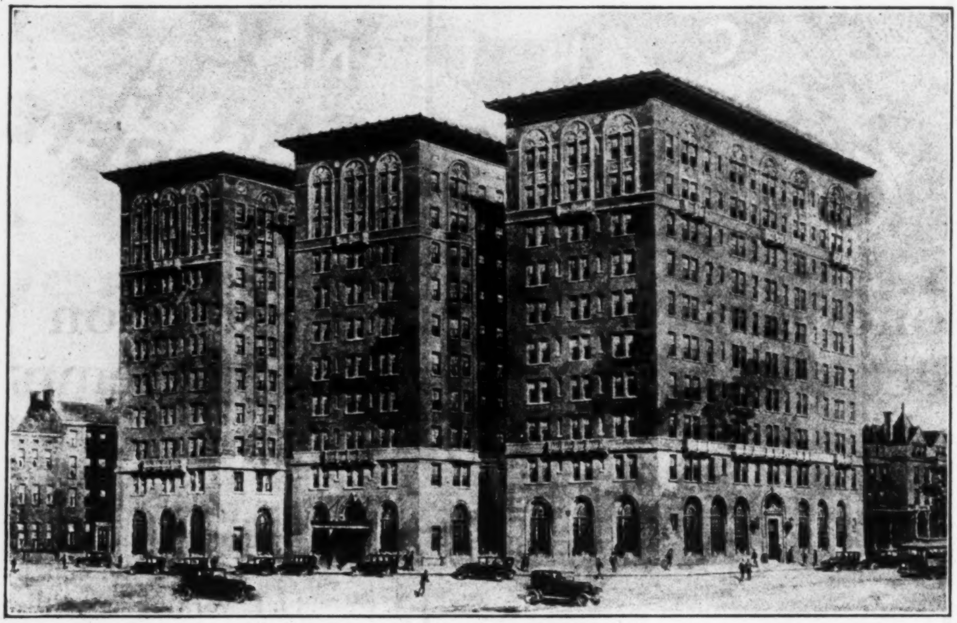
Economies are effected through the use of larger power units, safety features that avoid breakdowns, heavy construction, patented devices and ability to dig anything that is classed as earth excavation.

This is AUSTIN TRENCH DIGGING efficiency summed up and the guarantee of economy on every job.

AUSTIN MACHINERY CORPORATION
MAIN OFFICES
3500 DORR STREET, TOLEDO, OHIO

The PENNSYLVANIA APARTMENTS

One of the newest, largest, best equipped
Apartment Hotels in Philadelphia



Pennsylvania Apartments
39th and Chestnut Sts., Philadelphia, Pa.

Owner and General Contractor: Daniel Crawford, Jr.
Architect: Clarence E. Wunder

A Havemeyer Job throughout

Using Havemeyer Bars, Lath and other Metal Products

Havemeyer Products used included Reinforcing Bars, Lath, Hangers, Channels, Ex-tension Clips, Wire Chain Spacers, No. 2 Bar-Tys, Corner Bead Clips, Corner Bead. Material was furnished and delivered to the job from our Warehouse as and when required, thus saving the contractor any double handling or storage.

You can depend upon Havemeyer Service

HAVEMEYER BARS
Rolled Exclusively From
NEW BILLET STEEL

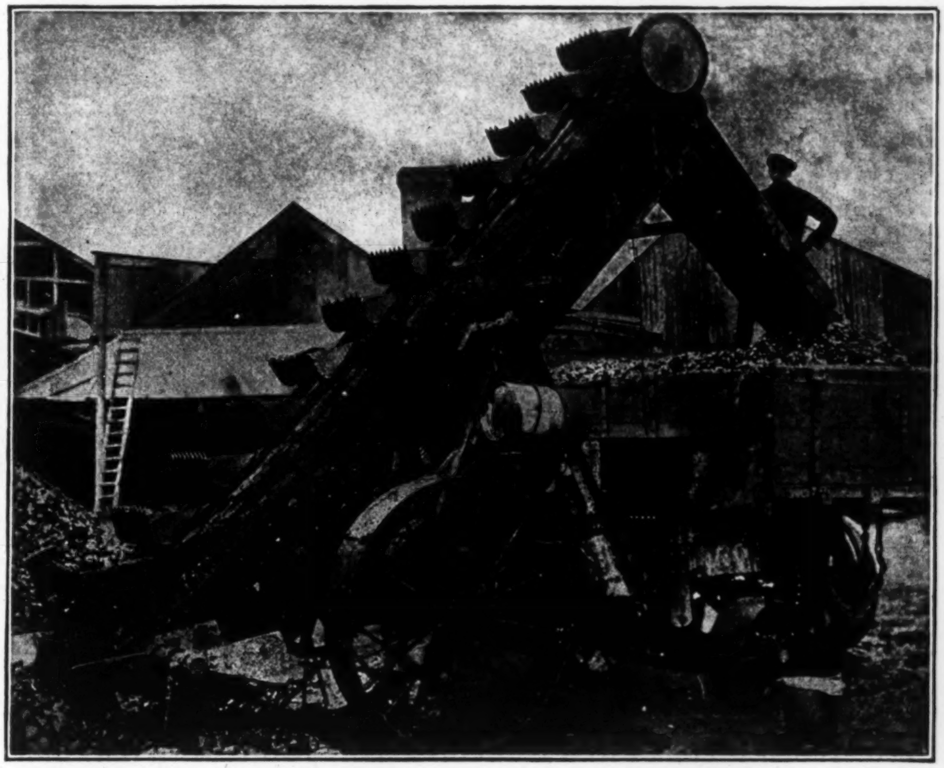
Concrete Steel Company

42 Broadway New York City

Sales Offices, Warehouses and Fabricating Shops—Principal Cities

On Some Jobs

The "Wheel" Machine's The Thing



Cross-country road building needs the "Creeper Type" Path Digging Loader—but city work or material yard handling is just as well done with the "Wheel Type" Machine.

Has the wonderfully efficient Haiss Self-Feeding Propellers and a slow-speed drive of 30 inches a minute to crowd it against the pile. Self-propelling, of course.

Digs and loads 1 cu. yard per minute (and better) in crushed rock or other material—and does all the work with a labor cost of one operator only.

"The man who owns one" buys a second out of the first one's savings. Repeat orders on Haiss Loaders are a matter of course.

MEMBERS COOPERATIVE SERVICE A.G.C. of A.

Catalog 523 describes
both Creeper and Wheel Machines
Send for a Copy

The Geo. Haiss Manufacturing Co., Inc., 140th St. and Rider Ave., New York

HAISS

TRUCK LOADERS

MATERIALS HANDLING EQUIPMENT

CLAM SHELL BUCKETS

PORTABLE BELT CONVEYORS

A "Sure 'Nuff"

RIP-SNORTER

Users of the Austin Rip-Snorter know how appropriately it was named. When it comes to tearing up a hard-as-sin, worn out, rutted road surface, no other machine or method can touch it.

On maintenance work the Rip-Snorter scarifies and grades in a single operation, leaving the road ready for rolling. In the preparation of an old road for resurfacing, the blade carries the scarified material to the sides of the road to form the new shoulders, or can be easily loaded in wagons.

Special Rip-Snorter Bulletin H suggests many other uses that the practical road man will find for this most efficient machine. Write for a copy today.

The Austin-Western Road Machinery Co.

400 N. Michigan Avenue, Chicago

THE AUSTIN-WESTERN LINE · IT SERVES YOU RIGHT

BRANCH OFFICES:

Albany
Atlanta
Billings
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Dallas
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Jackson, Mich.
Kansas City, Mo.
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New Orleans
New York City
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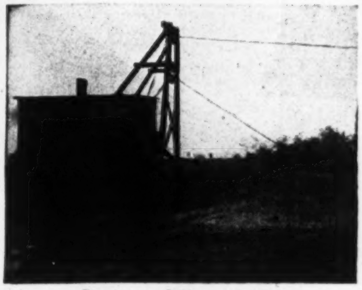
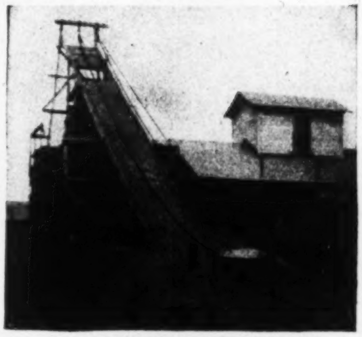
Portland, Ore.
Richmond
Salt Lake City
San Francisco
St. Paul
Wahoo, Neb.

Scraper in County Gravel Pit


Scraper and Traveling Tower


Scraper at Concrete Block Plant

Scraper on Cut-and-Fill Job

How Scraper Handles Stripping

The Brief Statement Below Gives You the Main Facts You Wish To Know Regarding

SAUERMAN Power Drag SCRAPERS

In excavating bank deposits of gravel, stripping overburden, making cuts and fills, cleaning out reservoirs, storing and reclaiming crushed stone, gravel or coal, Sauerman Power Drag Scrapers are money-savers because they possess large capacity, yet require no great outlay to install, operate and maintain. They show greatest economy in handling materials distances of 200 to 400 feet.

Description—There are three distinct types of Sauerman power scrapers. "Excavator," "LeClair" and "Crescent," each best suited to a particular class of work All are bottomless, hence self-loading and self-dumping. The operation consists simply of dragging the scraper back and forth over the deposit or pile that is to be excavated or rehandled. When the scraper reaches the dumping point, the operator causes it to deposit its load automatically by putting the pull-back cable in operation; one man at the levers of a double drum hoist controlling the complete operation.

Sizes—Standard sizes of Sauerman Power Scrapers are from 1/3 to 5 cu.yd. Larger sizes can be built to order as specified.

A portable power scraper outfit, designed for light excavating and material-handling, is offered in two sizes, ¼ and ½ cu.yd., with operating spans of 200 ft.

Service—If the illustrations here do not, give you sufficient evidence of the adaptability of Sauerman equipment for your conditions and requirements, submit your problem to Sauerman engineers. Their experience, gained through contact with over 1,000 installations of Sauerman cableways and power scrapers, is freely at your service.

Tell us what you want to accomplish, daily yardage you require and the surrounding conditions and we will suggest the type of equipment and general layout that will give you the desired result at lowest cost.

Sauerman Bros.
432 S. Clinton St., Chicago

Scraper Used With Crane

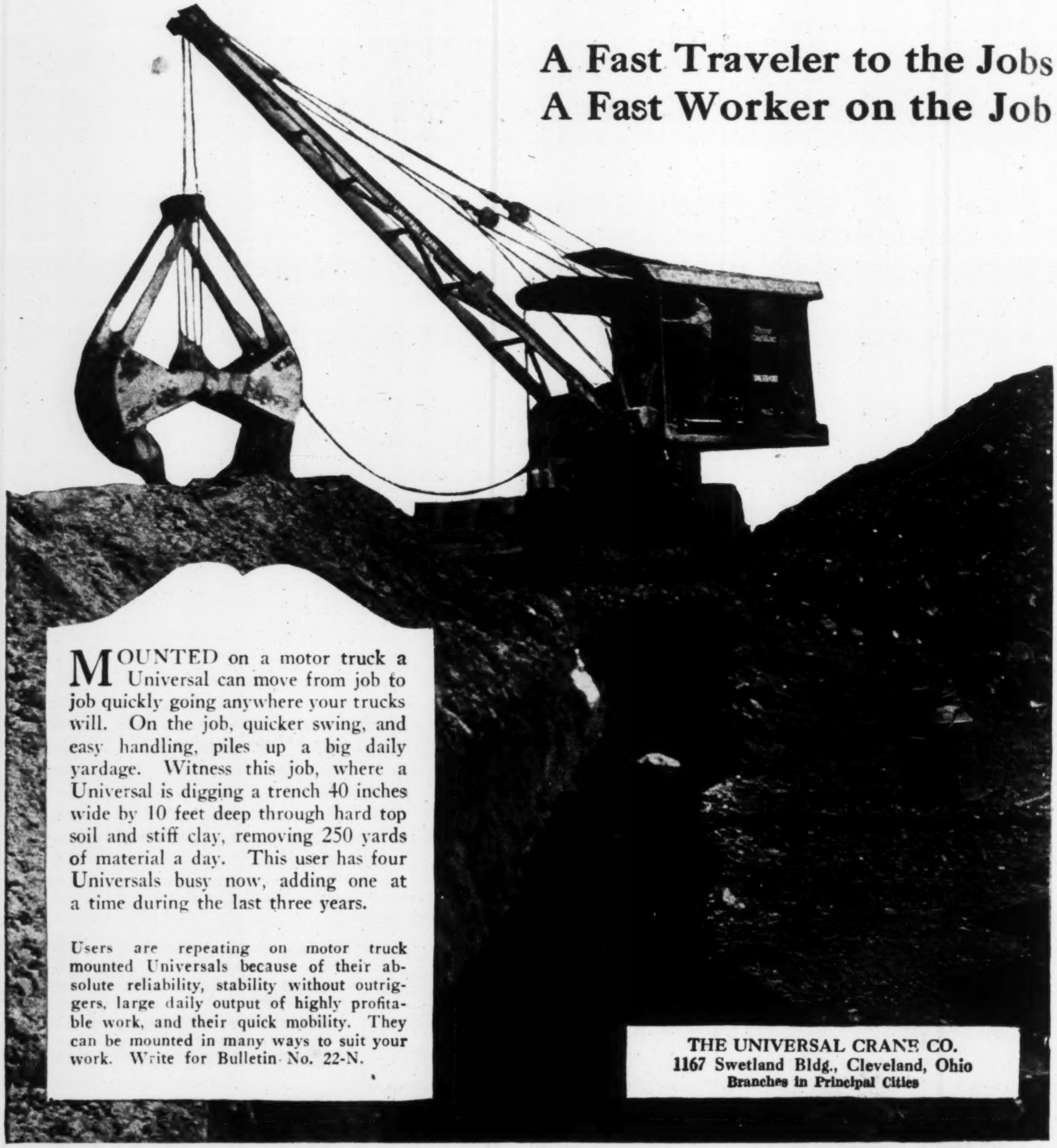
Scraper Cutting Through Hill

Grading Road With Scraper

Scraper Loading Stone Into Car

Loading Direct to Truck With Scraper

A Fast Traveler to the Jobs
A Fast Worker on the Job



MOUNTED on a motor truck a Universal can move from job to job quickly going anywhere your trucks will. On the job, quicker swing, and easy handling, piles up a big daily yardage. Witness this job, where a Universal is digging a trench 40 inches wide by 10 feet deep through hard top soil and stiff clay, removing 250 yards of material a day. This user has four Universals busy now, adding one at a time during the last three years.

Users are repeating on motor truck mounted Universals because of their absolute reliability, stability without outriggers, large daily output of highly profitable work, and their quick mobility. They can be mounted in many ways to suit your work. Write for Bulletin No. 22-N.

THE UNIVERSAL CRANE CO.
1167 Swetland Bldg., Cleveland, Ohio
Branches in Principal Cities

Every Batcherplant

a saver of TIME, LABOR AND MONEY

Some Users of

BLAW-KNOX Batcherplant

For Building and General Construction

Sanderson & Porter, New York City
West Penn Power Co Works at Springdale, Pa

American Construction & Securities Co Carrick, Pa.
South Pittsburgh Water Co
Walls, Reservoirs, etc, for Water Works

Youngstown Sheet & Tube Co., Youngstown, Ohio
Concrete Trestle, Industrial Construction

Phoenix Utility Co., Alexander, Idaho
Dam Construction

John A Byers, New Castle, Pa
Railroad Overhead Crossing
Pennsylvania R R and B & O

The Tennessee Electric Power Co., Rock Island, Tenn
Power Development

S W Shoemaker & Sons, Harrisburg, Pa
Reinforced Concrete Bridge Job

Skinner Maxwell Bldg. Co., Inc., Tuscaloosa, Ala
Building Construction

Boyajohn & Barr, Columbus, Ohio
Reinforced Concrete Buildings for Ohio State University

Metropolitan Edison Co., Philadelphia, Pa
Power House Construction

West Bros. & Co., Pittsburgh, Pa
Juniata Railroad Shops for Pennsylvania R R, Johnstown, Pa

H J Spieker Co., Toledo, Ohio
DeVilbiss Building Construction

Heller Bros, Youngstown, Ohio
Reinforced Concrete Factory Building, Warren, Ohio

Everett Winters Co., Detroit, Mich
Building Work

C J Wacker Const Co., Indianapolis, Ind
Reinforced Concrete Building Job

Youngstown Steel Co., Youngstown, Ohio
New Industrial Construction, Foundations, Walls, etc

The Cranford Co., Washington, D C
George Washington Memorial, Alexandria, Va

G A & F M Wagman, Spring Valley, Pa
Reinforced Concrete Bridge Construction

T H Reynolds & Co., New York City
New York Subway Construction

Building contractors all over the country are eliminating from 5 to 15 men at their central mixing and distributing plant

—through the use of a time and labor saving ONE-MAN Blaw-Knox Batcherplant for the quick and accurate measurement of sand, stone and cement.

A Blow-Knox Batcherplant—as the nucleus for a central mixing and distributing system—is the height of economy. We can equip any job, and help plan the layout.

BLAW-KNOX COMPANY
601 Farmer's Bank Bldg., Pittsburgh, Pa.

NEW YORK
30 E. 42nd St.

BALTIMORE
Bayard & Warner Sts.

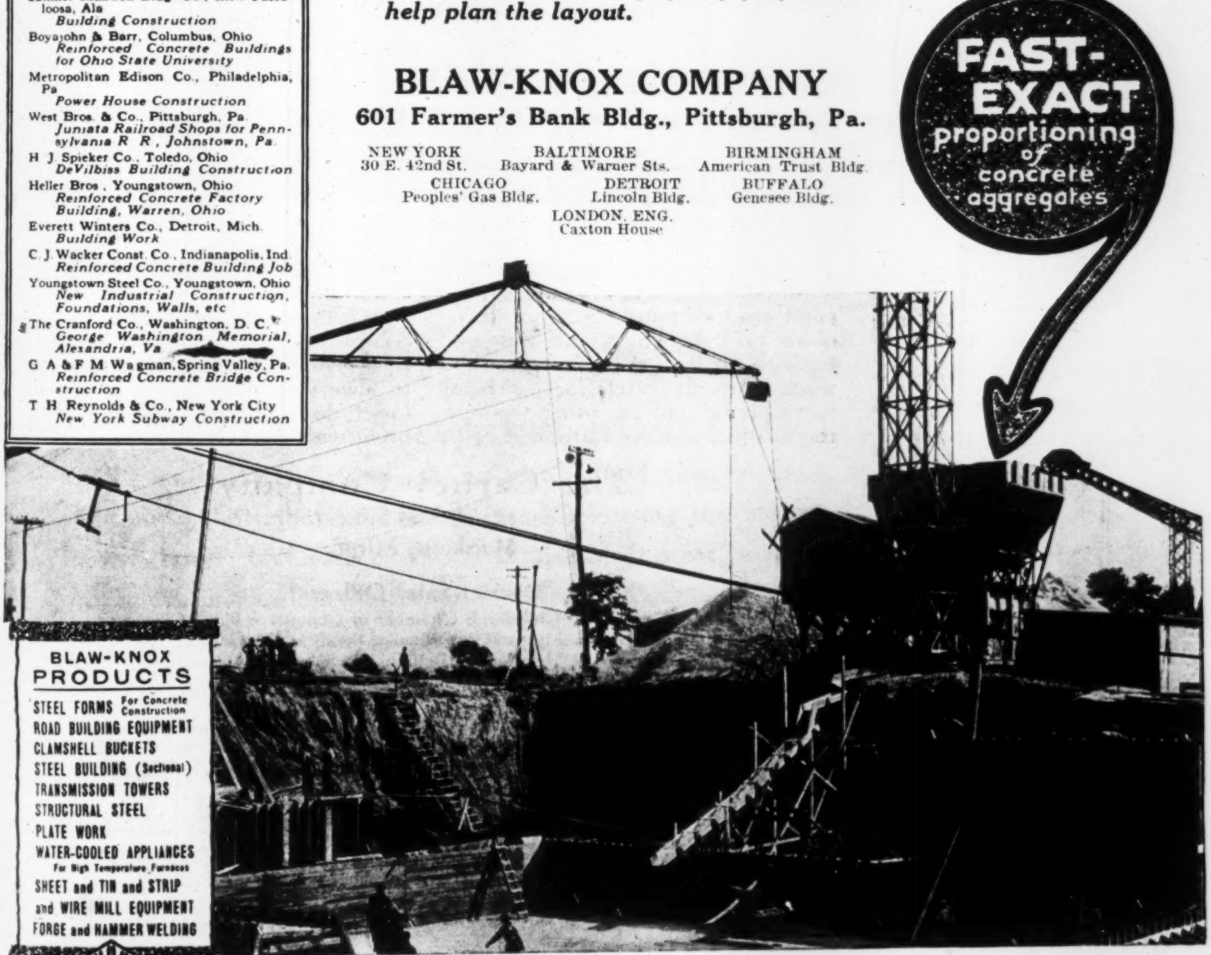
BIRMINGHAM
American Trust Bldg.

CHICAGO
Peoples' Gas Bldg.

DETROIT
Lincoln Bldg.

BUFFALO
Genesee Bldg.

LONDON, ENG.
Caxton House

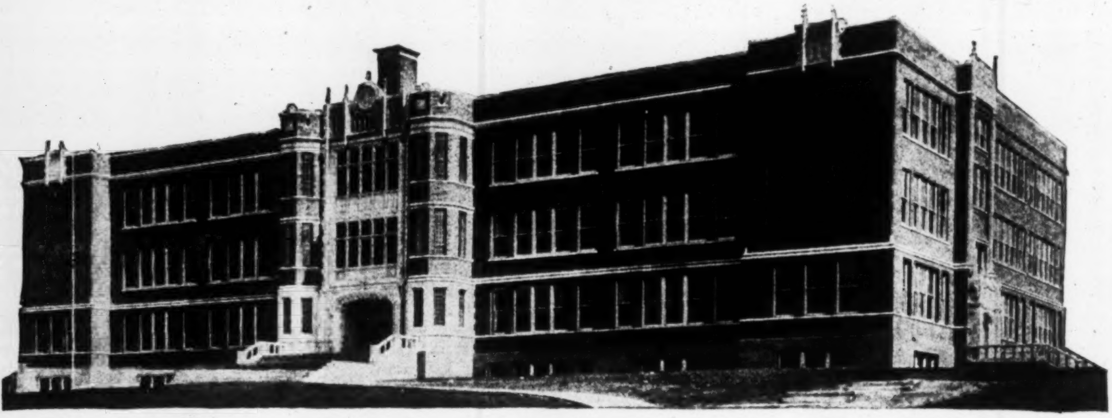


BLAW-KNOX PRODUCTS

- STEEL FORMS For Concrete Construction
- ROAD BUILDING EQUIPMENT
- CLAMSHELL BUCKETS
- STEEL BUILDING (Sectional)
- TRANSMISSION TOWERS
- STRUCTURAL STEEL
- PLATE WORK
- WATER-COOLED APPLIANCES For High Temperature Furnaces
- SHEET and TIN and STRIP and WIRE MILL EQUIPMENT
- FORGE and HAMMER WELDING

BLAW-KNOX

Batcherplant as nucleus for central mixing and distributing system—Metropolitan-Edison Co., Middletown, Pa. power plant.



Carney was specified for the McKinley Junior High School at Cedar Rapids, Iowa, as it is for hundreds of buildings throughout the country because it builds a better wall.

Architects: Rugh & Zalesky, Cedar Rapids, Iowa.
Contractors: Theo. Stark & Co., Cedar Rapids, Iowa.

Carney Sales Increase Each Month

THE merits of Carney have brought it into general use. Hundreds of Contractors know from practical experience that it saves time, money, and worry. Carney sales are increasing by leaps and bounds, due entirely to its good and saving qualities. Carney always builds a better wall at final lower cost. That is why we are building new mills.

Carney Has These Exclusive Merits

It can be used immediately after mixing or left in the box over night. There is no waste to Carney. Five bags to a barrel. Four and seventy-five hundreths cubic feet to a barrel. Four parts sand carrying capacity. It requires no lime, which saves time and labor in mixing. It prevents loss and waste through carelessness. Being more plastic and smoother working, the mason can work faster and easier on the wall. It lays the maximum number of brick to the barrel. It is ideal for wall bearing buildings. It becomes harder than the brick and tile it binds, continuing to harden indefinitely as time goes on. It sets a creamy white, contrasting beautifully with brick and tile. The final cost of a Carney wall is always lower. Contractors bid lower, do better work, and make more profit with Carney.

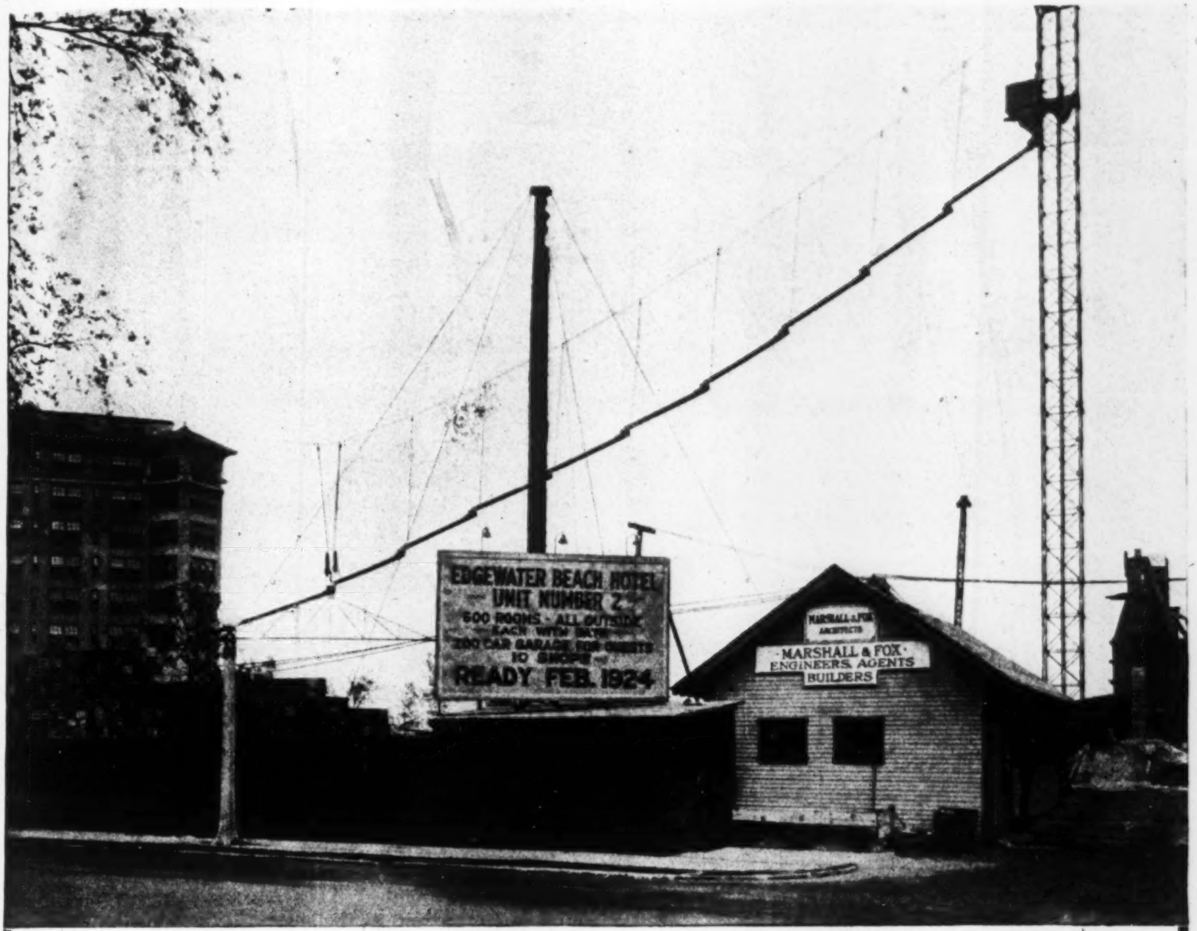
The Carney Company
Cement Makers Since 1883
Mankato, Minn.

District Sales Offices:
Leader-News Bldg., Cleveland; Chamber of Commerce Bldg., Chicago; Omaha National Bank Bldg., Omaha; Syndicate Trust Bldg., St. Louis; Book Bldg., Detroit; Builders' Exchange, Minneapolis.

This book tells the complete story of Carney. It will be sent free to anyone interested in building.

CARNEY
for Brick and Tile Mortar

Specifications: 1 part Carney to 4 parts sand.
(due to refined process of manufacture.)


EDGEWATER BEACH HOTEL
UNIT NUMBER 2
600 ROOMS - ALL OUTSIDE
EACH WITH BATH
200 CAR GARAGE FOR GUESTS
10 SHOPS
READY FEB. 1924
MARSHALL & FOX
ARCHITECTS
MARSHALL & FOX
ENGINEERS AGENTS
BUILDERS

Insley Equipment for Handling Concrete

Marshall & Fox used INSLEY STEEL TOWER EQUIPMENT on the Drake Hotel job in Chicago, and now, on the addition to the Edgewater Beach Hotel are using the plant shown above. It consists of a 160 ft. Quick Shift Steel Tower, continuous line Insley Chutes, and an Insley Counterweight Chute which distributes the concrete.

Marshall & Fox are one of the many high class builders throughout the country for whom Insley Concrete Handling Equipment means complete satisfaction, as is best evidenced by the fact that they have used it not once, but several times.

INSLEY

CONCRETE
PLACING EQUIPMENT

INDUSTRIAL CARS

STEEL DERRICKS

DUMP BUCKETS

INSLEY MANUFACTURING CO.

Engineers and Manufacturers

INDIANAPOLIS

321

Chemical Laboratory Building Ohio State University, Columbus, Ohio. Architect, Prof. J. N. Bradford. Contractors, D. W. McGrath & Sons. 35,000 sq. ft. Berloy ¾-in. Ribplex used in the 2-in. solid walls and partitions.

Two-Inch Walls and Partitions

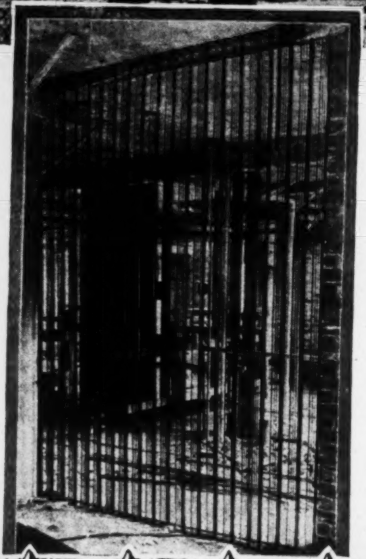
To the adaptability of reinforced concrete there is no end. Proper distribution of steel is one of the biggest factors in its success and for many forms of concrete work. Berloy ¾-inch Ribplex has proven to be a very effective type of reinforcement.

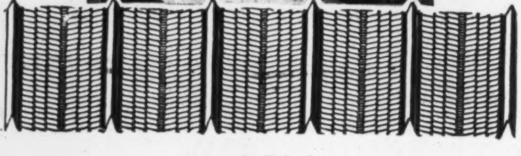
Walls and partitions two inches thick with the ribs of the ¾-inch Ribplex placed vertically were used to excellent advantage in the building shown above.

The same type of construction has been used in many other buildings in walls, partitions, floors, roofs, and in a wide variety of special concrete work such as bath houses, ornamental fences, drying ovens, hand-ball courts and, in fact, wherever a light, strong concrete slab is desirable.

Another very effective basis for two inch solid walls and partitions is the use of ⅜-inch Ribplex with ribs horizontal wired to Berloy cold rolled channel supports.

May we tell you more about this type of construction and its use? Please address Dept. F-24.





¾-Inch Ribplex

This is a stiff, expanded metal mesh with ¾-inch ribs, spaced 4.8 inches on centers. Covering width of sheets is 24 inches, the ribs nesting together at sides and ends to make a firm, even splice.

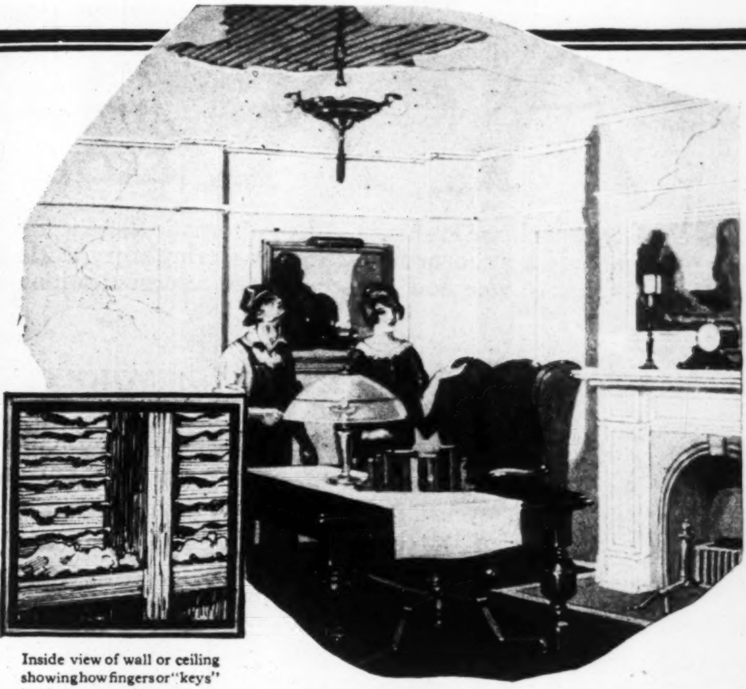
¾-inch Ribplex has been used exensively as centering and reinforcement for concrete floors and roofs as well as for walls, partitions and many forms of special work. Other Berloy Products include ⅜-inch Ribplex, Diamond Mesh Lath, Metal Lumber and Floor Cores.

The Berger Manufacturing Co.

Canton, O., Boston, New York, Philadelphia, Chicago, St. Louis, Kansas City, Minneapolis, San Francisco, Los Angeles, Dallas, Roanoke, Jacksonville.

BERLOY

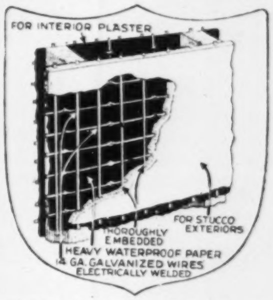
DIAMOND MESH LATH AND RIBPLEX



Inside view of wall or ceiling showing how fingers or "keys" hold plaster to wood lath.

NATIONAL

Stucco-Plaster Reinforcement



A combination plaster and stucco base and *reinforcement* which makes those materials permanent and enduring.

why does PLASTER *crack?*

Plaster and stucco crack, and sometimes fall off, because expansion and contraction of lath causes the fingers or "keys" which hold it in place, to break off.

National Stucco-Plaster Reinforcement eliminates "keys".

This combination of base and *reinforcement* becomes an integral part of and thoroughly embedded in, plaster and stucco, and thereby prevents cracking and falling.

It provides very much stronger stucco and plaster than any other type of lath or base. It automatically "back-plasters" itself. It is fire-safe and sound-deadening. It eliminates dust streaks, lath marks, and rust marks.

It is applied either direct to studs and joists, or over sheathing or insulation It cannot be "skinned", yet takes less material because it eliminates "keys".

In all your work, use National Stucco-Plaster Reinforcement in place of lath, because it saves time, labor, and material, yet assures stronger plaster and stucco.

Our new catalog explains and proves *how* and *why* it is best to build with *reinforced* concrete, plaster, and stucco. Write for a copy—it is tree.

National Steel Fabric Company

(Subsidiary of Pittsburgh Steel Company)

700 Union Trust Bldg., Pittsburgh, Pa.

OFFICES: Atlanta, Chicago, Cleveland, Denver, Detroit, Houston, Los Angeles, New York City, Philadelphia, Pittsburgh, St. Louis, San Antonio, San Francisco.
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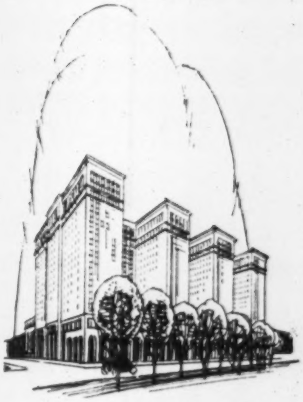

General Motors Building, Detroit, Mich.

Largest office building in the world.

Albert Kahn, Architect.

Floors temperature—reinforced with more than 2,000,000 square feet of National Steel Fabric.

There is a Style of National Steel Fabric for every type of concrete work.

Write for our "Building" Catalog.

World's Largest Manufacturers of Welded Steel Fabric

NATIONAL STEEL FABRIC CO

Subsidiary of PITTSBURGH STEEL CO

UNION TRUST BUILDING PITTSBURGH, U.S.A

P-A-X

TRADE MARK

THE PRIVATE AUTOMATIC EXCHANGE

More than a private telephone exchange—the Automatic Electric Services of the P-A-X include and co-ordinate interior telephony, code call, conference, watchman service and all other inter-communication needs

What the P-A-X will do for your client

1. Handle all his intercommunicating calls at no expense for operators' salaries.
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3. Save him 18 seconds on every call.
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The P-A-X is similar to the Automatic Telephone equipment being so widely adopted for city service. It augments and completes but neither supplants nor connects with local or long distance telephone service.

We shall be pleased to co-operate with you fully [as we have with architects all over the world] in properly meeting the needs of your clients. Get in touch with our nearest office.

Automatic Electric Company

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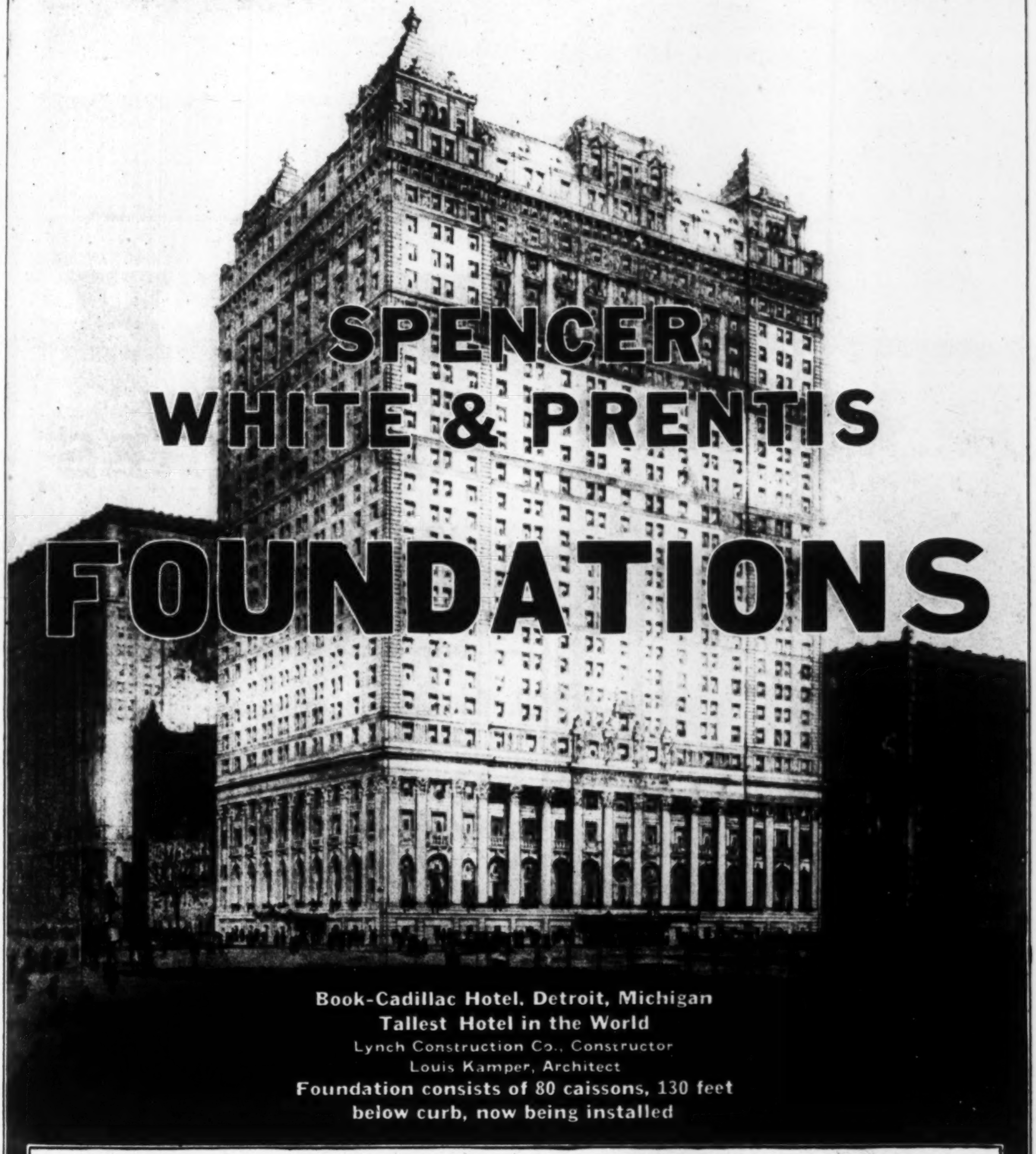

Book-Cadillac Hotel, Detroit, Michigan
Tallest Hotel in the World
Lynch Construction Co., Constructor
Louis Kamper, Architect
Foundation consists of 80 caissons, 130 feet below curb, now being installed

THE SPENCER, WHITE & PRENTIS COMPANY
1501 EUCLID AVENUE, CLEVELAND, OHIO
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SPENCER, WHITE & PRENTIS INCORPORATED
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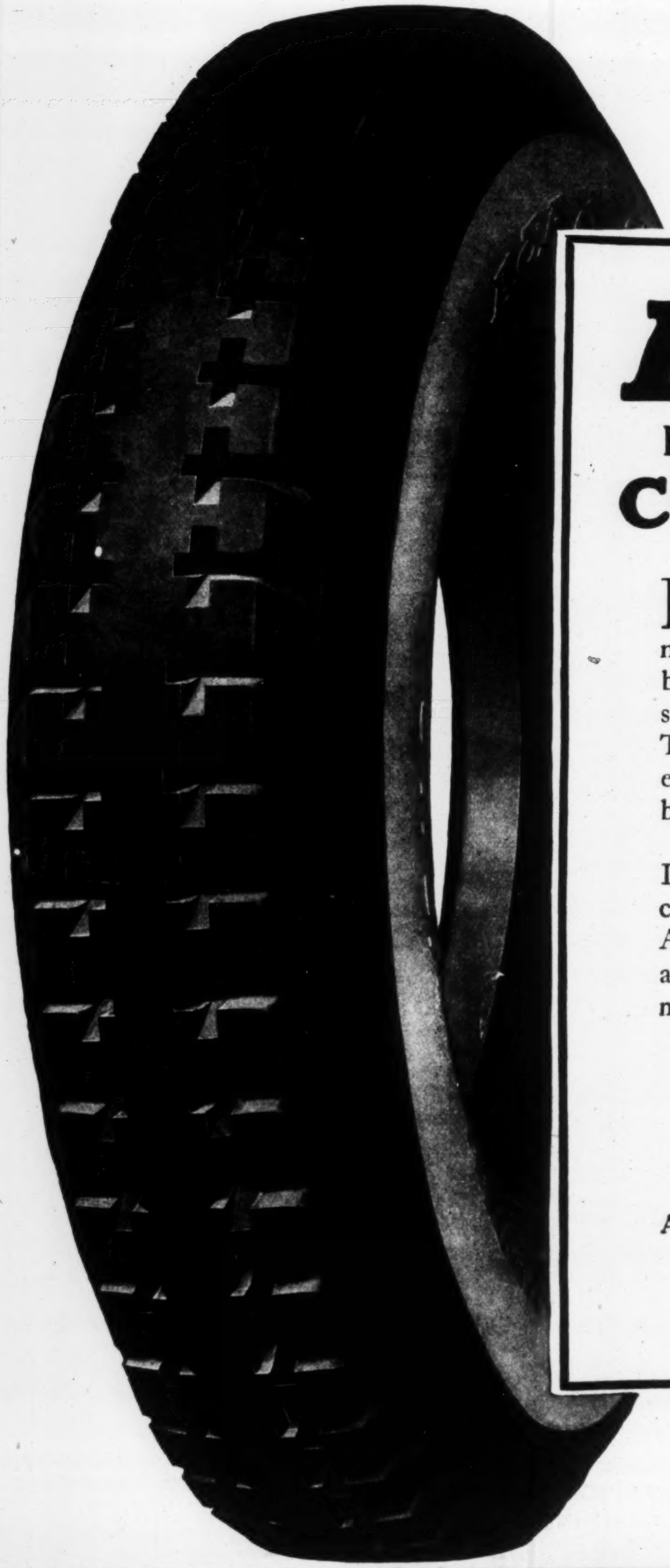
TUBA STEEL FOUNDATIONS
PRETEST FOUNDATIONS PAT. JUNE 12, 1917
PRETEST UNDERPINNING PAT. FEB. 20, 1917

PILES — SHAFTS — TUNNELS — STEEL AND CONCRETE CONSTRUCTION



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PNEUMATIC TRUCK
CORD TIRES

EVERY element of design in a motor truck must be properly balanced in proportion to the stresses and strains of the others. The same principle applies to all engineering construction—bridges, buildings.

It is this same engineering principle of Balance that distinguishes Ajax Cord Tires—the proper balance of strength, resiliency, toughness and traction.

Engineers and Contractors are invited to correspond with us on their problems relating to pneumatic cord tires.

AJAX RUBBER COMPANY, INC.
220 W. 57th Street, New York City

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NEW FEATURES IN CONSTRUCTION AND DESIGN

Ford
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1924

Make no mistake! The passing of another year has been marked by enormous changes in the value of methods and tools!

A visit to the FORD POWER EQUIPMENT EXPOSITION will keep you posted on the vitally important savings effected in adapting efficient, low-cost FORD POWER to industrial and commercial use.

Here are gathered exhibits by more than 78 leading manufacturers of industrial, commercial and agricultural equipment using the Fordson Tractor and Ford One-Ton Truck as power plants.

Proven money savers displayed side by side on a "brass tack" basis.

Men who know your needs—to give cold facts and figures—to show you why, when and where! Keep posted! Write now for a detailed list of exhibits and information on the application of FORD POWER in the solving of *your* problems'

FORD POWER EQUIPMENT
EXPOSITION
In the Ford Building, 54th St. & Broadway, N.Y.

There Will Be Other Jobs

You expect to work your shovel on future jobs too. Some of them will be tough work. You will need the best shovel you can get.

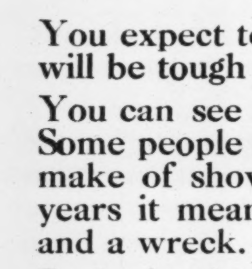
You can see records of all makes of shovels on all kinds of jobs. Some people get the idea that it doesn't make much difference what make of shovel they buy. They sometimes find out that in a few years it means the difference between a good dependable shovel and a wreck.

So don't take a chance. Don't buy for one job or one season. They all work fine when they are new but when you hear of a shovel ten years old and still doing six days a week, it is a Thew.

And Thews are made better today than ever before. New improvements. More conveniences. Added refinements.

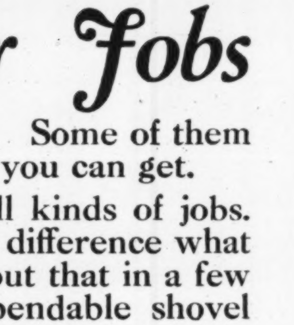
Write us before you buy.

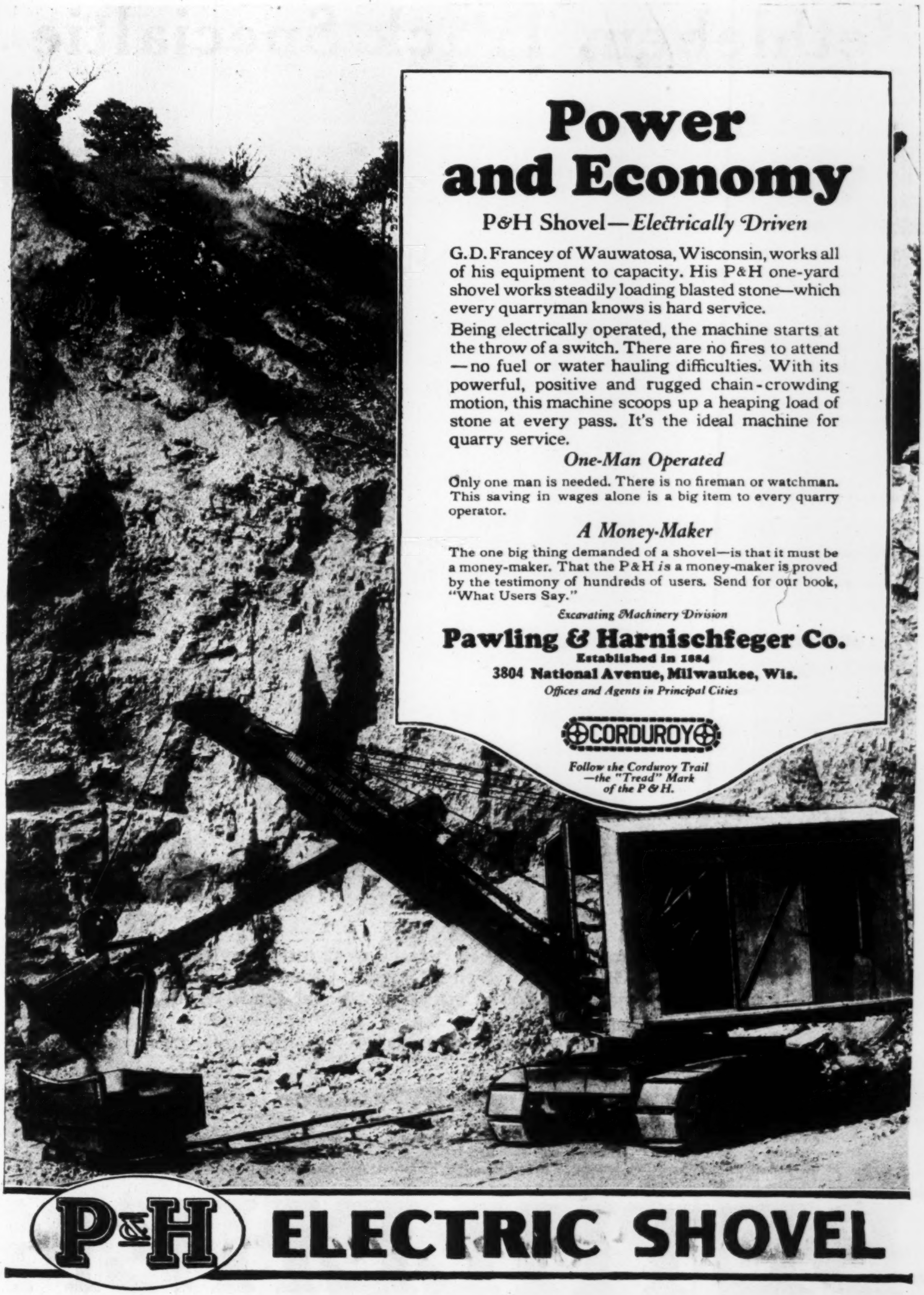
THE THEW SHOVEL COMPANY, LORAIN, OHIO



Thew

Power Shovels





Power and Economy

P&H Shovel—*Electrically Driven*

G. D. Francey of Wauwatosa, Wisconsin, works all of his equipment to capacity. His P&H one-yard shovel works steadily loading blasted stone—which every quarryman knows is hard service.

Being electrically operated, the machine starts at the throw of a switch. There are no fires to attend—no fuel or water hauling difficulties. With its powerful, positive and rugged chain-crowding motion, this machine scoops up a heaping load of stone at every pass. It's the ideal machine for quarry service.

One-Man Operated

Only one man is needed. There is no fireman or watchman. This saving in wages alone is a big item to every quarry operator.

A Money-Maker

The one big thing demanded of a shovel—is that it must be a money-maker. That the P&H *is* a money-maker is proved by the testimony of hundreds of users. Send for our book, "What Users Say."

Excavating Machinery Division

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Established in 1884
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CORDUROY

Follow the Corduroy Trail
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of the P & H.

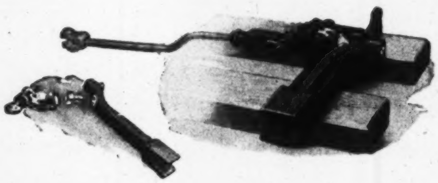
P&H ELECTRIC SHOVEL

Bethlehem Track Specialties

CAMBRIA MINE TIES are in one piece—no loose parts to mislay—clamping button quickly turned to position with hammer—track always to gage—extra ties can be added or taken out without disassembling track—longer life than wood ties—can be used many times.

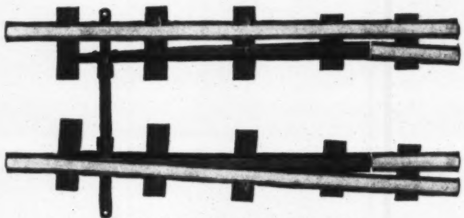
A Bundle of ten No. 2 Cambria Mine Ties

BETHLEHEM PARALLEL THROW SWITCH STAND, MODEL 1217, is adjustable for any throw—lever throws parallel to the track—when in normal position, lever is on "dead center" and switch is positively held—only 3″ high—only 3 moving parts—no bolts—can also be furnished with spring rod.



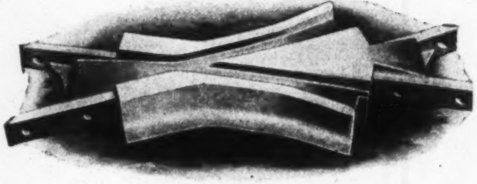
Parallel Throw Switch Stand, Model 1217

BETHLEHEM HEAVY DUTY SWITCH is fitted with extra heavy plates and braces—practically corrosion proof—will stand unlimited abuse—derailments eliminated—lengthens tie life—maintenance expense wiped out—plates and braces last indefinitely—switch points cost no more to renew than other kinds.



Heavy Duty Switch, Design 396

BETHLEHEM SOLID CAST FROG, Design 289, is made either of carbon, or manganese steel—strictly one-piece construction with no rivets or plates to work loose—flange bearing feature makes for smoother riding and reduces wear on wing rails and point—unbreakable and easy to install.



Solid Cast Frog, Design 289

Bethlehem also manufactures heavy track work for steam Railroads, such as Rails, Guard Rails, Switch Stands, Crossings, Tie Plates, Fish Plates, Splice Bars, Solid Cast Frogs, Special Track Work, etc.

Let us know your requirements and we will gladly furnish estimates

BETHLEHEM STEEL COMPANY, ***General Offices:*** **BETHLEHEM, PA.**

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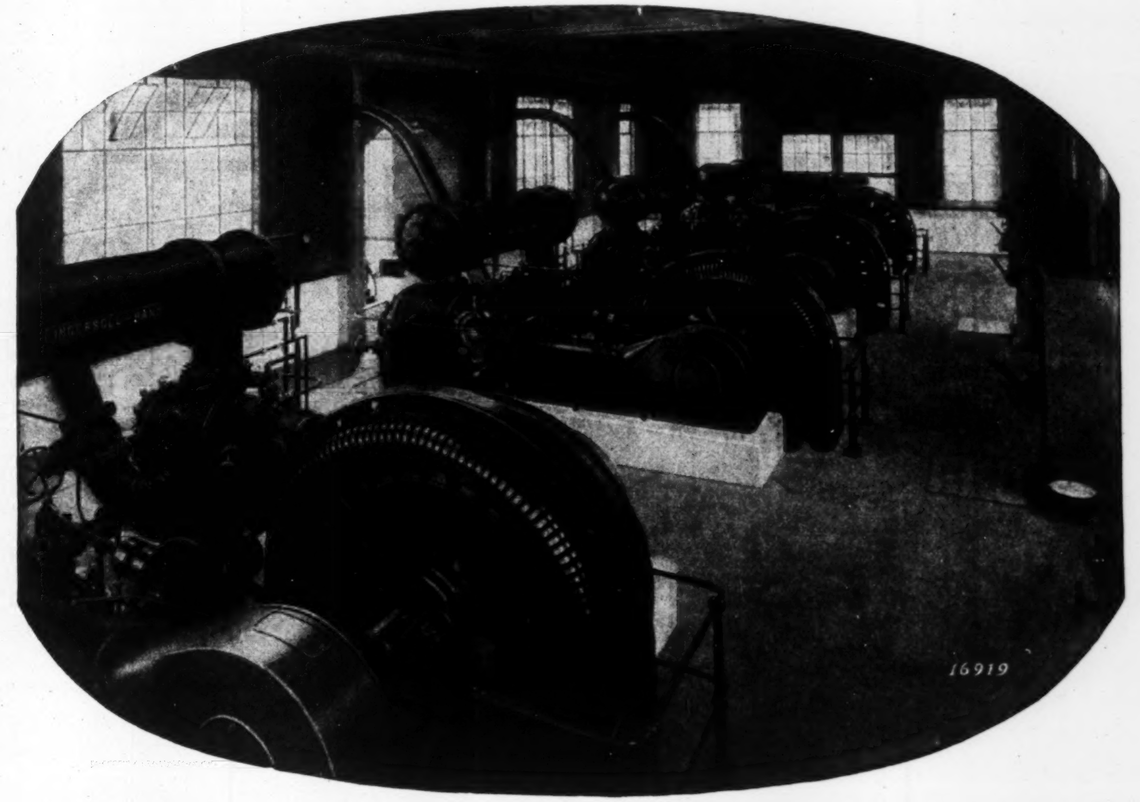
BETHLEHEM



Compressor Efficiency At Full and Partial Loads With the 5-Step Clearance Control

The demand for air is seldom steady even during any one day. Throughout the year it is bound to vary in accordance with the shop's production.

Your compressor must be large enough to meet the shop's present or contemplated maximum demand. At the same time it should operate efficiently when delivering partial capacity so that the cost of air does not become excessive when the demand falls off.

Class PRE direct-connected, electric motor driven compressors are extensively used where large volumes of air are required. The volume of compressed air delivered by the compressor is efficiently regulated by means of the patented 5-step Clearance Control. With this regulation the compressor delivers automatically, full, three-quarter, one-half, one-quarter or none of its rated capacity. The horsepower required is reduced practically in proportion to the reduction in capacity.

Another feature of the 5-step Clearance Control is the maximum Demand Stop which prevents operation of the compressor at any higher maximum load than is desired. This is extremely important when a maximum demand of service charge is included in your contract for electric current.

INGERSOLL-RAND COMPANY, 11 Broadway, N. Y.

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ARECIBO, P. R. wanted pipe for its water supply—reliable, durable, permanently tight pipe. "Universal" was laid because it possessed all of these essentials, *and more*—no expensive cumbersome joint-making equipment was needed, no time was wasted pouring and calking. The above line hugging the bridge is "Universal" 12-inch.

The flexibility and tightness of its machined joints make 'Universal' a great favorite for water supply, fire protection systems, sewage disposal, gas lines, subaqueous lines, and for other service where freedom from leakage is essential.

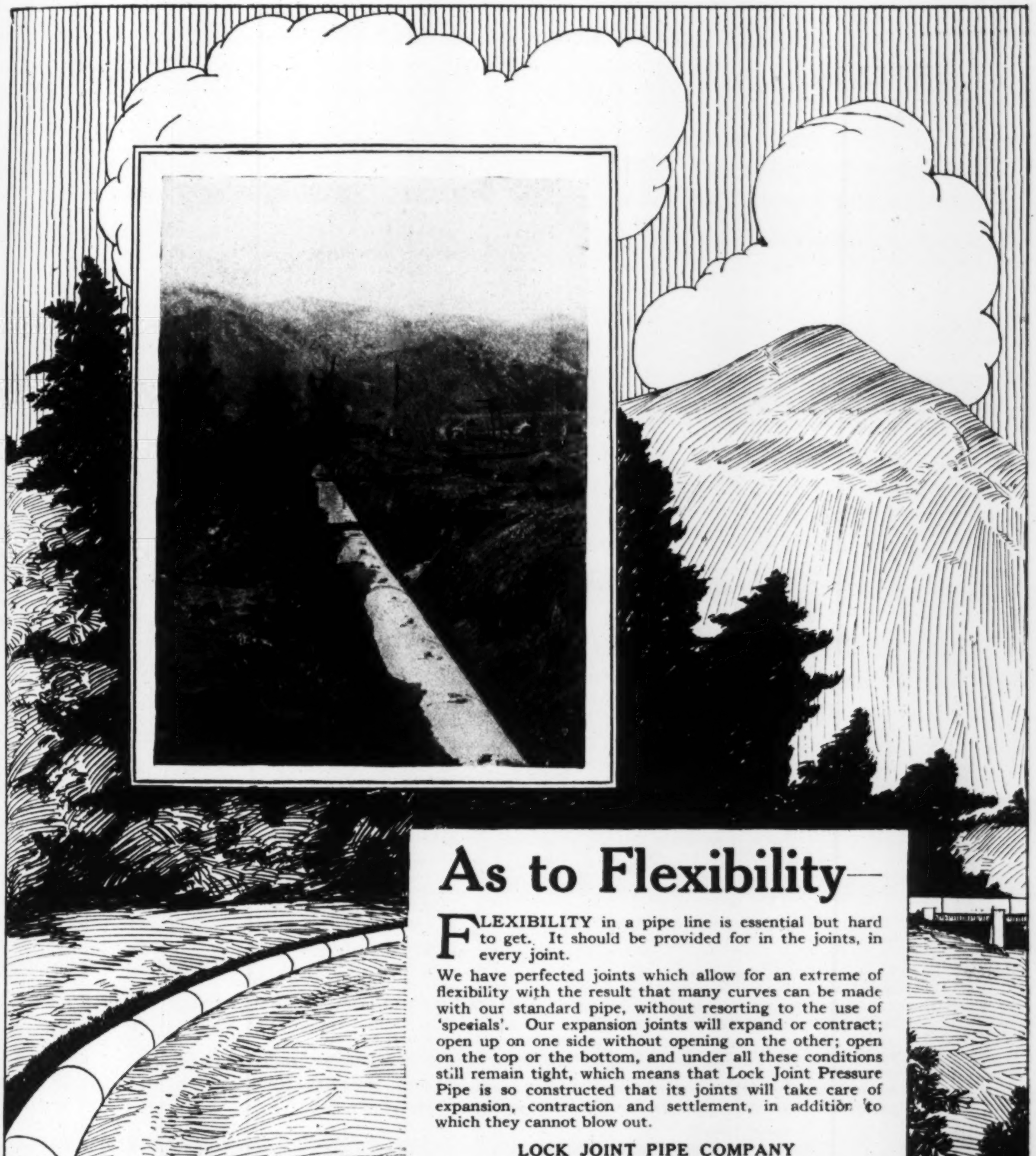
UNIVERSAL
the
CAST IRON PIPE
that Makes
its Own Joints

Ratchet Wrenches the only tools—No bell holes to dig.

THE CENTRAL FOUNDRY COMPANY
Subsidiary of
IRON PRODUCTS CORPORATION
New York, Chicago, Birmingham, Dallas, San Francisco, Los Angeles

UNIVERSAL CAST IRON PIPE

tight, flexible, dependable—no lead, no calking, no bell holes to dig



As to Flexibility—

FLEXIBILITY in a pipe line is essential but hard to get. It should be provided for in the joints, in every joint.

We have perfected joints which allow for an extreme of flexibility with the result that many curves can be made with our standard pipe, without resorting to the use of 'specials'. Our expansion joints will expand or contract; open up on one side without opening on the other; open on the top or the bottom, and under all these conditions still remain tight, which means that Lock Joint Pressure Pipe is so constructed that its joints will take care of expansion, contraction and settlement, in addition to which they cannot blow out.

LOCK JOINT PIPE COMPANY
Pressure, Sewer, Culvert and Subaqueous Pipe
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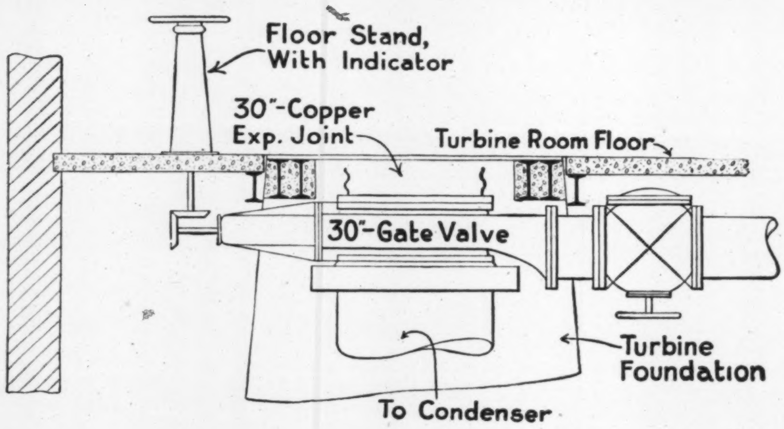
"Every Joint an Expansion Joint"


Floor Stand, With Indicator
30"-Copper Exp. Joint
Turbine Room Floor
30"-Gate Valve
Turbine Foundation
To Condenser

Meeting Special Requirements is one of the features of "NAVCO" service

Where clearance or other structural conditions make the use of standard valves, fittings, or piping accessories impossible, we can meet the requirements by supplying special valves, fittings, and other castings from our own foundry.

The above illustration shows a 30-inch gate valve in the condenser connection of a turbine, with a 14-inch side outlet for the atmospheric exhaust connection. The center line of the branch is offset $3\frac{1}{2}$ inches to clear the I-beams in the turbine foundation.

This, and many other small details, make up an entire piping job. Our experience in this field should be invaluable to piping men and consulting engineers.

Send for our Catalog 5A. It should be in the hands of everyone who has to do with power piping.

National Valve & Manufacturing Company
3102 Liberty Avenue, Pittsburgh, Pa.
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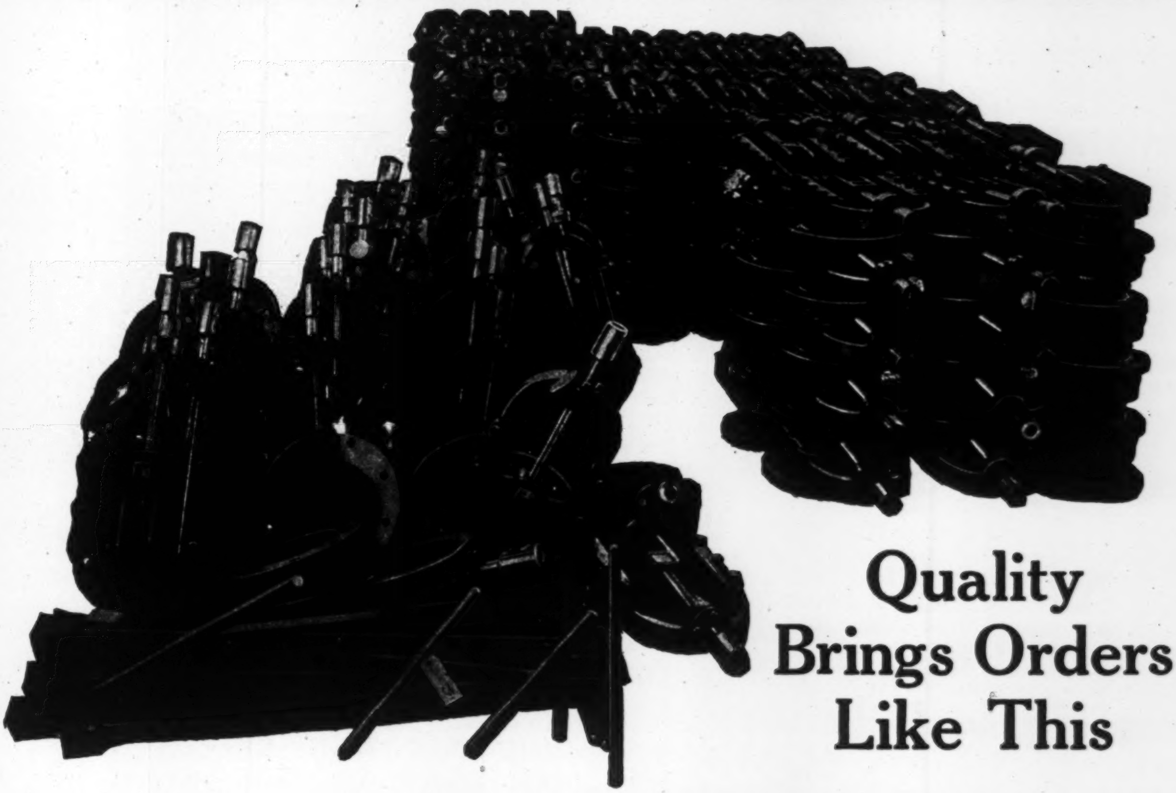
NAVCO **National** NAVCO

CHAPMAN



Quality Brings Orders Like This

Not every order, of course, is for sluice gates by the hundred. Our orders run from the little gates pictured here to giant gates that could dam a river. But every Chapman Valve or Sluice Gate is equal in QUALITY—a statement based upon OUR 50 years' manufacturing experience in this field, and upon USERS' years of experience with Chapman Products.

Let us send you CATALOG

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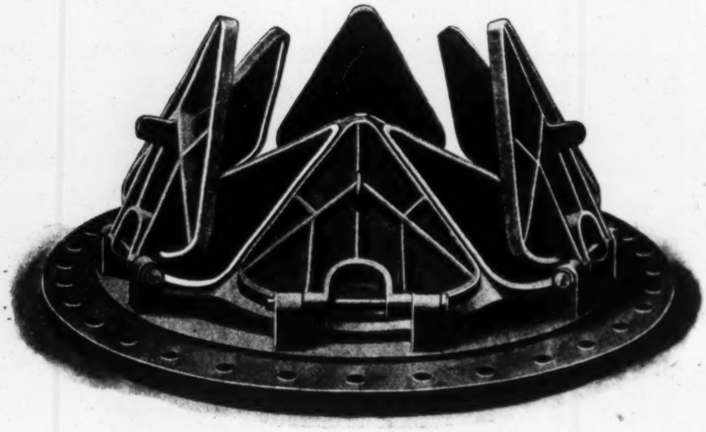
VALVES

"One of the famous Coffin Products"

COFFIN V
BOST

Coffin Foot Valve with strainer



Coffin Foot Valve with Shell removed. Note solidity.

SELF-SUPPORTING Foot Valves.

Note how the flaps are supported by their own HINGES—not by the water column.

They do not check the water flow.

The aggregate opening is 15% in excess of the pipe area!

All standard sizes with or without strainers.

COFFIN VALVE COMPANY,

Makers of the Largest Sluice and Gate Valves in America

Check Valves
Flap Valves
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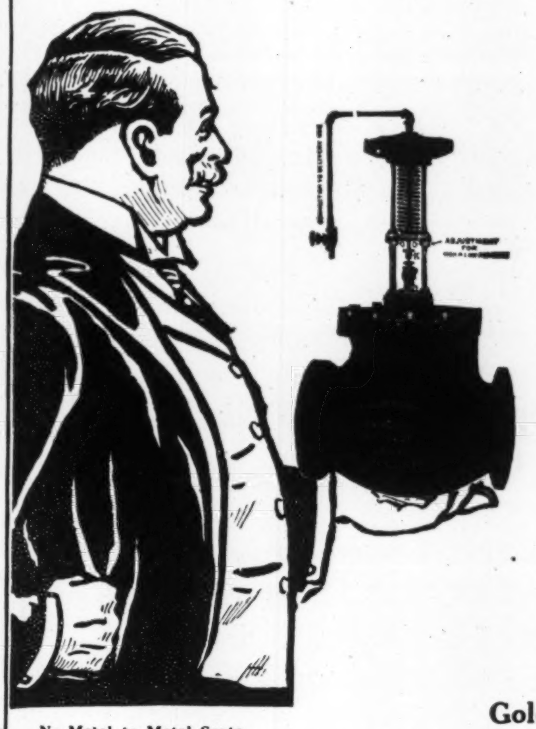
Montreal, Que.: Sterling Engineering Co., 232 St. James St.

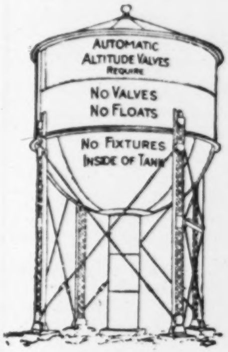
Cut Your Water Bill, Reduce Your Pumping Costs


ADJUSTMENT FOR HIGH & LOW PRESSURE

The water that overflows from your tanks, standpipes, reservoirs, etc., represents a double loss—a loss in power required to pump it there, and a loss in water. Such waste can be eliminated *completely* by the installation of

GOLDEN-ANDERSON
Automatic "Cushioned" Controlling Altitude Valves

They maintain a constant level automatically, without the use of floats or fixtures inside or outside the tank. No human element is involved. These valves may be closed in three ways, (1) automatically by water, (2) by electricity (3) by hand. They may also be arranged to close automatically when a break occurs in the mains. When necessary, they may also be connected to "close both ways" in a single line of pipe.



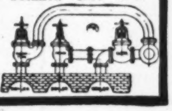
No Metal to Metal Seats.
No Water Hammer.

Golden-Anderson Valve Specialty Co.,
1202 Fulton Bldg., Pittsburgh, Pa.

GOLDEN-ANDERSON
Pat. Automatic Double Cushioned Triple Acting Non-Return Valves

Angle Globe or Elbow Pattern

1. Prevent shut-downs due to reversal of steam flow.
2. Instantly close and isolate a boiler when a tube bursts.
3. Cut off steam flow from every boiler instantly when a steam pipe ruptures.
4. Automatically cut a boiler into line.
5. Prevent backflow into cold boiler
6. The only valves that can be tested in service.



No Bursting Mains

Every Valve with an Absolute Guarantee

GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Float Valves

1. Automatically Maintain Uniform Water Levels in Tanks, Standpipes, etc.
2. Instantly Adjusted to Operate Quickly or Slowly.
3. Floats Swivel to any Angle—Most Satisfactory Float Valves Known.
4. No Metal-to-Metal Seats — No Water, Hammer or Shock.
5. Cushioned by Water and Air.

GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Pressure Regulating Valves

1. Maintain a constant reduced pressure regardless of fluctuations on high pressure side.
2. Perfectly Cushioned by water and air. No metal-to-metal seats.
3. The best valve made for maintaining a constant low pressure where consumption is continuous.
4. Operates quickly or slowly as required—No attention necessary.
5. Positively no hammering or sticking. Sizes to 24 in.

No Water Hammer

GOLDEN-ANDERSON
Pat. Cushioned Water Relief Valves

1. Automatically relieve excess pressure.
2. Prevent stress, strain and bursting of mains.
3. Correct mechanical construction.
4. Perfect air and water cushioning.
5. No metal-to-metal seats. No hammering or shocks.
6. Angle and globe pattern. Sizes 3 to 30 in

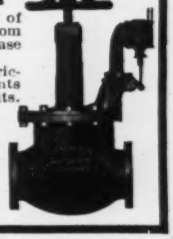
Hosts of References

GOLDEN-ANDERSON
Pat. Automatic Double Cushioned Check Valves

1. Especially adapted for Water Service.
2. For High or Low Pressure.
3. Thoroughly Cushioned, No chattering, Hammering, or Sticking.
4. Globe or Angle Patterns up to 30 in.
5. Especially adapted for hydraulic elevator service.

GOLDEN-ANDERSON
Pat. Cushioned Electric Water Service Valves

1. Give instant control of water distribution from pumping station in case of fire.
2. Open or close by electricity from distant points —a.c. or d.c. circuits. Also close by hand.
3. No waste of electricity. Current is on only few seconds.
4. Cushioned in opening and closing.
5. No water hammer, shock, sticking, surging or chattering



Stop-starter attachment for centrifugal pumps

No Metal-to-Metal Seats

POWER

Stone & Webster power stations designed and built, or now being built, total one and three-quarter million horse power—enough to operate the traction systems of New York, Chicago, Philadelphia, Detroit, Cleveland and St. Louis—our six largest cities.

Under construction is over 300,000 horse power. This is to supply Boston, Washington, Hartford, Lynn, Indianapolis, Fall River, Los Angeles and other cities.

Sixty public service corporations are served continuously by Stone & Webster engineers who make their plans and install their new generating and distributing equipment.

Stone & Webster engineers have examined and appraised properties to the total value of more than $4,500,000,000 including many of the country's foremost public utilities.

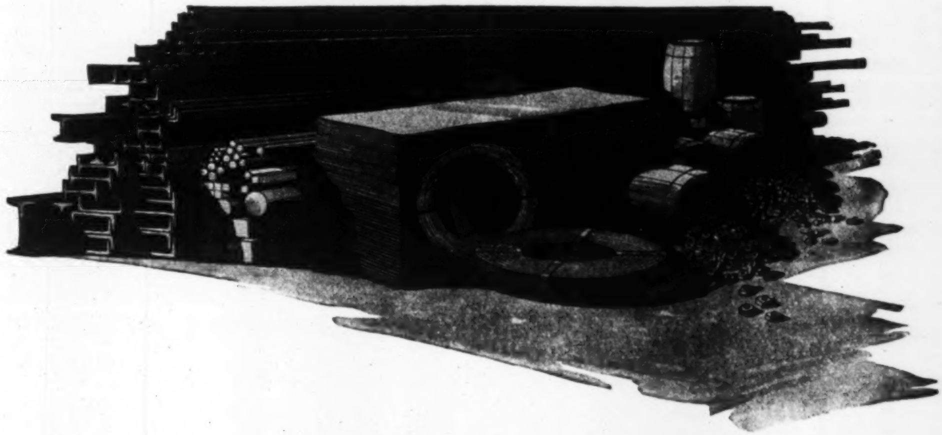
STONE & WEBSTER
INCORPORATED

DESIGN · BUILD
MANAGE
FINANCE

NEW YORK, 120 Broadway
SAN FRANCISCO, Holbrook Bldg.

CHICAGO, 38 S. Dearborn Street
PHILADELPHIA, Real Estate Trust Bldg.

BOSTON, 147 Milk Street



Everything in Steel When You Need It

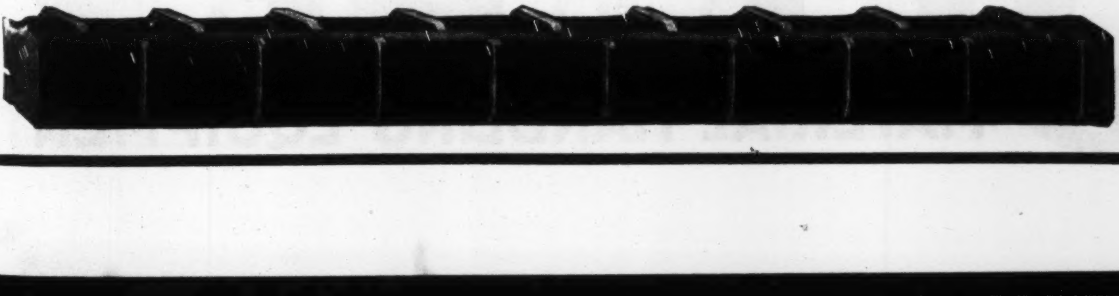
WHETHER it's reinforcing bars and spirals or beams, bars, rails, bolts, rivets, or any other steel product needed by the contractor—Ryerson is the logical source.

First, because you can rely upon immediate shipment from our large and complete stocks. Second, because of our facilities for bending or cutting to the exact size you require. And third, because Ryerson *Steel-Service* may be taken literally. Our engineers—and in fact every member of our organization is ready to go out of his way to help you get the steel *where* you want it and *when* you want it.

The Ryerson Journal and Stock List contains complete information on all steel products—have you written for your copy?

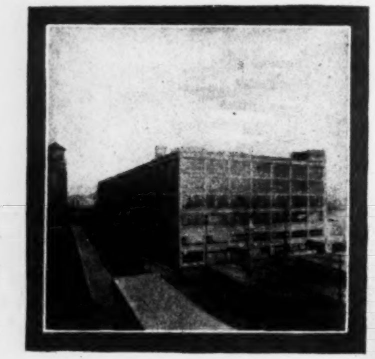
JOSEPH T. RYERSON & SON INC.
ESTABLISHED 1842

CHICAGO ST. LOUIS CINCINNATI DETROIT BUFFALO NEW YORK
BRANCH OFFICES: DENVER HOUSTON JERSEY CITY
MILWAUKEE MINNEAPOLIS NEWARK SAN FRANCISCO TULSA



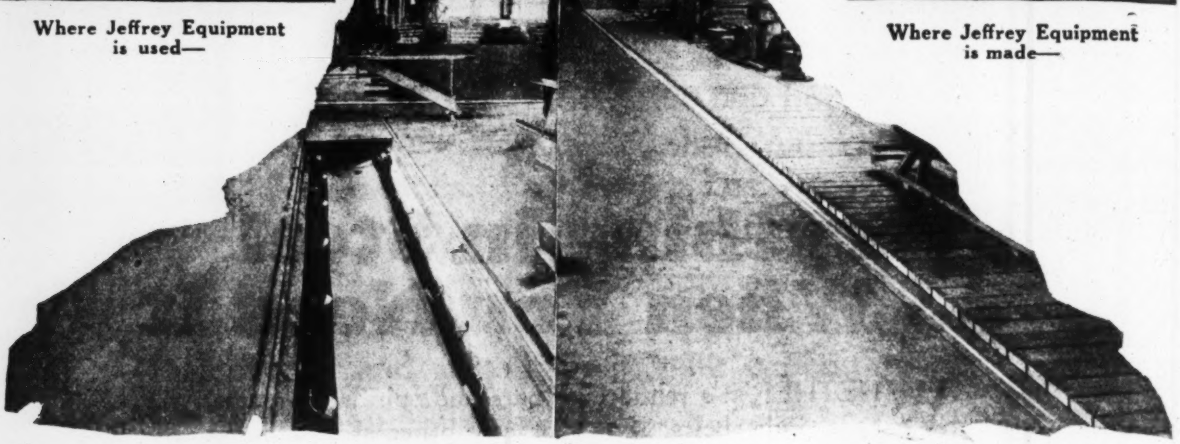
Jeffrey Material-Handling Equipment as used by the Fisher Body Corp'n

Wood Apron and Rubber Belt Conveyors



Where Jeffrey Equipment is used—

Where Jeffrey Equipment is made—



AT the Pontiac plant of the Fisher Body Corporation, the Jeffrey Belt Conveyor shown in the left hand illustration saves labor by handling waste wood or wood scraps from woodworking machines to storage.

This conveyor is 320 feet long, measuring 155 feet between centers; and travels at the rate of 100 feet per minute. It uses 24-inch four-ply canvas belting,—with 24-inch five-pulley troughing carriers mounted on wood base boards, and 24-inch standard flat belt carriers serving as return idlers.

The Jeffrey Conveyor shown at the right is part of a Jeffrey Wood Apron Conveyor System comprised of three units, employed to handle boards or finished wood shapes at the Pontiac plant.

One unit, 400 feet between centers, uses 1615 feet of Jeffrey No. 126 Malleable Roller Chain. Another unit 130 feet at centers, utilizes 530 feet of the Chain; and the third unit, which is 245 feet between centers, uses 990 feet of the Chain.

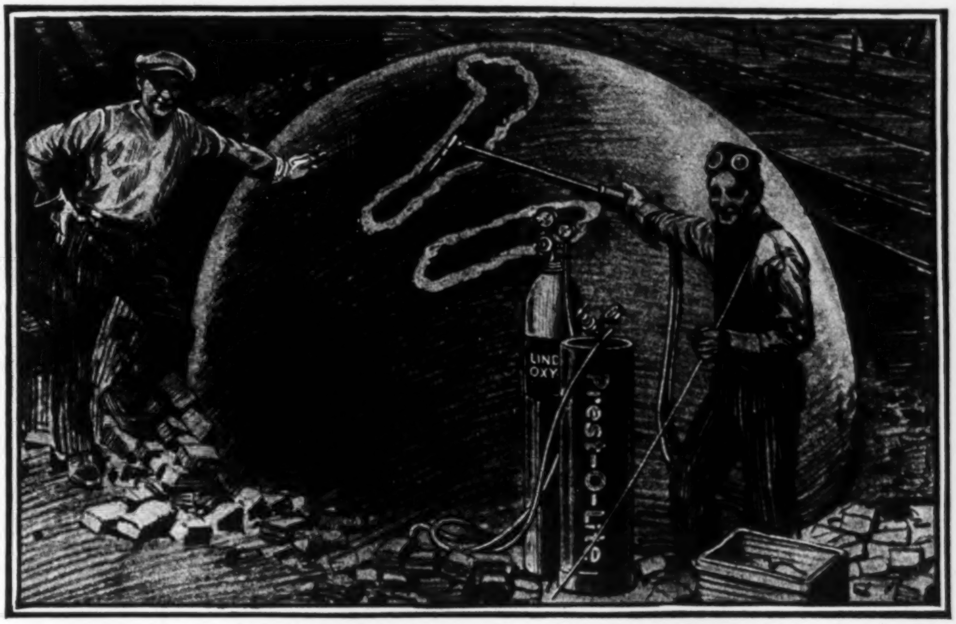
Dependable, continuous operation is expected of these Jeffrey Conveyor systems — and is given.

The Jeffrey Manufacturing Company, Columbus, Ohio

New York, 30 Church Street
Chicago, 858 McCormick Bldg.
Philadelphia, 515 Real Estate Tr. Bldg.
Pittsburgh, Rea Bldg., 620 Second Ave.
Montreal, Canada, Power Bldg.
Scranton, Pa., 518 Union Nat'l Bank Bldg.
Cleveland, Ohio, 1519 Guardian Bldg.
Denver, Colo., 1751 Wazee Street
St. Louis, Mo., 606 Pontiac Bldg.
Detroit, Mich., 455 Book Bldg.
Milwaukee, Wis., M. & M. Bldg.
Boston, Mass., 141 Milk Street
Los Angeles, Cal., H. W. Hellman Bldg.
Charleston, W. Va., 914 Kanawha Street

JEFFREY

MATERIAL HANDLING EQUIPMENT



Proud of It!

And with good reason. A few years ago monster cast-iron pots like these were regarded as "unweldable". In out-of-the-way places they were allowed to accumulate and encumber the smelter yards, because of the expense of breaking them up and transporting them to a scrap market.

The reclamation of "lead pots" is now a standard practice—thanks to the oxy-acetylene process. The big fellow shown here is one of twenty-six 8-ton cast iron pots reclaimed by a large mining and concentrating company in the west.

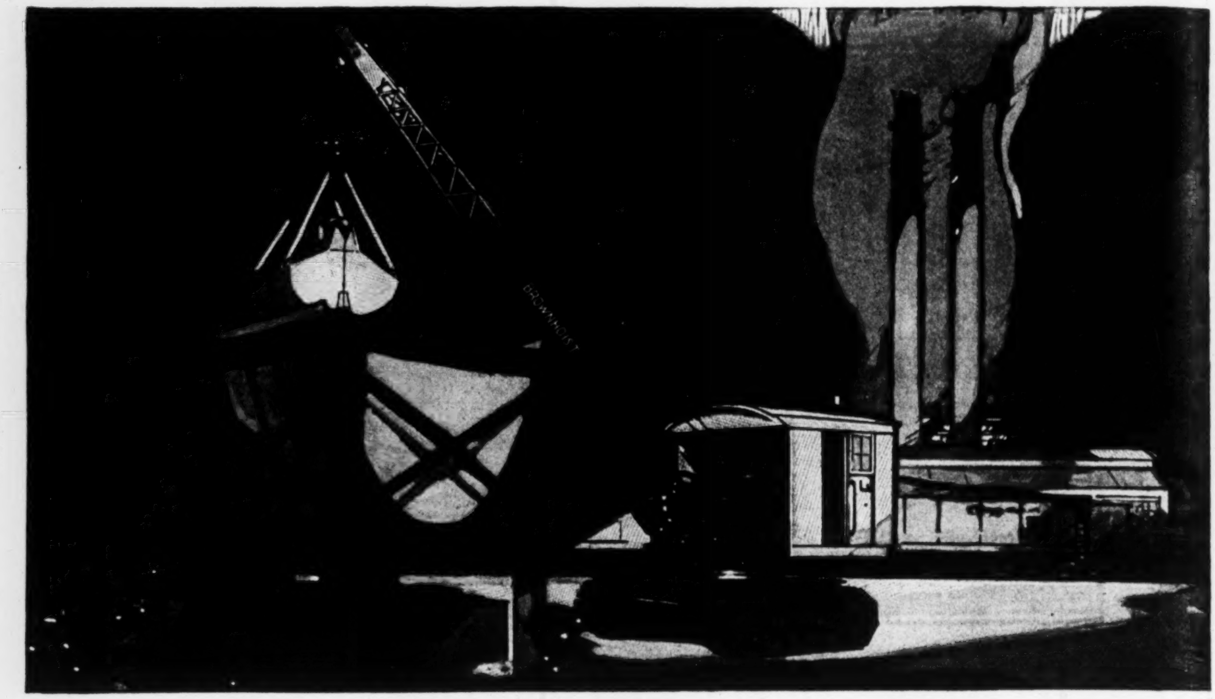
Thus one more intricate and difficult puzzle has been solved by oxwelding. It is typical of what Oxweld Resident Engineers (located in over fifty cities) are daily doing for the metal industry. They are ready to work on YOUR cutting and welding problems—to point out economical short cuts, reclaim scrapped pieces, speed production. Send for illustrated book "Oxweld Can Do It".

OXWELD ACETYLENE COMPANY
Newark, N. J. Chicago San Francisco

Oxweld

WELDING AND CUTTING APPARATUS

World's Largest Manufacturers of Welding and Cutting Equipment



No. 2 Brownhoist creeper truck crane equipped with 40 foot boom and Brownhoist one yard clamshell bucket

This Small Crane Will Cut Road Building Costs

Small in size and low in cost, this No. 2 Brownhoist Locomotive Crane has a remarkable handling capacity. It handles a one yard Brownhoist clamshell bucket easily and rapidly. The forty foot boom provides a wide handling radius and increased clearance for loading into bins.

In road building, large savings can be effected by the use of this crane in the handling of sand, stone, gravel, etc. The No. 2 Brownhoist is made with creeper trucks and four or eight wheel railroad trucks—powered either by gasoline or steam engine.

These different types are built so as to provide the most economical crane for the individual requirements of each user. We'll be glad to help you choose the one best fitted for your job.

Literature and complete data on request

Road Show

A moving picture showing approved methods of building roads in several states and also a No. 2 Brownhoist 8-wheel crane will be shown at the Road Show.

The Brown Hoisting Machinery Co., *Cleveland, O.*
Branch Offices: New York, Chicago, Pittsburgh, San Francisco, New Orleans
Products: Locomotive Cranes, Buckets, Storage Bins, Belt and Chain Conveyors, Etc.

BROWNHOIST

MATERIAL HANDLING EQUIPMENT

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

Bids: **Jan. 15.**

Municipal Water Supply Improvement

Oklahoma City, **Okla.**

Sealed bids will be received by M. Peshek, Jr., City Clerk of the City of Oklahoma City, Oklahoma, up to 12.00 o'clock noon, Tuesday, January 15th, 1924, and a duplicate of each bid must be filed with the City Auditor of the said city, and will be opened and considered by the Board of Commissioners at 2.00 o'clock p.m., Tuesday, January 15th, 1924, for the construction of the following work for the improvement to the municipal water supply for the City of Oklahoma City, Oklahoma:

Section A—1—Ambursen Const. Co. plan—Main Dam Extension.

Section A—2—Ambursen Const. Co. plan—Intake.

Section A—3—Ambursen Const. Co. plan—Gates and Operating Mechanism, Main Dam Extension.

Section A—4—Ambursen Const. Co. plan—Steel Flashboards and Operating Mechanism—Intake.

Section B—1—V. V. Long & Co. plan—Main Dam Extension.

Section B—2—V. V. Long & Co. plan—Intake.

Section B—3—V. V. Long & Co. plan—Structural Steel Crest; Intake.

Section C—1—Callahan Const. Co. plan—Main Dam Extension.

Section C—2—Callahan Const. Co. plan—Intake.

Section C—3—Callahan Const. Co. plan—Gates and Operating Mechanism—Main Dam Extension.

Section C—4—Callahan Const. Co. plan—Gates and Operating Mechanism, Intake.

Section D—1—Holway Engr. Co. plan—Main Dam Extension.

Section D—2—Holway Engr. Co. plan—Intake.

Setion D—3—Holway Engr. Co. plan—Gates and Operating Mechanism—Main Dam Extension.

Section D—4—Holway Engr. Co. plan—Gates and Operating Mechanism—Intake.

Bids will be considered on each Section separately, and contractors may bid on any or all sections. All of the necessary work and materials used shall be in strict accordance with the plans and specifications therefor, now on file in the office of the City Clerk.

Each bidder shall accompany his bid with a sworn statement in writing that the bidder had not directly nor indirectly made any agreement, express or implied, with any other bidder or bidders, having for its object the controlling of the price or amount of such bid or bids, the limiting of the bidder or bidders, the parcelling or farming out to any bidder or bidders, or other persons, of any part of the contract, or any part of the subject matter of the bid or of the profits thereof, and has no knowledge of the amount, kind or character of any bid to be made by any other person, firm or corporation, except those submitted and filed by him.

The bid or bids filed with the City Clerk must be accompanied by a certified check on any national bank, in the sum of at least five (5%) per cent of the amount of the bid or bids.

It being further understood that the amount of damages which the City would suffer would be impracticable to determine and extremely difficult to fix in case the successful bidder should fail to enter into a contract and give the required bonds within the required time, it is therefore understood that by the filing of a bid or bids it will be considered as agreed that the amount of damages which the City would suffer by reason of such failure on the part of said successful bidder is the amount represented by the check or checks so filed by the successful bidder, and that the City shall have the authority to appropriate such checks for its own use and benefit in payment for such damages.

Each bidder shall agree to enter into a contract and furnish the required bonds within ten (10) days after the acceptance of his bid, and shall state in his bid when he will begin the work and when he will complete the same.

The contractor will be required to give bond in the sum of twenty-five (25%) per cent of the contract price for faithful performance of the work, and all other bonds that are required by the laws of the State of Oklahoma or the ordinances of said City, and to give bond to hold the City harmless from any and all damages for which the City might be liable under the law, and which might occur by reason of any act upon the part of the said contractor or of any of his employees.

A deposit of fifty ($50.00) dollars will be required for each set of plans and specifications. Such deposit will be refunded upon the return of the plans and specifications in good condition within 10 days after the bids are opened.

Each bidder is hereby notified that the Ambursen Co. plans, the V. V. Long & Co. plans, the Callahan Const. Co. plans and the Holway Engr. Co. plans are different plans for the same construction work and the City reserves the right to finally adopt for said work any one plan or any part of any plan.

The Board of Commissioners further reserves the right to reject any or all bids.

M. PESHEK, JR.,
City Clerk.

Bids: Jan. 8.

Fire Escapes

Sonyea, N. Y.

Sealed proposals for Construction—Fire Escapes, at Craig Colony, Sonyea, N. Y., will be received by Mr. Percy L. Lang, President, Board of Managers, Craig Colony, Sonyea, N. Y., until 2 o'clock p.m. on Tuesday, January 8, 1924, when they will be publicly opened and read. Proposal shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4182. The right is reserved to reject any or all bids. Drawings and specifications may be examined at Craig Colony, Sonyea, N. Y., at the Department of Architecture, 18th Floor, Fuller Bldg., Broadway and 23rd Street, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: December 13. 1923.

Bids: **Jan. 18.**

Dredging

ENGINEERING DEPARTMENT
PARISH OF CALCASIEU, LOUISIANA

Lake Charles, La.

December 15th, 1923.

Sealed bids will be received by the Police Jury of the Parish of Calcasieu, Louisiana, until noon, Friday, January 18th, 1924, in the Police Jury Room, Court House, Lake Charles, Louisiana, and then and there publicly opened, for the construction of a Navigation Channel 30 feet deep by 125 feet wide at the bottom, from **Lake Charles** to the Sabine River.

SECTION 3

The construction of a channel 30 feet deep and 125 feet wide at the bottom, from Station 714, East along the Intracoastal Canal, to Station 580. A distance of 2.54 miles. Approximately 2,020,000 cubic yards of earth to be moved.

This work is along the present Intracoastal Canal, which on this section, is 6 feet deep and 40 feet wide on the bottom. The Atlantic, Gulf and Pacific Dredging Company have a contract with the War Department to deepen and widen this part of the Intracoastal Canal to 12 by 90 feet; their dredge "TEXAS" is working about Station 760 at present, and will pass Station 714 going East between January 1st and 10th. From Station 714, East to Station 680, the land is marsh, elevation +1.0 to +2.0. The Gum Cove Ridge lies between Station 680 and 580, elevation +2.0 to +12.0. Average stage of water +1.2. All depths and elevations refer to Mean Low Gulf Datum.

SECTION 5

The construction of a channel 30 feet deep and 125 feet wide at the bottom, from Station 58 on the Intracoastal Canal, West to Station 322. A distance of 5 miles. Approximately 3,480,000 cubic yards of earth to be moved.

This work is along the present Intracoastal Canal, which has been deepened and widened from Station 58 to 120, to 12 feet deep by 90 feet wide on the bottom. From Station 120 to 322 the Canal is 6 feet deep by 40 feet wide on the bottom, with a Pilot cut from Station 176 to 322, 12 feet deep by 40 feet wide on the bottom, along the South side of the old ditch: The Government Dredge "BLACKWATER" is at present at Station 120 working West completing the Canal to 12 feet depth and 90 feet width. The Blackwater will probably pass Station 176 about February 1st. From Station 58 to 90 is a low Ridge; Elevation +2.0 to +7.0; from Station 90 to Station 322 is a Black Grass Marsh, with knolls; Elevation +1.0 to +3.0. Average stage of water +1.2. All elevations and depths refer to Mean Low Gulf Datum.

Every bid shall be accompanied by a certified check in an amount equal to five per cent (5%) of the amount of the bid, payable to the Treasurer of Calcasieu Parish, which check shall be forfeited to the Parish should the bidder to whom such contract is awarded fail to enter into the contract required within ten (10) days after notice to do so from the Police Jury of Calcasieu Parish.

The Police Jury reserves the right to reject any or all bids.

V. R. REEVES,
President, Police Jury.
FRED SHUTTS,
Parish Engineer.

OFFICIAL PROPOSALS

Bids: **Jan. 17.**

Excavation and Rock Protection

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
BUREAU OF CANALS

Albany, N. Y.,
December 13, 1923.

Sealed proposals will be received by the undersigned at his office in Albany, N. Y., until twelve o'clock noon of Thursday, January 17th, 1924, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 214.

Erie Canal—Section 9.

For completing the excavation of the canal channel in the Genesee river at Rochester and placing rock spoil protection along the river banks.

Sheets 1 to 3, inclusive.

Plans may be seen, and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Bureau of Canals, Albany, N. Y.; at the office of the Division Engineer, Department of Public Works, at Utica, Syracuse, Rochester and Buffalo; and at the Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accomplished by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank, in good credit within the State and payable at sight to the Commissioner of Canals and Waterways for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Commissioner of Canals and Waterways.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Commissioner of Canals and Waterways, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work, according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Bureau of Canals, State Department of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Commissioner of Canals and Waterways of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

ROYAL K. FULLER.
Commissioner of Canals
and Waterways.

Bids: Jan. 3.

Railroad Siding, Relocating Electric Railroad and Bridge

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at the office of the Purchasing Agent, Second Floor, City Hall, until 2 oclock p.m., January 3, 1924, for furnishing the labor and materials for the grading for a railroad siding about three-fourths of a mile long, and a relocated electric railroad and highway about four-fifths of a mile long including a reinforced concrete highway bridge, span 16 feet, width 18 feet, located just north of North Kansas City. The proposals shall be in accordance with drawings and specifications on file in the office of the Board of Fire and Water Commissioners of Kansas City, Missouri, of Fuller and Maitland, Engineers for the Board of Fire and Water Commissioners, 600 Walnut Street, Kansas City, Missouri, and of Fuller and McClintock, 170 Broadway, New York City. Copies of the drawings and specifications may be obtained from Fuller and Maitland, 600 Walnut Street, Kansas City, Missouri, upon the deposit of $10.00 for each set, which deposit will be refunded provided the drawings and specifications are returned in good condition within 30 days after bids are received.

Each bidder shall deposit with the City Comptroller a certified check on a solvent bank or trust company in the amount of five thousand dollars ($5,000), payable to the City Comptroller of Kansas City, Missouri, and accompany his bid with the Comptroller's receipt therefor. The said certified check is required as a guarantee that the bidder will, within ten (10) days after receiving the award of the contract, file with the City a satisfactory bond to the amount of fifty per cent of the bid price, and will execute the contract.

The Board of Fire and Water Commissioners does not bind itself to accept the lowest or any bid offered, and reserves the right to reject any or all bids, and to waive any irregularity or informality in the bids.

MARTY H. RAMING,
Purchasing Agent.

FULLER AND MAITLAND,
Engineers.
By Authority of the Board of Fire and Water Commissioners.

Bids: Feb. 4, 1924.

University Buildings

Urbana, Ill.

Sealed proposals for General Work on four buildings to be erected for the University of Illinois in Urbana, Illinois, will be received at the office of James M. White, Supervising Architect, 256 Administration Building, Urbana, up to 2:00 p.m., Monday, February 4, 1924.

Bidders interested should write the Supervising Architect immediately for information as to type and size of buildings and dates when plans will be available.

Bids: **Jan. 3.**

Sewer Construction

McKenzie, Tenn.

Sealed bids for the construction of a vitrified pipe sewer system and settling tanks for the City of McKenzie will be received by the Mayor and City Council at the office of H. C. Bryant, City Clerk until 2 p.m., January 3, 1924, at which time and place they will be opened and publicly read.

The approximate quantities are as follows:

38,506	Lineal feet 8" Sewers
4,620	Lineal feet 10" Sewers
900	Lineal feet 12" Sewers
1,650	Lineal feet 15" Sewers
134	Manholes
12	Flush Tanks
588	Lineal feet vertical risers
2	Reinforced concrete settling tanks

Plans and specifications may be examined at the office of H. C. Bryant, City Clerk, at McKenzie, or at the office of the Engineer, or a copy may be obtained from the Engineer upon receipt of a deposit of $15.00, of which amount $10.00 will be refunded when the plans and specifications are returned in good condition. If additional information is required, address the Engineer.

The right is reserved to reject any and all proposals and to waive informalities. The contractor will be paid cash on monthly estimates amounting to 85% of the work done.

All proposals and bids must be accompanied by a certified check drawn on a responsible bank or trust company, and made payable to H. C. Bryant, City Clerk, for a sum of not less than 5% of the amount of the proposal; or a bidders bond for the same amount by a surety company authorized to do business in the State of Tennessee, will be accepted. The successful bidders will be required to furnish a performance bond in the sum of 50% of the contract price.

December, 1923. H. C. BRYANT,
City Clerk.

B. H. KLYCE, Engineer,
506 4th and 1st Natl. Bank Bldg.,
Nashville, Tenn.

Bids: **Jan. 19.**

Pipe Line, Tunnel, Dam, Etc.

Charlottesville, Va.

Sealed proposals will be received by the City Manager at his office, Charlottesville, Va., until 11 o'clock a.m., January 19th, 1924, for the construction of approximately 12 miles of 18 inch Cast Iron Pipe Line and 700 lineal feet of 4 x 6 Tunnel, a Diversion Dam, Grit Chamber and Regulating works. Pipe and Specials will be furnished by the City of Charlottesville, f.o.b. cars. Plans and Specifications can be seen on or after January 1, 1924, at the office of the City Manager, Charlottesville, Va., and at the offices of the Engineers, Fuller and McClintock, 170 Broadway, New York City, or Lee H. Williamson, National Bank Building, Charlottesville, Va. Proposal blanks will be forwarded upon application to the City Manager. Construction Bond to the amount of the contract will be required and each proposal must be accompanied by a certified check for $10,000.00.

Arrangements for inspection of the line can be made at the office of Lee H. Williamson, National Bank Building, Charlottesville, Va.

The right is reserved by the City Manager to reject any or all bids.

BOYD A. BENNETT,
City Manager.
City of Charlottesville, Va.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited references. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

THE CITY OF HAPPINESS IS IN THE STATE OF MIND

CONTRACT BONDS FOR RESPONSIBLE CONTRACTORS

Treat your bonding company as you do your banker; both help you with the CREDIT you require.

ÆTNA CASUALTY AND SURETY COMPANY
HARTFORD, CONN. AGENTS EVERYWHERE

Bids: Jan. 15.

Construction of Flood Control Works

OFFICE OF THE BOARD OF DIRECTORS
THE PUEBLO CONSERVANCY
DISTRICT

Pueblo, Colo.
Dec. 17, 1923.

Sealed proposals will be received by The Pueblo Conservancy District, Pueblo, Colorado, until 2 o'clock, p.m., on Tuesday, January fifteen, 1924, for the construction of a relocated river channel and the relocation of 35 miles of railroad yard tracks in Pueblo, also a barrier dam 6 miles west of Pueblo, involving approximately the following principal quantities divided into contracts as follows:

No. 1. Channel Excavation above Santa Fe avenue; material used in Railroad Yard and Levee Fills.

Upper railroad fill	464,000 Cu.Yds.
Lower railroad fill	90,000 Cu.Yds.
Levees	486,500 Cu.Yds.

No. 2. Concrete Levee Paving.

Steel sheet piling	74,400 Sq.Ft.
Concrete slab revetment	26,600 Cu.Yds.

No. 3. Railroad Track Construction below Dry Creek Bridge.

Track laying and surfacing	26.47 Mi.
Alterations to tracks	3.53 Mi.

(Rails and ties to be furnished to Contractor.)

No. 4. Channel Excavation, below Santa Fe avenue, 54,000 Cu.Yds.

No. 6. Concrete Intake Structure, Reinforced concrete, 350 Cu.Yds., Reinforced concrete pipe, 48" Diam., 808 lin.ft.

No. 7. Retaining walls in Levee at Round House and at Union Depot, concrete, 1,985 Cu.Yds.

No. 8. Dyke below Santa Fe avenue, 6,000 Cu.Yds.

No. 9. Dykes at Dry Creek, 25,000 Cu. Yds.

No. 10. Dykes at North Side Water Works Reservoirs, 55,000 Cu.Yds.

No. 12. Railroad Track Removal, Removing and storing track materials, 32 miles.

No. 13. Railroad Embankment above Dry Creek. Embankment, 130,000 Cu.Yds.; Riprap, 1,600 Cu.Yds.

No. 14. Railroad Track Construction above Dry Creek. Track laying and surfacing, 3.86 miles. (Rail and ties to be furnished to Contractor.)

No. 17. Concrete Culvert, North Side Water Works. Reinforced concrete, 139 Cu.Yds.; Timber flume, 60 MBM.

No. 18. Concrete Culvert, South Side Water Works. Reinforced concrete, 64 Cu. Yds.; Timber flume, 16 MBM.

No. 21. Upper Railroad Bridge, Substructure; concrete, 2,000 Cu.Yds.

No. 22a. Upper Railroad Bridge, Superstructure, 4-100 foot double track, through riveted truss spans. Structural steel, fabrication and delivery, 1,750,000 lbs.

No. 22b. Upper Railroad Bridge, Superstructure. 4-100 foot double track through riveted truss spans. Structural steel, erection, 1,750,000 lbs. Deck timber, 80 MBM.

No. 23. Concrete Railroad Bridge at Dry Creek, Reinforced concrete through girders. Reinforced concrete, 4,800 Cu.Yds.

No. 30. Lower Railroad Bridge, Substructure. Concrete, 2,920 Cu.Yds.

No. 31a. Lower Railroad Bridge, Superstructure. 2-200 foot double track through riveted truss spans, skewed. Structural steel, fabrication and delivery, 2,500,000 lbs.

No. 31b. Lower Railroad Bridge, Superstructure. Structural steel, erection, 2,500,000 lbs.; deck timbers, 80 MBM.

No. 32. Santa Fe Avenue Highway Bridge, Substructure. Concrete, 325 Cu.Yds.; Steel tubes for cylinder piers, 4.

No. 33a. Santa Fe Avenue Highway Bridge, Superstructure, 1-280 foot through riveted highway span. Structural steel, fabrication and delivery, 615,000 lbs.

No. 33b. Santa Fe Avenue Highway Bridge, Superstructure. Structural steel, erection, 615,000 lbs.; Deck timber, 50 MBM.

No. 34. Rock Canyon Barrier, Embankment. Earth fill, 90,000 Cu.Yds.

No. 35. Rock Canyon Barrier, Concrete, Plain concrete, 5,000 Cu.Yds.; Reinforced concrete, 7,328 Cu.Yds., which works are a part of the system of flood control and stream elimination for The Pueblo Conservancy District, to be carried out under authority of The Conservancy Act of Colorado, and are in accordance with the Official Plan of the District.

The contracts will include, in addition to the principal quantities given, incidental work, such as excavation, backfill, track material, etc. Cement reinforcing steel and track material will be furnished to the Contractor. Other contracts necessary for the completion of the project have been deferred.

Proposals must be on the blank forms furnished by the Board, and must be accompanied by a certified check for not less than 5 per cent of the aggregate amount of the bid, figured on the basis of the estimated quantities and the unit prices bid, but which in no case shall be less than $1,000 or need be more than $50,000, such check to be drawn to the order of The Pueblo Conservancy District, as a guarantee that the bidder, if awarded a contract, will, within 15 days after the contract is delivered to him for that purpose, execute the same and furnish surety bond for the faithful performance of the contract in the sum of 55 per cent of the contract price; said contract and bond to be on the standard forms adopted by the Board. A bidder submitting alternative bids may furnish a single certified check covering the largest amount required by any alternative.

If any bidder, to whom an award has been made, shall fail to execute the contract or to furnish satisfactory bond within the time hereinbefore specified, or as extended by the Board, the award shall thereupon become void, in which case the proceeds of the certified check shall become the property of the District, and the contract may be awarded to the next lowest or best bidder; and such next lowest or best bidder shall thereupon assume the contract, as if he were the party to whom the award was first made.

Each bidder must, in his proposal, present satisfactory evidence that he has been engaged in constructing works of the general character covered by his proposal, and that he is fully prepared, and has the necessary capital, to begin the work promptly, and to conduct it as required by the contract and specifications.

The right is reserved to reject any or all bids, and to waive any technical defects, as the interests of the District may require.

Drawings, specifications, proposal blanks, and other information may be obtained on application to the Chief Engineer, The Pueblo Conservancy District, Pueblo, Colorado, at whose office drawings, borings and other data may be inspected. This information is now on file for examination and will be ready for mailing on or before January first. Specifications, drawings, sample blank forms and proposal forms covering any one contract will be furnished for $1.00, or all contracts for $15.00.

Bids should be sealed and marked "Bid on Pueblo Conservancy Contract." and inclosed in an envelope addressed to Chas. W. Lee, Room 740, First National Bank Bldg., Pueblo, Colorado, or presented in person at the time of the letting. Bids will be opened by the Board, in the Council Chamber, at the City Hall, Pueblo, at 2 p.m., Tuesday, January 15, 1924.

Done this 17th day of December, 1923, at Pueblo, Colorado, pursuant to resolution of the Board of Directors of The Pueblo Conservancy District.

E. D. SPRUILL.
Secretary.

Bids: Jan. 16.

(READVERTISEMENT)

Delaware River Bridge

CONTRACTS NOS. 9A, 9B, 9D, 10A & 10B
DEMOLITION

Philadelphia, Pa.

Sealed proposals for the demolition and removal of the buildings on the site of the Philadelphia approach between Front Street and Third Street, and between Fourth Street and Sixth Street, and the buildings on the site of the Camden Approach between Delaware Avenue and Fourth Street, will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 2:30 o'clock p.m., January 16, 1924, when they will be publicly opened and read. The contracts will be awarded, or all bids rejected, within fourteen days after bids are opened. The right is reserved to reject any or all bids.

Separate bids are asked for each of three sections of the Philadelphia Approach, and each of two sections of the Camden Approach. The work includes the demolition and removal of structures and certain other work incidental thereto. The work under Contracts 9A, 9B, 10A and 10B, is to be completed in three months, and that under 9D in six months.

Bids must be made upon the blank proposal forms, which together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission, upon deposit of $10.00, which deposit will be refunded upon receipt of bid or upon the return in good condition of the copies so taken.

Each proposal must be accompanied by a certified check for Three Thousand Dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and surety's consent must be shown. The bidder or bidders to whom the contract for each section is awarded will be required to give bond in the sum of fifty per cent of the amount of such contract, but not less than $25,000.

Delaware River Bridge Joint Commission.
GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.

Bids: Jan. 29.

Street Paving

Baton Rouge, La.

Sealed bids will be received by the Commission Council, Baton Rouge, La., until 11:00 A.M., Jan. 29th, 1924, for paving sixteen streets. Bids will be received upon Asphaltic Concrete, Brick, Sheet Asphalt, and Warrenite Bitulithic, all on concrete base.

Approximate Quantities:
102,269 sq.yds. surfacing and base.
20,311 lin.ft. straight curb and gutter.
3,327 lin.ft. header curb.
585 lin.ft. circular curb and gutter.
3,970 lin.ft. drain pipe, 10 inch.
2,945 lin.ft. drain pipe, 12 inch.
150 lin.ft. drain pipe, 15 inch.
140 lin.ft. drain pipe, 18 inch.
56 catch basins.
3 manholes.
2,180 lin.ft. stone header.
27,680 cu.yds. excavation.

Plans and specifications are on file in the office of the Consulting Engineer, City Hall, Baton Rouge, La. Copies may be had upon payment of fifteen dollars, which will not be returned.

A certified check, or bidder's bond, for 5% of amount bid, payable to the Commissioner of Finance, City of Baton Rouge, must accompany each bid. The right is reserved to reject any and all bids.

J. W. BILLINGSLEY,
Consulting Engineer.

Ask Your Wife—She Knows

Put on a sale of anything where either the price is reduced or the quantity and quality increased and there will be an athletic response by the women. They know values. Just say this to your wife: "All insurance costs the same but some brokers give greater value by intelligent investigation that either increases the coverage or reduces the premium. Which is the better buy?" Then when she gives you her answer telephone Swart for information regarding an investigation that won't cost you a dime and will prove that

SWART SERVICE REALLY SERVES

SWART
Insurance Advisor Rate Specialist
92 Williams Street, New York City

OFFICIAL PROPOSALS

Bids: Jan. 10.

Land Dredge

OFFICE OF THE COMMISSIONERS OF CHATHAM COUNTY AND EX-OFFICIO JUDGES

Savannah, Georgia.
December 13, 1923.

Sealed proposals will be received by the Commissioners of Chatham County and ex-officio Judges until the 10th day of January, 1924, at 12:30 o'clock p.m., and publicly opened by them at their office at that time for furnishing the County with One (1) Internal Combustion Land Dredge equipped with not more than three-quarter cubic yards capacity bucket, operated by at least fifty horse power Internal Combustion Engine. The machinery must be so designed as to dig new ditches and also to clean out those already dug.

Bidders will be required to submit with their bids specifications to the minutest detail of the machinery they propose to furnish, giving full weight of machine, length of boom, turning radius, compression per square inch on Caterpillar Tractors, and the total load on hoisting cable at different elevations of the boom, with guarantee of cost of operation, etc., and must also state at what place similar machinery to that bid on is in operation.

Proposals must be accompanied by a certified check, money deposit or bidder's liability bond, payable to the Commissioners of Chatham County, in an amount equal to 5 per cent of the amount of the total bid, to insure the succesful contractor delivering the machinery bid on and at the time he agreed to deliver the same.

TIME OF PAYMENT: The successful bidder will be paid on the 15th of the following month after delivery and acceptance of the machinery by the County Commissioners, by a warrant on the County Treasurer to be paid when in funds. Said warrent when presented to and stamped by the County Treasurer will bear interest at the rate of 7 per cent from the time of said presentation and stamping until paid.

The right is reserved to reject any or all bids and to waive all formalities.

By order of:
COMMISSIONERS OF CHATHAM COUNTY AND EX-OFFICIO JUDGES.
G. REUBEN BUTLER,
Clerk. (L. S.)

Bids: **Feb. 5.**

Sewers

Baton Rouge, La.

Sealed bids **will be** received by the Commission Council of Baton Rouge, La., at the City Hall, until 11:00 A.M., Feb. 5th, 1924, for constructing certain **Sanitary Sewers** and appurtenances in the City **of Baton** Rouge.

Approximate Quantities:
2,100 lin.ft. 10 inch V. C. Pipe.
2,500 lin.ft. 24 inch V. C. Pipe.
520 lin.ft. 36 inch Cast Iron Pipe **through** levee.
17 Manholes.

Plans and specifications on file in the office of the Consulting Engineer, City Hall, Baton Rouge. Copies may be had **upon** payment of $7.50, **which will not be** returned.

A certified check, **or bidder's bond, for** $3,000.00, payable to the **Commissioner of** Finance, Baton Rouge, must accompany each bid. **The right is reserved to reject** any or all bids.

J. W. BILLINGSLEY,
Consulting Engineer.

Bids: **Jan. 14.**

Filtration Plant

North East, Pa.

Sealed proposals will be received up to eight o'clock p.m., Monday, January 14, 1924, at the Council Rooms of the Borough of North East, Pa., for the construction of a rapid sand filtration plant, complete, consisting of two units of a capacity of 600,000 gallons daily. Plans and specifications may be seen at the office of the Boro Engineer or of the Boro Secretary. A deposit of $10.00 will be required for each set of plans given out, to be refunded when contract 's awarded and plans returned. All bids must be accompanied by a certified check for 5 per cent of the amount of bid and the right to reject any or all bids is reserved.

J. N. LEET,
Secretary.

OFFICIAL PROPOSALS

Bids: Jan. 17.

Double-Deck Bridge and Approach

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Court Building, until 3:00 P.M., Thursday, January 17, 1924, and then publicly opened for contracts in connection with the construction of a double-deck bridge and approach span, containing about 213 tons of structural steel, operating machinery and trim, for the ferry landing at the foot of Canal Street, New Orleans, La., as follows:

Requisition E. D. 14393—Under one contract.

Furnishing structural steel for ferry bridge with or without erection of bridge, of machinery and of trim.

Requisition E. D. 14394—Under one contract.

Erection of ferry bridge, of machinery and of trim.

Requisition E. D. 14395—Under one contract.

Furnishing ferry bridge machinery.

A deposit of $1,000 in cash or **certified** check is required with the proposal to cover the first requisition and $400 in cash or certified check with each of the other proposals.

A bond to the amount of fifty per cent (50%) of the sum bid will be required with each notarial contract signed.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases, at No. 1 Canal Street, New Orleans, Louisiana. Complete sets for each proposal will be furnished to prospective bidders on deposit of $10 for each set, which will be refunded to depositors who submit proposals or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH.
General Manager.

Bids: Jan. 30.

42 in.—48 in. and 60 in. Intercepting Sewers, Sewage Pumps, and Sewage Disposal Plant Improvements

Fostoria, Ohio.
December 24th, 1923.

Sealed proposals for the construction of 42" 48" and 60" Intercepting Sewers and Pumping Machinery, Superstructures, Grit Chamber, Sludge Beds, and other improvements to the Sewage Disposal Plant, will be received by the City of Fostoria, Ohio, until 2 o'clock p.m., Eastern Standard Time, on the 30th day of January, 1924, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the Director of Public Service, Fostoria, Ohio, or one (1) copy of plans and specifications may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bank Building, Pittsburgh, Pa., or to the City of Fostoria, Ohio, and deposit of Twenty-five Dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid, or upon the return within thirty (30) days after receipt of bids, of both plans and specifications, in good order.

The right is reserved to reject any or all **bids.**

JAMES MANECKS,
Director of Public Service.
THE J. N. CHESTER ENGINEERS,
Union Bank Building,
Pittsburgh, Pa.

Bids: Jan. 11.

Viaduct and Retaining Wall

Seattle, Wash.

Sealed proposals will be received by The Seattle Board of Public Works up to 10 o'clock a.m., January 11th, 1924, for the construction of a concrete viaduct and retaining wall on West Spokane Street. Approximately 2400 cubic yards excavation, 4600 cubic yards concrete and 650,000 pounds reinforcing steel will be used with all necessary drainage and lighting.

Plans and specifications may be obtained of the City Engineer upon the payment of $10, which will be refunded if the plans are returned in good condition.

J. D. BLACKWELL, City Engineer.

OFFICIAL PROPOSALS

Bids: Jan. 24.

Storm Drainage

Baton Rouge, La.

Sealed bids **will be** received by the Commission Council of Baton Rouge, La., at the City Hall, until 11:00 A.M., Jan. 24, 1924, for constructing certain storm drains in the City of Baton Rouge. The work will be let in three contracts, the Goose Hollow, Saint Philip, and Roseland Terrace Canals.

Combined Approximate Quantities:
4,250 cu.yds. Class "A" Concrete.
384,000 lbs. Reinforcing Steel.
650 lin.ft. Pipe.
16 Manholes.

Plans and specifications are on file in the office of the Consulting Engineer, City Hall, Baton Rouge, La. Copies may be had upon payment of ten dollars, which will not be returned.

A certified check, or bidder's bond, for five thousand dollars, payable to the Commissioner of Finance, City of Baton Rouge, must accompany each bid. The right is reserved to reject any and all bids.

J. W. BILLINGSLEY,
Consulting Engineer.

Bids: Jan. 10.

Water Main

Norfolk, Va.

Sealed proposals for relaying a 16-inch water main will be received at the office of the Director of Public Works, Norfolk, Virginia, until 12 o'clock noon, January 10, 1924, at which time and place they will be publicly opened.

The work includes taking up 22,000 feet of a present 16-inch main, hauling to the new location, and relaying same, together with necessary valves, hydrants and fittings, with cross-connections to small existing mains.

Plans, specifications, form of proposal, contract and bond may be obtained at the above office upon deposit of $10.00, which will be refunded when plans and forms are returned.

A certified check on a Norfolk or other acceptable bank in the sum of Five Hundred ($500.00) must accompany each bid. The right to reject any or all bids is reserved.

WALTER H. TAYLOR, 3RD.
Director of Public Works.

U. S. GOVERNMENT

U. S. ENGINEER OFFICE, Milwaukee, Wis. Sealed proposals will be received here until 3 p.m., Jan. 16, **1924,** and then opened, **for constructing steel dump** scows and barge. **Further information on** application.

U. S. ENGINEER OFFICE, 250 Old Land Office Building, Washington, D. C. Sealed proposals will be received here until 12 M. January 15, 1924, and then opened, for the construction of the **Filtration Plant** and Pumping Station substructures for the District **of** Columbia water supply project. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., central time, Jan. 3, 1924, and then opened, for furnishing, delivering and erecting gates for Lock No. 45, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., central time, December 29, 1923, and then opened, for furnishing and delivering Metal Work for Dams Nos. 44 and 45, Ohio **River.** Further information on application.

U. S. ENGINEER OFFICE, Cincinnati, Ohio. Sealed proposals for furnishing, delivering and erecting gates for Lock No. 34, Ohio River, will be received here until 11 a.m. January 19, 1924, and then opened. Information on application.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Dec. 20, 1923. Sealed proposals will be opened in this office at 3 p.m., Jan. 21, 1924, for the construction, including mechanical equipment, of a one story brick and tile nonfireproof Post Office building, approximately 62 x 64 feet in size at State College, Pa. **Drawings and specifications may be** obtained from the Custodian of the site at **State College, Pa.,** or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

POSITIONS VACANT

AN experienced structural steel detailer wanted to do detailing and estimating. Location West of Mississippi River. P-254, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

DRAFTSMEN and checkers, experienced in making shop drawings for structural steel work. Good opportunity for competent men. Apply Whitehead & Kales Co., Detroit, Mich.

EXPERIENCED architectural and structural designer and draftsman. Only technical graduates, thoroughly familiar with building codes need apply. State age, availability and salary. P-272, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

ESTABLISHED construction company doing general building construction, requires the services of an experienced estimator. State experience and salary expected in first letter. Communications confidential. Address P-176, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

LEVELERS and rodmen for work on subway construction, New York City; entrance salary $1,501 per annum, with opportunities for advancement; open to graduates in civil engineering or those with at least one year's satisfactory practical experience; citizens only; apply giving full information as to education and experience to Chief Clerk, Transit Commission, 49 Lafayette Street, New York City.

PUMP draftsman: Large mid-west manufacturer has opportunity for man familiar with centrifugal, steam and power pumps. Must be good detailer and thoroughly familiar with material lists. Good opportunity for young, energetic pump man. Location Michigan. P-251, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

SEVERAL experienced bridge designers for highway work wanted; must be good draftsmen. Give complete statement of education and experience, age and nationality. Submit sample of drafting. State salary. P-229, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

STRUCTURAL engineers wanted for designing structural steel factory and mill buildings; also for designing reinforced concrete buildings; state experience in full detail and salary expected. P-245, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

STRUCTURAL engineer, experienced in truss, general steel, design and drafting; give full particulars as to training previous positions age and salary expected. Asbury Bridge & Iron Works, Asbury Park, N. J.

STRUCTURAL engineer wanted, experienced in estimating and detailing, one with sales experience preferred. State experience, also salary expected in first letter, Southern Ohio territory. P-275, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

POSITIONS VACANT

STRUCTURAL steel and railroad bridge draftsman wanted. State age, nationality, education, experience in full, salary expected aand date you can report for work. Address P. G. Lang, Jr., Engineer of Bridges, Baltimore and Ohio Railroad Company, Baltimore, Md.

SUPERINTENDENT to take charge of a sand and gravel dredging plant. Must understand the operation of floating derricks having clam-shell buckets and hoisting sand and gravel out of beach. Must be familiar with the construction and operation of a screening plant and the loading of scows. Location, forty miles from New York on Long Island. State age, experience and salary expected. P-186, Eng. News-Record, 10th Ave. at 36th St., New York.

WANTED (at once) structural draftsman. Only first-class men need apply. Apply Bethlehem Construction Company, Bethlehem Trust Bldg., Bethlehem, Pa.

WANTED: The Blaw-Knox Company has an opening for a young civil engineer interested in being trained for sales work. This is a good opportunity. Construction experience necessary, particularly in highway and concrete construction. Sales experience desirable but not essential. Write your story completely, with references in first letter, to Blaw-Knox Company, attention Sales Manager, P. O. Box 915, Pittsburgh, Pa.

WANTED, writer in civil engineering subjects; must be a college graduate with experience in railroad surveying and construction; position requires residence in Eastern city of 150,000. State education and experience, also initial salary expected in first letter. New York or Philadelphia interview. P-248, Engineering News-Record, 10th Ave. at 36th St., New York.

WE need a Surveyor who is experienced in the relocation of city and country property lines from descriptions by metes and bounds and who not only can keep, but is in the habit of keeping, full and complete notes of all he does. He need not be an engineer, though training as an engineer would not disqualify. We are not advertising for students. We want someone who can deliver the goods. Please do not reply to this ad unless you can fill the bill and are dependable, accurate, sound in wind and limb, and intend to stick. If you do answer, state age, education, experience, least salary considered, and date available. Box 796, Asheville, N. C.

WE require the services of an engineer-surveyor who is familiar with the following branches of work: relocation of property corners from descriptions by metes and bounds; stadia, road and sewer location and construction; topography, drafting, etc. Judgment in the first named branch is an important item. Please do not answer this ad unless you can fill the bill and are accurate, dependable, healthy and intend to stick. We do not want a rolling stone, as this will be a permanent job for the right man. If you do answer, state age, education, experience, least salary considered and date available. Brown & Gibbs, Asheville, N. C.

Notice to Advertisers!

Owing to the holiday—New Year's Day—the *"Searchlight"* pages of the January 3rd issue of *Engineering News-Record* will close for press earlier than usual. Copy should reach us as follows:

Display Ads—Copy required by 10 A.M., Saturday, December 29th.

Want Ads—Copy required by Noon, Saturday, December 29th.

Proposal Ads—Copy required by 5 P.M., Monday, December 31st.

EMPLOYMENT SERVICE

SALARIED men seeking tentative offers of new connections, are invited to communicate confidentially with the undersigned, who will negotiate overtures without jeopardy to present connections. A professional, ethical service, restricted to high grade positions; established 1910. Our "Refund Contract" guarantees refund of retaining fee to the client named therein, if service is not satisfactorily rendered and refund be requested within three months from date remitted. Send name and address only for particulars. R. W. Bixby, Inc., 701 Lockwood Building, Buffalo, New York.

EXECUTIVES, engineers and other qualified men whose salary requirements are over $2,500 per year, find our confidential direct service to specific employers extremely satisfactory. An inquiry entails no obligation. The National Business Bourse, Inc., H. H. Harrison, President, Association Building, Chicago.

EMPLOYMENT AGENCIES

GENERAL ENGINEERING AGENCY, Monongahela Bank Building, Pittsburgh, Pa. Supply employers everywhere, freely, prepared proposals available plant managers, superintendents, chief engineers, designers, draftsmen, transitmen, office clerks. Power engineers, electricians, master mechanics for every purpose, individuals or groups. General registration, no registration fees. We send men to Canada, Mexico, Central and South America.

NATIONAL CLERICAL BUREAU — Wisconsin's only technical agency offers special opportunity to technical men to locate in Milwaukee and vicinity where diversified industries assure both opportunity for advancement and steady employment. No advance fee. Loan & Trust Building, Milwaukee, Wis.

WANTED—Teachers engineering subjects. Draftsmen, mechanical, structural, architectural and civil engineering work. Recent graduates for various engineering opportunities. Cleveland Engineering Agency, Rose Bldg., Cleveland, Ohio.

POSITIONS WANTED

Civil Engineers

CIVIL engineer, age 31, ten years' experience, highway location and construction, railroad location, construction, tunnel driving, industrial construction surveys, reports, estimates. Desires permanent position with chance of advancement through meritorious service. At present employed as resident engineer but available on short notice; location immaterial. PW-244, 7ngineering News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer, 20 years' experience, Mexico and West Indies. Railroads, surveys and construction; wharves and harbor improvements, highways, streets and sewers. Excellent record as sales engineer. Speaks and writes Spanish fluently. Available on short notice, PW-279, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL and mining engineer, perfect knowledge of Spanish and Spanish American countries, desires representation of manufacturing, industrial or engineering firm in Chile, Peru, Argentine and Bolivia. PW-269, Eng. News-Record, 10th Ave. at 36th St., New York.

WILSON COURSES *(By Mail)*

"Engineer Makers" is what one enthusiastic student calls these courses; another student asks, "Isn't there some way of letting more draftsmen know about your courses"? "Thousands of good men are looking for just such practice work as you give in these courses, and they don't know where to find it."

We want to reach every technical graduate who needs **Experience** and every other man who has some knowledge of mathematics to start with; we have trained thousands in our 12 years of business and we invite communication with every man in the profession, regardless of age, who needs to modernize his methods, or get experience, or who is not satisfied with his present position through lack of confidence in his ability.

Reinforced Concrete Designing; Steel Designing; Bridges, Estimating a part of every course.

FREE literature; write for it TODAY

New Prep. Course for Non-technical Men

WILSON ENGINEERING CORPORATION

10 Broadway, Hanover, Mass.

POSITIONS WANTED

ENGINEER, C. E., structural steel and concrete design, ten years on first class hotels, office buildings, theatres and industrial plants. PW-257, Eng. News-Record. 10th Ave. at 36th St., New York.

JUNIOR civil engineer, married, varied field and office experience. PW-240, Engineering News-Record, 10th Ave. at 36th St., New York.

RECENT graduate civil engineering (24) desires connection in any engineering capacity offering experience and advancement; four months on outside building construction work and seven months' structural and topographical drafting experience; prefer location in New York City or vicinity. PW-266, Eng. News-Record, 10th Ave. at 36th St., New York.

Surveyors

TRANSITMAN—Inspector, varied field and office experience, desires change. PW-239, Eng. News-Record, 10th Ave. at 36th St., New York.

TRANSITMAN desires position. West Coast preferred. University training and four years' experience in office and field. PW-273, Eng. News-Record, 883 Mission St., San Francisco, Cal.

Bridge and Structural

STRUCTURAL engineer, with eighteen years' designing and construction experience of structural steel and reinforced concrete structures, is open for engagement; South preferred. Engineer, 108 West Harris St., Savannah, Ga.

STRUCTURAL steel estimator and contracting engineer. Twelve years experience, designing, estimating and selling structural steel, reinforcing steel and allied products. Can take complete charge of any structural job and handle it throughout all branches of fabricating shop. Financially responsible, open for engagement after February 1st with medium sized structural shop or contractor specializing in steel construction. PW-280, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

Estimators

ESTIMATOR, building construction executive, twenty years' experience high class work New York City, purchasing, sub contracting, systematize construction accounting and costs. PW-255, Engineering News-Record, 10th Ave. at 36th St., New York.

Drafting and Designing

NEAT DRAFTSMAN; transitor levelman; long experience in land surveying and titles; 2 years' inspector concrete paving N. C. state highway; competent foreman, grade or paving; speak a little Spanish, 49 years old. Box 43, Jefferson, N. C.

TOPOGRAPHICAL draftsman, experienced, first class; good letterer, well versed in surveying. Available now. PW-247, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

Mechanical and Electrical

ELECTRICAL Engineer, 13 years' experience, design, construction and operation of power plants and substations both high and low voltage, field and factory testing, industrial power distribution, specifications, steam, electric and hydroelectric. Desire change in position. PW-54, Engineering News-Record, 10th Ave. at 36th St., New York.

Superintendents

ASPHALT plant superintendent, twelve years' experience; can furnish complete organization; salary $75 weekly. Available Jan. 1. PW-252, Engineering News-Record, Real Estate Trust Bldg., Philadelphia, Pa.

CONSTRUCTION superintendent, age 34, graduate civil engineer; experience docks, industrial plants, foundations, excavation operations, in charge of two million yard project, seeks permanent connections where loyalty and strict attention to business will be appreciated. PW-274, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS WANTED

LIVE Superintendent or General Superintendent. Practical construction man. Try me on docks, power plants, drydocks, canals, other work. Fifteen years responsible charge. Would consider association with engineer. Have experience if you have money. PW-213, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

ROCK and earth excavation superintendent or walking boss wishes job on heavy excavation; prefers heavy rock work; has long experience in well drill and jackhammer work. Last heavy job 150,000 cubic yards big shot on same work nine tons seven hundred pounds; best of references. Have job now but wish to change. State salary. PW-208, Eng. News-Record, 10th Ave. at 36th St., New York.

STRUCTURAL steel fabricating shop superintendent or foreman, age 36, wishes position; competent, reliable, good organizer and producer, clean record. PW-258, Engineering News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT, broad experience all kinds heavy construction, bridges, caissons, foundations, dams, waterworks, etc.; have good following of men; salary $500; available at once. PW-264, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT construction, technical education, long experience United States and in Latin America, hydro-electric construction, factories, railways, docks and heavy machinery installations, thoroughly capable organizer from inception to completion of job, speak Spanish and Portuguese fluently, some French; location anywhere. Address: P. D. Cox, Apt. 38, 87 Hamilton Place, New York.

SUPERINTENDENT, eighteen years' experience general heavy construction, foundations, caissons, bridges, locks, dams, waterworks and power houses; have executive ability and had full charge of important contracts; available two weeks. PW-263, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT or general foreman, heavy industrial and public works construction. Engineer. Salary $75 week. Available immediately. PW-260, Engineering News-Record, Real Estate Trust Bldg., Phila., Pa.

SUPERINTENDENT on highway construction, familiar with all types of pavements. PW-235, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

Miscellaneous

CHIEF engineer of industrial firm is near completion of design construction and equipment program of very large manufacturing plant. He has had many years' experience on greatest undertakings of this country. Will be available in near future. PW-243, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

CONSTRUCTION manager, M. Am. Soc. C. E., 42 years of age, solicits correspondence from those desiring a construction engineer who has had broad experience in railroad, highway, bridge and heavy foundation construction. At present employed as construction engineer in charge of $1,000,000 gravity type dam. Available Feb. 1, 1924. Minimum salary considered $7,500. Speak Spanish. PW-250, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

ELECTRICAL engineer, experienced in factory maintenance and construction, desires position as electrical engineer or chief electrician. Available after Jan. 1st. PW-281, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

ENGINEER, executive, 23 years' experience in engineering work. Water systems including dams, reservoirs, filter and pumping stations. Hydraulic, ice and gas plants, municipal work; past five years assistant manager and chief engineer of a holding corporation operating the water, gas and ice plants of Omaha, Neb. Mem. Amer. Soc. of Civil Engineers and Amer. Water Works Assoc. F. P. Larmon, 4912 California St., Omaha, Neb.

ENGINEER, with private schooling and twelve years' general engineering as railroad, highway, plant and coal mining, construction, maintenance and surveys, open for engagement Jan. 1; age 32, married. PW-196, Eng. News-Record, 10th Ave. at 36th St., New York.

POSITIONS WANTED

FOREMAN, experienced, sewers, water, gas, roads, concrete, general excavation. Matthews, Room 628, 15 Park Row, New York City. Phone Barclay 8143.

GENERAL foreman or foreman for rigger, reinforced steel, structural steel, concrete, or labor gang. 25 years' experience in construction of all kinds. Available immediately. PW-271, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

GENERAL foreman, experienced heavy timber, concrete, pile driving, dock building, scow building; single; go anywhere; references. PW-270, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

GRADUATE in marine engineering, age 24, single, desires position as a maintenance engineer ashore, home or abroad; four years' practical experience in internal combustion and steam engineering; willing worker; will accept low wage where prospects are good. PW-277, Eng. News-Record, McGraw-Hill Co., 6-8 Bouverie St., London, E. C., England.

MAN, experienced as timekeeper, time-clerk, paymaster on construction work and coal stripping, desires position. Will consider anything with prospects, and immediately available, A1 references. PW-276, Eng. News-Record, Leader-News Building, Cleveland, Ohio.

YOUNG man, six years' experience on construction work, timekeeping, payroll clerk, purchasing agent, engineering, wishes permanent position with construction company. A1 reference. Address Box 34, Hannibal, N. Y.

WORK WANTED

Designing, Detailing Checking

For structural steel and reinforced concrete. Industrial, mechanical, structural engineering. Shop drawings. Central States Engineering Company, 28 East Jackson Boulevard. Chicago, Ill.

PLANS, exhibits, maps, charts, structural details, tracing, lettering, coloring, etc. The Drafting Co., 449 West 123rd St., New York City. Morningside 0973.

SALESMEN AVAILABLE

SALESMAN, mechanical engineer, experienced, high class. SA-267, Eng. News-Record, 10th Ave. at 36th St., New York.

Additional undisplayed advertisements on page 54

Distributors Wanted

For the most economical and efficient Adjustable Shore made in America. Eight years of proven worth. New factory being built to largely increase production. Excellent territory open. Handsome profits assured. Distributors will be backed by intensive advertising campaign.

Write immediately for details.

Address,
P. O. BOX 416, TOLEDO, OHIO

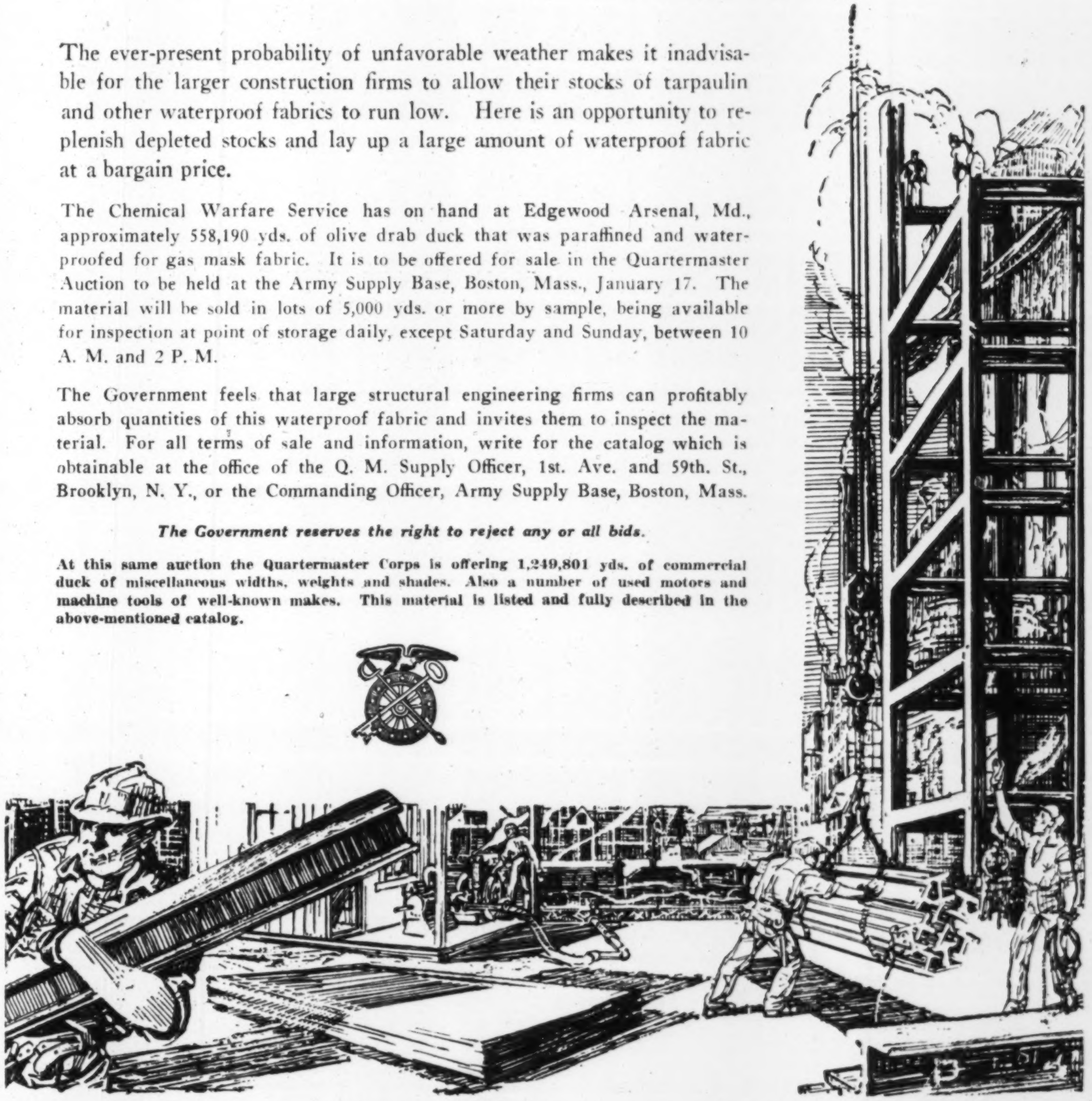
FABRICATED STEEL PRODUCTS

We have just completed a large factory for the manufacture of all kinds of fabricated steel products and solicit your inquiry. We are prepared to render exceptional service on structural steel shapes and plates. Tell us what you need—we can make it. Representation desired in all territories.

The Building Products Co.
Toledo, Ohio

Construction Protection

The Quartermaster Auction at Boston, Jan. 17, offers Engineering Contractors a large amount of Waterproof Duck



The ever-present probability of unfavorable weather makes it inadvisable for the larger construction firms to allow their stocks of tarpaulin and other waterproof fabrics to run low. Here is an opportunity to replenish depleted stocks and lay up a large amount of waterproof fabric at a bargain price.

The Chemical Warfare Service has on hand at Edgewood Arsenal, Md., approximately 558,190 yds. of olive drab duck that was paraffined and waterproofed for gas mask fabric. It is to be offered for sale in the Quartermaster Auction to be held at the Army Supply Base, Boston, Mass., January 17. The material will be sold in lots of 5,000 yds. or more by sample, being available for inspection at point of storage daily, except Saturday and Sunday, between 10 A. M. and 2 P. M.

The Government feels that large structural engineering firms can profitably absorb quantities of this waterproof fabric and invites them to inspect the material. For all terms of sale and information, write for the catalog which is obtainable at the office of the Q. M. Supply Officer, 1st. Ave. and 59th. St., Brooklyn, N. Y., or the Commanding Officer, Army Supply Base, Boston, Mass.

The Government reserves the right to reject any or all bids.

At this same auction the Quartermaster Corps is offering 1,249,801 yds. of commercial duck of miscellaneous widths, weights and shades. Also a number of used motors and machine tools of well-known makes. This material is listed and fully described in the above-mentioned catalog.

WAR DEPARTMENT

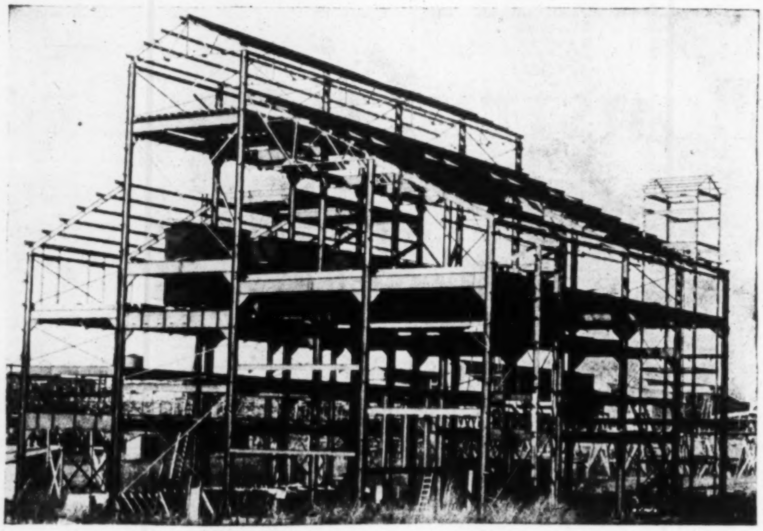
STRUCTURAL STEEL BUILDINGS

At the Old Hickory Powder Plant, Old Hickory, Tennessee

4—Structural steel buildings, 85 ft. 6 in. wide, 184 feet long, and 75 ft. 6 in. high. Covered with corrugated iron. Heavy construction, as shown by picture. Designed for heavy loading on floors.

A building identical to these was recently dismantled and shipped to Detroit, Michigan, where it will be re-erected in almost the exact form of the original. *Good proof of the sales values at Old Hickory.*

Write for further information



STRUCTURAL STEEL BUILDING

OLD HICKORY POWDER PLANT

Old Hickory, Tennessee

(Continued from Page 52)

SALESMEN AVAILABLE

MACHINERY salesman. Mechanical engineer. Experienced design, sale compressed air, electric, gasoline, oil, steam equipment for contractor, mine, power plant, shop including crushing, excavating, hoisting, pumping, etc. SA-268, Eng. News-Record, 10th Ave. at 36th St., New York.

AGENTS AND SALESMEN

Agents Wanted

for high quality steel windows and allied products. A desirable account for desirable agents. We give and expect close co-operation. Allison Steel Products Co., Chester, Pa.

TUTORING

CIVIL engineer teaches arithmetic, algebra, geometry, trigonometry, drafting, architectural, mechanical, structural, topographical surveying. Mondell, 50 E. 42nd St., New York.

EXCAVATIONS

Steam shovel work wanted on contract or rental basis. Crews furnished. No job too large or too small.

JOHN P. GILBERT
50 Church Street, New York City.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.

Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

Notice to Manufacturers

Contractor's Equipment Company would be interested in adding one or two lines of Nationally Advertised Products. To Manufacturers requiring large distribution, we can offer excellent facilities. Branch Sales Organization and Warehouses maintained in 5 representative Cities at present time.

BO-200, Engineering News-Record
10th Ave. at 36th St., New York City

Philadelphia Salesroom

Space with Machinery Representatives for display, office and storage. Ground floor, double glass front, well lighted, excellent location for manufacturer or representative of kindred line, to open branch office.

BO-232, Engineering News-Record
Real Estate Trust Bldg., Phila., Pa.

Second-Hand Transits and Levels

Guaranteed in Good Order and Adjustment.

Write for New Bargain List

WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

FOR SALE—BOUND VOLUMES

Engineering News—57-64 inclusive.
Engineering Record—55-57 inclusive.
Engineering Record—60-64 inclusive.
Engineering Contracting—31-34 inclusive.
Transactions A.S.C.E.—67-82 inclusive.
Transactions A.S.C.E.—Index 1911.
Transactions Cornell Society of C. E.— 2 Volumes 1898-1906.

C. J. PATERSON
936 E. 67th St., Cleveland, Ohio.

NEW AND USED SURVEYING INSTRUMENTS AT FACTORY PRICES

Satisfaction guaranteed or money refunded. Write for complete list and catalogue of our high grade instruments and supplies for civil engineers, surveyors, mining, builders, contractors, etc.; 40 years' experience in repairing instruments of all makes at reasonable prices. Prompt service.

WISSLER INSTRUMENT CO.
607 N. Broadway, St. Louis, Mo.

Buff & Buff 2B **Transit,** nearly new.
8-in. **Semi Circular Vernier Protractor.**
Set **Alteneder Drawing Insts. Knife Spring Pens,** center adj. on bow insts.
Bound volumes Engineering News, 1908 to 1912.
Unbound volumes Engineering News, 1913 to 1919.

NILES POULTRY FARM
Cherry St., Hicksville, L. I.

FOR SALE

Used Transits and Levels

BUFF, 46 Dey St., New York.

USED EQUIPMENT

AND NEW, OFFERED FOR RE-SALE

Space for these advertisements is sold by the advertising inch—30 inches to a page. The price per inch is based on total space used—multiply ad space by number of insertions.

RATE PER INCH:

1 to 3 inches	$5.00 an inch
4 to 7 inches	4.80 an inch
8 to 14 inches	4.70 an inch

An inch is measured vertically on one column—three columns to a page. Any space may be used measured by the even inch in height by 1, 2, or 3 columns in width.

RATES FOR LARGER SPACES, OR SPACE ON A YEARLY BASIS, FURNISHED ON REQUEST.

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CRANE FOR RENT

20-ton **Industrial** Locomotive Crane, 50-ft. boom, double drums, A.S.M.E. boiler, 8-wheel M.C.B. Just out of shop; like new. Will rent with or without operator.

FR-201, Engineering News-Record
10th Ave. at 36th St., New York City.

FOR RENT

14-B Bucyrus Shovel

Caterpillar mounted, A-1 condition.

ARMSTRONG-TROWBRIDGE
Montgomery, N. Y.

FOR RENT

DUMP CARS

30-yd. Western all steel automatic air dump cars, latest type, new condition, standard gauge M.C.B. throughout, all safety appliances.
20 available now.

H. W. NELSON
210 South La Salle St., Chicago, Ill.

WANTED

2—10x12 or larger D.C., D.D., and **Swinger Steam Hoists** without boilers. Also
2—**Stiff Leg Steel Derricks** 40 or 50-ft. mast, 50 or 60-ft. boom and 40-ton capacity.

MALLORY MACHINERY CORPORATION
522-524 Light Street, near Lee Street,
Baltimore, Md.

FOR RENT

Engines
Boilers
Pumps
Hoisters
Air Compressors
Locomotive Cranes

Marvin Briggs, Inc.
167 Sixth St., Brooklyn, N. Y.

WANTED IMMEDIATELY

¾ or 1-yd. **Shovel**, caterpillar or traction wheels, also Crane.
20—1½-yd. **Cars**, 24-in. gauge.
1—**Hoist**, 2 drums.

Could use few other tools

W-278, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

WANTED TO BUY

Used Coal Unloading Equipment

capable of unloading coal from boats at rate of 300 tons per hour or better. In reply give full specifications, date of manufacture, on what sort of operation engaged, and guarantee if any. Must be delivered previous to March 1, 1924. Address

W-143, Eng. News-Record
Old Colony Bldg., Chicago, Ill.

USED LUMBER

First Class Condition

80,000 ft. B.M. 12x12 in. L.L. Yellow Pine
4,000 ft. B.M. 8x12 in. L.L. Yellow Pine
30,000 ft. B.M. 10x10 in. L.L. Yellow Pine
1,800 ft. B.M. 8x10 in. L.L. Yellow Pine
5,000 ft. B.M. 8x8 in. L.L. Yellow Pine
30,000 ft. B.M. 4x10 in. L.L. Yellow Pine
4,500 ft. B.M. 4x12 in. L.L. Yellow Pine
70,000 ft. B.M. 3x10 in., 3x12 in., 2x12 in. Yellow Pine.

Average Price $50.00 per M., f.o.b. Philadelphia for immediate shipment.

Bolts—Nuts—Washers and Plates

Henry A. Hitner's Sons Company
4501 Richmond St., Philadelphia, Pa.

SWITCH ENGINE WANTED

60 to 70 Tons

Must be first class and up-to-date. Mail age, pressure, photo, full particulars and cash price.

W-233 Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

HOISTING ENGINES

In Stock in Baltimore

DOUBLE CYLINDER 3 DRUM AND BOILER

Number
83—7½x12 Mundy.
81—8 x12 Mundy.
80—8¼x10 National.
87—9 x10 Lambert.

DOUBLE CYLINDER DOUBLE DRUM AND BOILER

10—5 x 6 Flory.
75—6 x10 Mundy.
37—6¼x 8 Flory.
13—6¼x10 Flory.
82—6¼x10 Flory.
2—7¼x10 Mundy.
45—7¼x10 National.
85—8¼x10 Lidgerwood.
84—8½x10 Lambert.
44—9 x10 Lidgerwood.
102—9 x10 Lidgerwood.

DOUBLE CYLINDER SINGLE DRUM AND BOILER

38—6¼x10 Flory.

DOUBLE CYLINDER DOUBLE DRUM SKELETON SWINGING GEAR ATTACHED

86—7 x10 Lidgerwood, place for Boiler.
72—8½x10 Lambert.
73—8½x10 Lambert, place for Boiler.
53—9½x12 Lambert.

SWINGING ENGINES

51—3 x4 Mead & Morrison.
88—4½x6 Mead & Morrison.
100—4½x6 Mead & Morrison.
90—4½x6 Mundy.
103-104-105-106—4½x6 Mundy.
107—4½x6 National.
66—5 x6 Lidgerwood.

EVERY item listed here is either new or rebuilt and will pass the most rigid inspection.

Number
67—5 x6 Lidgerwood.
68—5 x6 Lidgerwood.
77—7 x8 American.
34—15-8¼x8 Lidgerwood.

DOUBLE CYLINDER SINGLE DRUM SKELETON

7—5 x 6 Lidgerwood, Reversing.
79—5 x 7 Orr & Sembower.
8½—5 x 7 Lidgerwood.
25—5 x 8 Lidgerwood, Reversing.
35—6¼x 8 Glover.
28—6½x10 Con. Plant.
29—6½x10 Con. Plant.
26—7 x10 Hunt.
22—8 x10 Hunt, Reversing.
40—8¼x10 Lidgerwood, 4 Winch Heads, Reversing.
24—8¼x10 Lidgerwood Reversing.
112—2-8½x10 Orr & Sembower, Reversing.
113—7-8½x10 Orr & Sembower, Reversing.
61—5-8½x10 Mead & Morrison, Reversing.
23—9 x10 Roberts.
52—12x12 Lambert, Reversing.
27—7 H.P. Dake.

DOUBLE CYLINDER DOUBLE DRUM SKELETON

Number
11—5 x 8 Lidgerwood.
43—6¼x 8 Lidgerwood.
42—6¼x10 Crook.
41—6½x10 Lambert, place for Boiler.
32—6½x10 American.
20—6½x12 Mundy.
15—6½x12 Mundy.
39—2-7 x 8 American, Reversing.
19—7 x10 Lidgerwood.
21—7 x10 Lambert, place for Boiler.
36—7 x10 Flory, place for Boiler.
93—7 x10 Lidgerwood.
94—7 x10 Lambert.
95—7 x10 Lambert.
96—7 x10 Pittsburgh.
101—7 x10 Flory.
7 x10 Marine.
7½x10 Mundy.
46—8 x10 National, place for Boiler.
78—8 x10 Marine Iron Works.
111—2-8¼x10 Mead & Morrison Reversing.
76—8¼x10 American.
97—8¼x10 Flory, place for Boiler.
108—2-9 x10 Lidgerwood.
99—10x12 Mead & Morrison.
14—20 H.P. Dake.

DOUBLE CYLINDER 3 DRUM SKELETON SWINGING GEAR ATTACHED

89—7x10 Lidgerwood.

DOUBLE CYLINDER 3 DRUM SKELETON

63—7 x10 American, place for Boiler.
64—7 x10 American, place for Boiler.
74—7 x10 Flory.
58—8¼x10 Flory.
98—8¼x10 Lidgerwood.
70—9 x10 Mead & Morrison.

Sharp and Conway Sts. **LOUIS A. TARR, Inc.** Baltimore, Md.

FOR SALE

INSLEY STEEL TOWER

1—240-ft. Insley Extra Heavy Steel Tower, together with all necessary auxiliary equipment.

Complete Stone Crushing Plant

1—24x36-in. Traylor Type "A" Blake Jaw Crusher, manganese steel, fitted complete.
1—Allis-Chalmers, Gates Gyratory Crusher, size 6, Style "D."
1—Allis-Chalmers, Gates Gyratory Crusher, size 3, Style "D."
1—48-in.x12-ft. 0-in. Traylor Trunnion Type Revolving Scalping Screen.
Complete set of sizing screens.
1—100-hp. Northwestern Motor.
1— 75-hp. General Electric Motor.
1— 25-hp. General Electric Motor.
All motors slip ring type, operated on 3 ph., 60 cy., current.
1—Robins Conveyor.
1—Bucket Elevator.
10—66 cu. ft. capacity Mine Cars, end dump.
6¼ tons 25-lb. rail in mill lengths.

Rodgers & Hagerty, Inc.
409 Main Street, Bethlehem, Pa.

TARPAULINS
AND
Waterproof Canvas Covers

All Sizes—All Weights at Hand
DASH MFG. CO., INC.
56 Suffolk St., New York City.

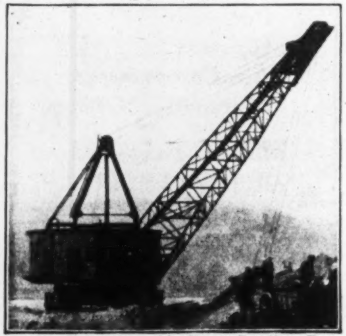
DEPENDABLE USED EQUIPMENT

READY TO DO YOUR JOB

Our equipment is maintained, inspected and overhauled at our own shops, by men familiar with every piece, which assures you equipment that is dependable and superior to just ordinary used machines.

DRAGLINE EXCAVATORS

1—"Lidgerwood" Class "B" Steam Dragline Excavator, truck mounted, 60-ft. or 75-ft. boom, 2-yd. or 1⅛-yd. bucket.
1—"Lidgerwood" Class "B" Dragline Excavator, truck mounted, 60-ft., or 75-ft. boom, 2-yd. or 1⅛-yd. bucket.
1—"Lidgerwood" Class "B" Steam Dragline Excavator, mounted on four double flanged wheels. Boom is 60-ft. with 15-ft. extension and handles 1½-yd. or 2-yd. bucket.



1—"Bucyrus" Class 14 Steam Dragline Excavator, mounted on caterpillars, with 60-ft. boom and 2-yd. bucket.
2—"Bucyrus" Class 24 Electric Dragline Excavators, skid mounted, with 85-, 100-, or 115-ft. boom, and 4½-, 3½-, or 2½-yd. bucket.

1—"Marion" Model 21 Dragline Excavator and Crane, mounted on caterpillars; 32-ft. boom, ¾-yd. bucket, either drag or clam shell.

DERRICKS AND HOISTS

Steel guy derricks, 70-ft. boom, 82-ft. mast. Wood guy and stiff-leg, 45-ft. boom, 50-ft. mast. Lidgerwood and Thomas Hoists.

PUMPS

Centrifugal pumps up to 14 in. with or without motors.

SUB-STATION TOWERS

high voltage, with lightning arresters.

6 CONCRETE BUCKETS

1½-yd. capacity.

SMITH CONCRETE MIXERS

½-yd. steam—¼-yd., gasoline.

25—ELECTRIC MOTORS—25

7½ to 500 hp.—220-440-2200—A.C.

1—10-TON HUBER STEAM TRACTOR

LOCOMOTIVES

1—35-ton Baldwin, std. gauge.

LOCOMOTIVE CRANES

Orten & Steinbrenner, 20 ton.

50—TRANSFORMERS—50

6/10 kva. to 500 kva.

TRANSMISSION AND HIGH TENSION LINE MATERIAL

STEAM PILE HAMMER

1—Ingersoll-Rand, 3 in.

GATE VALVES

10-12-15-in. Iron Body Bronze Mounted.

SPUD EQUIPMENT

Speed Hoists for use on dredge or scow.

NEW REPAIR PARTS at half price for above equipment, also for Bucyrus Dragline Excavators, Class 9½ and 175, Marion Models 21 and 36, Smith one-yard Concrete Mixers, Western 4 and 12-yd. Dump Cars, Cyclone Class "B" Non-traction Well Drills, Ingersoll-Rand E-44 Tripod and 100 B.C.R. Jackhamer Drills, Sullivan F. L. 3 Tripod and D.P. 33 Jackhamer Drills, American Railroad Ditcher, Dull Link Gravel Washers, American 40 and 50-ton Locomotives, Allis-Chamers, General Electric and Westinghouse Motors.

MIAMI CONSERVANCY DIST. SALES DIVISION, DAYTON, OHIO

"WE BUY, REBUILD, SELL or RENT"

ANNOUNCEMENT!

In addition to our large stock of equipment listed on the lower part of this page, we have purchased the following equipment which was just released from a large sewer job being completed in Detroit. This equipment will not be loaded out to our Plants for several weeks, and we are now offering same for sale f.o.b. Detroit. Description as listed below:

BOILER

1—Ames Locomotive type, 100 hp., Butt strapped, complete with stack.
Also several small vertical boilers.

DUMP CARS

64—Western, 4-yd., 36-in. gauge.
27—K. & J., 4-yd., 36-in. gauge.
4—Drop bottom Concrete Cars, 36-in. ga.
12—Koppel 1½-yd., "V" shaped, cradle dump cars, 36-in. ga. All steel, spring draw bars and axles.

CRANE

1—15-ton Brown Hoist Locomotive Crane, 8-wheel MCB, standard 48-ft. boom, also 1—65-ft. goose neck boom.

DREDGE

1—Hydraulic Dredge, Hull 32x8x110-ft., equipped with 12-in. Erie Pump, 250 hp. Ball Engine, tandem compound, and 300 hp. Scotch Marine Boiler, 3 Morrison Furnaces. This Dredge is complete with all miscellaneous equipment and is now located at Erie, Pennsylvania.

LOCOMOTIVES

1—Brooks, 16x24, standard gauge, 6-wheel switcher with tender. Weight on drives 45 tons.
2—Porters, 18-ton, 36-in. gauge, cyl. 10x16. Shop No. 5238 and No. 4612.
3—Vulcan, 18-ton, 36-in. gauge, cyl. 10x16, Shop No. 1612, No. 1577, No. 1575.
2—Porter, 14-ton, 36-in. gauge, cyl. 9x14, Shop Nos. 2873 and 3469.
2—Burton 3½-ton, 36-in. gauge, purchased new in 1921.

DRAGLINE

1—Class No. 20 Bucyrus Dragline Excavator, 2½-yd. Page Bucket, Steam, Shop No. 856, on skids and rollers. 85-ft. boom.

PUMPS

Miscellaneous lot of piston pumps, consisting of Cameron & Prescott & Blake.
1—Pulsometer No. 3.
1—Pulsometer No. 7, 4-in. suction and 4-in. discharge.
1—Centrifugal, 8-in., direct connected to Westinghouse 9x8 engine.

STEAM SHOVEL AND CRANE

1—Erie type "B", traction wheels, high lift, ¾-yd., also has ½-yd. sewer bucket and stick, also 36-ft. crane boom.
1—Bucyrus 70-C, Shop No. 1266, equipped with 2½-yd. dipper, new boiler.

All equipment listed below is in stock and may be inspected at one of our four Rebuilding Plants

CLAMSHELL BUCKETS

3—2-yd., 2 Owens, 1 O&S.
2—1½-yd. Williams, heavy duty.
23—1-yd., Blaw Knox, Standard, Lakewood, Owens.
34—¾-yd., Standard, Keisler, Hayward, Owens and Blaw Knox.
14—½-yd. All makes.

CONCRETE MIXERS

2—Ransome, No. 56-S, cap. 2-yd., on skids, without power.
60—Concrete Mixers, sizes 28S, cap. 1-yd., 21S, cap. ¾-yd.; 14S, cap. ½-yd. and 10S, cap. 1¾-yd. With steam or electric power with side loaders or batch hoppers. Following makes: Marsh-Capron, Koehring, Milwaukee, Ransome, Smith, Smith-Chicago, Rex, Lakewood, Foote, Cube, or Oshkosh.
42—7S, cap. 1 bag, with low charging platforms, with gasoline engines.

CARS

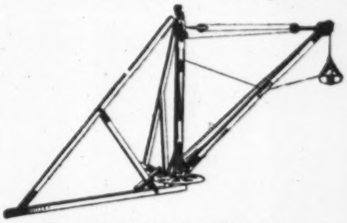
52—Koppel Flat Cars, 24-in. gauge, Spring Journal and draw bars. Frame 35x84x6-in. channels.
15—Lakewood Flat Cars, spring journals and spring draw bars, ball bearing.

CATERPILLAR CRANE

1—Northwest Combination Crane and Dragline, caterpillar, 40-ft. boom, 70-hp. Gasoline Engine, ¾-yd. Page Bucket.
1—Brownhoist, combination Crane & Dragline, 40-ft. boom, ¾-yd. clam shell bucket, has ⅝-yd. skimmer scoop attachment also equipped to handle 1-yd. Dragline bucket.

COMPRESSORS

1—Ingersoll-Rand, Steam, cap. 960 cu. ft. per minute, 100 lb. pressure.
1—Sullivan, Class W.G.3, belt driven, cyl. 10x12.
1—Westinghouse, size 11x11x12, on skids.
1—Westinghouse, size 8x8x9, on skids.



ELECTRIC HOISTS AND DERRICKS FROM HOG ISLAND

Specifications of Electric Hoists

35—American late model hoists. These hoists have 2 drums with attached swinging gear, with 37-hp. Otis A.C., 440-v., 60-cy., 3-ph. electric motor—complete with controllers and resistance grids—can be changed to suit customer's current requirements if desired.

Can furnish counterwighted holding drums with these hoists when used for operating bucket.
Also several 55 and 75-hp., single and double drum hoists with A.C. motors.

Specifications of Derricks

Large number of practically new American stiff-leg derricks.
Boom, 14x14x80-ft., trussed.
Mast, 16x16x40-ft.
Legs, 14x14x62-ft.
Bull wheel, 16-ft.
For Single Line Work or Arranged for Bucket Operation.
Will sell fittings only if desired.
Also have large stock of lighter stiff-leg derricks, several steel stiff-legs, 20, 30 and 50 ton.

GUY DERRICKS

9—Wood Guy Derricks; bucket operating or hook line, masts 60 to 90 ft., booms 50 to 80-ft., with "American" fittings.

STEAM HOISTS

10—Three-Drum Hoists, with or without boilers. Sizes, 9x12, 9x10, 8¼x10, and 7x10, with separate swingers for derrick work. All makes.
26—Two-Drum Hoists, with or without boilers. Sizes, 10x12, 9x10, 8¼x10, 7x10, 6¼x10, 6x8, and 5x8. Can be equipped with holding drum for bucket work. Several special Cableway Excavator or Drag Scraper Hoists. All makes.
2—8¼x10 American, D.C., D.D., with swingers.
1—7x10 National Single drum with boiler.

LOCOMOTIVES

2—3-ton Plymouth, 24-in. gauge gasoline.
1—7-ton Davenport, 24-in. gauge, steam.
1—6-ton Whitcomb, 24-in. gauge, gasoline.
1—6-ton Plymouth, 24-in. gauge, gasoline.

ROAD ROLLERS

1—10-ton Austin, 3-wheel, gasoline, single cylinder.
5—10-ton, 3-wheel, steam—2 Buffalo-Pitts, 1 Kelly-Springfield, 1 Peerless, 1 Monarch.
1—5-ton Iroquois Tanden, steam.
1—3-ton Erie Tandem, steam, new.

STEAM SHOVELS

4—Keystone Excavators, 3—No. 3, 1—No. 4
2—Type O Thew on traction wheels with ⅝-yd. dipper.
1—Type A-1 Thew, traction wheels, ⅞-yd. dipper.

CRANES

2—Byers Auto Cranes, on traction wheels, with 30-ft. boom, with ½ or ¾-yd. clam shell bucket, 1 steam, 1 gasoline.
1—15-ton, 8-wheel, O.&S., 40-ft. boom.

The above is only a partial list of our equipment. Write for latest stock list

Equipment Corporation of America

Manufacturers and Rebuilders of Contractors' Equipment

PHILADELPHIA, PA.
855 Land Title Bldg.
Phone, Spruce 5498

CHICAGO, ILL.
1455 Lumber Exchange Bldg.
Phone, Randolph 6586

PITTSBURGH, PA.
655 Empire Bldg.
Phone, Smithfield 1502

FOR SALE OR RENT

STEAM SHOVELS

1—Type B Erie Traction. Shop No. 321. ¾-yd. dipper.
7—70C Bucyrus, Shop Nos. 1277. 1445, 1482, 1499, 1582, 1608 and 1998; 2½-yd. dippers.
3—70-ton Bucyrus, Shop Nos. 920, 977, and 1233. 2½-yd. dippers.
1—Model 60 Marion, Shop No. 2367, 2½-yd. dipper.
1—Model 80 Marion, Shop No. 876, 4-yd. dipper.

STEAM SHOVEL PARTS

1—1½-yd. Coal Loading Dipper for Marion 36 Steam Shovel.
2—Booms for 70-ton Bucyrus, length 29 ft.
1—Boom for 70C Bucyrus shovel, composite, length 40 ft.
1—Marion Dipper, 2½ cu. yd. capacity.
1—Bucyrus Dipper, 3 cu. yd. capacity.
Jack Arms and Boom Engines for 70-ton Bucyrus Shovels.

DRAGLINE EXCAVATORS

1—Class 7 Bucyrus. Shop No. 798, mounted on skids and rollers, 42-ft. boom, 1-yd. bucket.
1—Class 14 Bucyrus. Shop No. 745, mounted on skids and rollers or tandem wheels, 60-ft. boom, 2-yd. Page bucket.
1—Class 14 Bucyrus. Shop No. 2140, mounted on caterpillars, 60-ft. boom, 2-yd. Page bucket.

LOCOMOTIVES

1—18 x 24 American, 6-wheeled switcher, Brooks No. 2318. Wt. 55 tons on drivers.
1—18x24 American 6-wheeled Switcher. Brooks No. 1778. Wt. 50 tons on drivers.
1—16x24 Baldwin 6-wheeled Switcher, with tender. Shop No. 44887. New in 1917. Wt. 43 tons on drivers. 180 lbs. pressure.
1—16x24 Vulcan 4-wheeled Switcher with tender. Shop No. 1764. Wt. 40 tons. 180 lbs. steam pressure.

LOCOMOTIVES (Continued)

1—16x24 Baldwin 4-wheeled Switcher with tender. Shop No. 37643. Wt. 39 tons. 180 lbs. steam pressure.
1—16x24 Davenport 4-wheeled Switcher, with tender. Shop No. 900. Wt. 38 tons. 170 lbs. steam pressure.
1—17x24 Baldwin 4-wheeled Saddle Tank Locomotive. No. 15683. Wt. 47 tons.
1—16 x 22 C. M. & St. P. Ry., Class J-2, 4-wheeled switcher. Weight 32 tons.
1—Std. gauge 11x16 Davenport Dinkey. Shop No. 1163, new in 1912. Air brakes, automatic couplers. Wt. 20 tons
2—Std. gauge 11x16 American 4-wheeled Saddle Tank Locomotives. Shop Nos. 46519 and 47421, built 1912. Wt. 21 tons. Steam brakes, automatic couplers.
1—Std. gauge, 11x16 Davenport Dinkey. Shop No. 1027, new in 1910. Steam brakes. Wt. 20 tons.
1—36-in. gauge, 10x16 Vulcan Dinkey; Shop No. 868. Wt. 18 tons.
2—24-in. gauge, 7x12 Davenport Dinkies. Shop Nos. 1411 and 1524. Wt. 9 tons.
1—24-in. gauge, 7x12 Vulcan dinkey, Shop No. 2345. Wt. 9 tons.
1—24-in. gauge 6x10 Davenport side tank Dinkey. Shop No. 1307. Wt. 7 tons.
1—24-in. gauge 5x10 Shay geared. Lima No. 2678. Wt. 12 tons.
1—24-in. gauge, 6-ton Plymouth. Type 2, No. 1077.

CRANES

1—30-ton Ohio Locomotive Crane. No. 3416, new in 1919. 55-ft. boom, 20-ft. extension, 1½-yd. clam shell bucket.
1—Pintle Type Crane, built by Variety Iron & Steel Works. New in 1919; 48-ft. boom, 15-ton cap. at 18-ft. radius; 7-ft. 10½-in. gauge, 12-ft. wheelbase, self propelling. Base of boom 17 ft. above track. Bucket-operating drums. Wt. 50 tons. Price, 25% of new.
1—10-ton Industrial Crane (Shop No. 1989). 4 wheeled, 40 ft. boom.
1—Crane Boom, 33 ft. long, drum and necessary equipment for converting type B Erie shovel into crane.

DUMP CARS

38—20-yd. Western, all steel Air Dump Cars, 80,000 lb. capacity.
20—12-yd. Western Air Dump Cars, 19-ft. beds, steel sills, box girder doors.
4—16-yd. Western Air Dump Cars, steel sills, box girder doors.
8—12-yd. Western Hand Dump Cars, 19-ft. beds, steel sills, box girder doors, full M.C.B.
15—8-yd. Western, 36-in. gauge, double truck side Dump Cars; steel draw sills, wood beds.
4—4-yd. Continental, 36-in. Gauge Side Dump Cars, wood beds, steel draw sills.
9—12-yd. Western Air Dump Cars, 26-ft. beds.
4—4-yd. Western, 36-in. gauge, Wood Sill Dump Cars, truss rod doors.
24—4-yd. Continental, 36-in. gauge, wood draw sills, 4 pedestals, truss rod doors.
8—3½-yd. Peteler 36-in. gauge side dump cars, wood sills and wood beds.

SPREADER CARS

1—Std. gauge Jordan All Steel Spreader Car, 100,000 lb. capacity. Shop No. 317.
1—Std. gauge Western Spreader Car.
1—36-in. gauge Western Spreader Car,
1—36-in. gauge Oliver Spreader Car.

MISCELLANEOUS

1—7x10 D.C., D.D. Lidgerwood Hoist No. 25967. No boiler.
1—7x10 D.C., D.D. Lambert Hoist, with or without boiler.
3—1½-yd. Western Bottom Dump Wagons.
3—Locomotive Air Pumps, 9½-in. and 11-in. simple, 8½-in. and 9½-in. cross compound.
2—80-hp. horiz. Boilers, with fittings.
1—1½-yd. Page Dragline Bucket.
6—Mead-Morrison 1½-yd. Clam Shell Buckets.
3—1¼-yd. O. & S. coal loading clam shell buckets.

CLAPP, RILEY & HALL EQUIPMENT CO., 14 So. Canal St., Chicago
(Successors to Clapp, Norstrom & Riley Equipment Co.)

FOR SALE

R. R. Pin Connected Through Truss Span

228 ft. 0 in. C. to C. of end pins
E 40 213 tons

Forty Other Bridges

J. NORMAN JENSEN, C. E.
343 S. Dearborn St., Chicago, Ill.

Come to the Factory for Your

PULSOMETER STEAM PUMP

THAT'S the surest way to satisfaction. New Pulsometers for rent or lease. Reconditioned Pulsometers for sale at *real* bargain prices. Sizes, 2½, 3½, 4, 5, 6, 8 inches in stock now. 'Nuff said.

See our large advertisements in the display advertising section.

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Four cylinder 7½x10 Valve-in-head Enterprise gasoline engines, very rugged design with two extra heavy flywheels, designed for duty on excavating machinery. Will develop 55 hp. at 400 r.p.m. All working parts enclosed. Fan and other auxiliaries direct driven. These engines are all new, have never been used. Are surplus stock, account change in design of our machines. Will sacrifice. Complete description on request.

BUCYRUS COMPANY
Specialty Dept.
South Milwaukee, Wis.

FOR SALE

Pawling & Harnischfeger full **Caterpillar Crane,** Model 206, new 1923, equipped with 40-ft. boom, 50-hp. gas engine, ¾-yd. clam shell bucket, used 60 days.

Northwest **Crane,** with 40-ft. boom, 1-yd. clam shell bucket, also equipped with ¾-yd. shovel dipper. Machine new this spring.

Brown Hoist **Locomotive Crane,** 8 wheel, 50-ft. boom, 1½-yd. clam shell bucket.

Marion Model 28 **Steam Shovel,** traction wheels, ¾-yd. dipper, also equipped with 33-ft. crane boom, and ¾-yd. clam shell bucket.

American **Switcher Locomotive,** type 0-6-0, 18x24-in. cylinders, 160 lb. boiler pressure, first class working condition.

Dolan-Tucker-Smith Equipment & Supply Co.
53 W. Jackson Blvd., Chicago, Ill.

FOR SALE

STEAM SHOVEL

1—Keystone, equipped with both skimmer and ditcher scoops. Machine just coming out of shop, and will guarantee condition. Price with terms.

LEONARD F. SMITH, LaPorte, Ind.

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Carnegie Steel Piling

188 pieces 17 ft. long.
4 corner pieces 17 ft. long.

Immediate Delivery

ELLIOTT & HARMAN ENGINEERING CO.
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PARSONS' TRENCHING MACHINE

For Immediate Delivery

JOHN B. McLANE & COMPANY
Newport, Kentucky

1—0-42 Austin, steam driven, digs 18 ft. deep, up to 42 inches wide.
1—00-42 Austin, steam driven, digs 12 ft. deep, up to 42 inches wide.
1—00-42 Austin, gasoline driven, digs 12 ft. deep, up to 42 inches wide.
1—Austin Backfiller, all caterpillar traction.
3—Parsons Backfiller, caterpillar traction.

JAMES McELROY
11 So. La Salle St., Chicago, Ill.

TRENCH MACHINES

Parsons 48. Steam, cuts to 48 in. wide x 18 ft. deep. Location New York City. Bargain.
Austin Backfiller Caterpillar, 30-ft. boom. Cheap.
Buckeye No. 4. Gasoline. Good shape.
2—Austins 00-42, Gasoline. Almost junk prices.

C. C. SIXBEY
149 Centre St., New York

Locomotive Cranes

STANDARD GAUGE

1—20-ton Browning, 8-wheel, standard gauge, double drum, 50-ft. boom. Shop No. 1149. Mass. Standard boiler, rebuilt and in fine condition.

1—25-ton Browning, 8-wheel, standard gauge, double drum, 52-ft. boom. Shop No. 1221. Mass. Standard boiler, with outriggers.

1—25-ton Browning 8-wheel, standard gauge, double drum, 50-ft boom. Shop No. 1265, equipped with outriggers, excellent condition.

1—25/30-ton Browning, 8-wheel, standard gauge, double drum, 50-ft boom. A.S.M.E. boiler, new 1922 Crane like NEW.

BROAD GAUGE

2—20-ton Brownhoist, mounted on 10-ft., 3-in. gauge, 4-wheel trucks, 75-ft. booms, Mass. Standard boilers, perfect condition.

1—20-ton Brownhoist, mounted on 15-ft., 3-in. gauge, 4-wheel trucks, 75-ft. boom, electrically-operated, 3 ph 60 cy., 440 v.

1—25-ton mounted on 7-ft. 6-in. gauge, 50-ft. boom, double drum, bucket handling, A.S.M.E. boiler, new 1918. Perfect condition.

Railroad Equipment

10—90-ton 2-8-0 Consolidation Type Standard Gauge Road Locomotives, 180 lb. steam pressure.

100—Standard Gauge Provision Cars. Can also be used as Box Cars if desired. 40-ton bodies mounted on 30-ton all steel trucks.

100—Standard Gauge Provision Cars. Can also be used as Box Cars if desired. 40-ton bodies mounted on 30-ton trucks. Cars have steel center-sills.

50—50-ton All Steel Hopper Bottom Coal Cars. Very excellent condition.

50—50-ton All Steel Hopper Bottom Coal Cars. Good condition.

CATERPILLAR CRANE

1—No. 5 Austin Caterpillar Mounted Gasoline Operated Full Revolving Crane. Will equip with 30-ft. or 40-ft. boom, as desired. Overhauled and in perfect condition. Prompt delivery.

STEAM SHOVELS

1—Marion 61 Railroad Type Shovel, 2½-yd. dipper. Exceptionally fine condition.

1—Marion 21, Caterpillar Mounted, ¾-yd. dipper. New 1920.

PNEUMATIC TOOLS

We have just purchased an enormous quantity of air tools and have available from our Philadelphia shops anything to meet your requirements. Hammers, Drills, New Spare Parts, Rivet Sets, Chisels, etc. Advise us as to your requirements.

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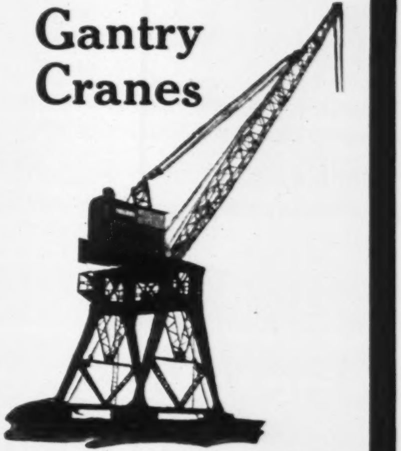
PHILADELPHIA, PA.**

B. M. WEISS

We Own and Offer Gantry Cranes



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New 1918. Full revolving, 90-ft. booms, 20-ft. gauge, 22-ft. wheel base. Will permit standard gauge railroad car to pass directly under them. Machines like new. Ideal for docks, scrap yard, lumber yard, steel mill, etc., for unloading, handling and storing.

We also offer: Dredges, Shovels, Cars, Locomotives, Draglines, Road Equipment, Hoisting Engines, Etc. What are your requirements?

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136 pieces 50-ft. lengths.
97 pieces 55-ft. lengths. 12 corner pieces.
Can easily cut carload or more, into 15, 20, 25, 30 or 35-ft. lengths.

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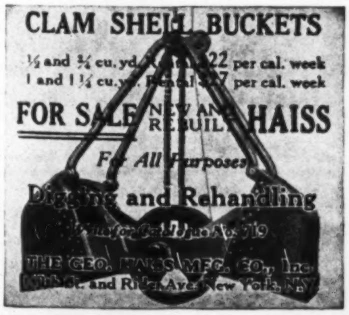
STEEL SHEET PILING

U. S. Steel Corp. type.

245 pcs. 12½ inches by 40 ft., new;
56 pcs. 12½ inches by 20 to 35 ft., new;
90 pcs. 9 inches by 20 ft., 90% new.

WESTERN STATES GAS & ELECTRIC CO.
Placerville, California.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Erie B Caterpillar; also Traction. Osgood, Bucyrus and Marion Revolving Shovels, ¾, 1 and 1½-yd. Railroad Shovels, all sizes and makes.

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No. 40. Perfect condition. Bargain if sold immediately. Convenient payments arranged. Inquire,

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FOR SALE

1—Marion ⅝-yd. **Steam Shovel, $1500.**
1—No. 3 Keystone **Grader** with Skimmer and Ditching Scoop, **$2000.**
1—Smith ½-yd. Tilting **Mixer** on wheels with power Loader and Discharge, **$1200.**
1—10-ton **Steam Roller, $700.**
1—Gasoline Diaphragm **Pump** on Wheels (new), **$200.**
1—Schramm Gasoline **Compressor No. 4, $600.**
1—Steel "A" Frame, **Traveller** with 55-ft. Boom, 3 Drum Engine and Boiler, Dake Swinger and ¾-yd. Owen Bucket, **$4000.**
2000 feet of **Steel Road Form** for 6 or 7 inch road at 30c. per foot.

All of this equipment is in Philadelphia

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FOR SALE

Used Equipment in good condition, as follows:

SHOVELS

2—Thew Shovels. 1—Erie Shovel.

MIXERS

2—1-yd. Koehring Heavy Duty Mixers, one new and one used.

INDUSTRIAL TRACK

2—Miles 24-in. gauge.

LOCOMOTIVES

10—3-ton, 24-in. gauge Plymouth Gasoline Locomotives.
2—36-in. gauge Locomotives, one Porter and one Vulcan.

INSLEY STEEL TOWER

1—120-ft., outfit complete.

The A. S. Hecker Company
8701 Union Ave., Cleveland, Ohio.

FOR SALE OR RENT

ROAD ROLLER

1—Kelly-Springfield 10-ton Road Roller, with Steam Scarifier attached. New 1922, and used very little. Above equipment is located in central Pennsylvania

J. L. WARD
11100 Wade Park Ave., Cleveland, Ohio

Complete Power Plant

Purchased from U. S. Navy, Boston

NEW 25-TON BALDWIN 4 WHEEL, STANDARD GAUGE, GASOLINE LOCOMOTIVE

Heating Plant

4—72-in.x19-ft., 6-in. Dillon, 125 lb., Mass. Std. HRT Boilers, with breeching, piping, all regular fittings, feed water pumps and Cochrane Feed Water Heater.

Also centrifugal pumps, tanks and piping to complete the circulating system in connection with the hot water heating, serving 60,000 sq. ft. radiation.

1—High pressure and low pressure U-type Pittsburgh Company heating coils.

Power Equipment

2—1730-cu. ft. OCE Chicago, dir. conn. electric compressors, 3 ph., 60 cy., 2200-550-440-220 v.

3—4800-cu. ft., 110-lb. brass tube Air Aftercoolers.

1— 400-gal. Yeomans Sewerage Duplex Ejector Pump, 40-ft. head, 3-60-550 v.

2— 350-gal. Morris Centrifugal Pumps, 50-ft. head, D.C. to 3-60-550 v. motors.

1— 350-gal. DeLaval Centrifugal Pump, 90-ft. head, D.C. to 3-60-550 v. motor.

1—1800-gal. DeLaval Centrifugal Pump, 75-ft. head, D.C. to 3-60-550 v. motor.

1—1800-gal. DeLaval Cent. Pump, 75-ft. head, D.C. to DeLaval Turbine.

PIPING—Considerable quantity of iron and brass piping, including about 150 various types and sizes of valves, also pipe covering.

1—750-kw., Syn. G. E. Converter, 240-120-v. Panels, Transformers 3-60-13,800 or 6900 v.

1—500-kw., Syn. G. E. Converter, 240-120-v. Panels, Transformers 3-60-13,800 or 6900 v.

1—250-kw., 125-v. Deihl Generator, D.C. to Kerr Turbine.

6—333-kva., Pittsburgh single phase, 60 cy., Transformers, primary 13,200 v., secondary 2300 v.

3—200-kva., Packard, single phase, 60 cy., Transformers, primary 13,200 v., secondary 575 v.

15—Panels, switchboard equipment, all purposes.

PLANT OPERATED TWO YEARS, ALL EQUIPMENT INSTALLED IN DUPLICATE.

I SPECIALIZE IN COMPRESSORS

2588-ft. OC-3 Ingersoll, compound steam, 2 stage.
2570-ft. Laidlaw Feather Valve, compound steam, duplex air, 60 lb.
3—1955-ft. XPV-3 Ingersoll, compound steam, 2 stage.
1592-ft. X-1 Ingersoll, duplex steam, duplex air, 55 lb.
NEW 1500-ft. WC Sullivan Tandem, compound steam, 2 stage.
1190-888-ft. X-3 Ingersoll, compound steam, 2 stage.
528-ft. FR-1 Ingersoll, simple steam, single stage.
1—446-ft. X-3 Ingersoll compound steam, 2 stage.
396-ft. WB-2 Sullivan, simple steam, 2 stage.
AIR RECEIVERS, 30 in.x6 ft., Mass. Std., 36 in.x8 ft. and 42 in.x7 ft.
No. 5 Leyner Drill Sharpener.

1000 ft. and 2000-ft. Cableways.
5011-3800-2033 ft. PRE-2 Ingersoll Electric 3-60-2200 v.
2—3460-ft. O-CTDE Chicago Electric 3-60-2200 v.
2678-ft. PRE-2 Ingersoll Electric 3-60-550 v.
2240-1730-ft. OCE Chicago Electric 3-60-2200 v.
1190-ft. XB-2 Ingersoll, 2-stage belt.
810-ft. OCB Chicago, 2-stage belt.
1—688-ft. ER-1 Ingersoll, single stage belt, 40 lbs.
1—599-446-ft. XB-2 Ingersoll, 2-stage belt.
478-ft. WJ-3 Sullivan Angle, 2-stage belt.

BOILERS—GENERATORS—LOCOMOTIVE CRANES—LOCOMOTIVES, ETC.

10 High St.—*A. Lee Ellis*—Boston, Mass.

"The Buyer Must Be Satisfied—Always"

Boilers

2—200-hp. Penn Scotch Marine Dry Back self-contained. 150 lb. steam.
1—100, also 150-hp. Fire Box type, 100 lb.
2—40-hp. Loco. Fire Box type, 100 lb.

Crushers

9x15 Western Jaw Crusher, portable.
No. 4 Gates Gyratory, Manganese fitted.
No. 6 Austin RH, also Straight Drive.

Gasoline Locomotives

3-ton, 24-in. ga. Plymouth.
3-ton, 30-in. ga. Plymouth, nearly new.
5, also 7-ton, 36-in. ga. Whitcomb.

Mid-Continent Equipment & Machinery Co.
319 North 4th St., St. Louis, Mo.

Merriman Asphalt Plant

We have for sale a rebuilt Merriman One-Car Steam Melting Asphalt Plant. It has just been rebuilt and is in fine condition and ready for delivery.

Here's your chance to get a real asphalt plant at a price that is right. Better get in touch with us quickly.

The East Iron & Machine Co.
Lima, Ohio

For Rent—For Sale

Locomotive Cranes

2—Type "B" McMyler, 8-wheel, standard gauge, bucket operating, 50-ft. boom. One year old.

2—Erie Type "B" Traction Wheel, 32-ft. boom.

Locomotives

1—18x24 50-ton, 6-wheel Switcher, standard gauge.

4—21x30 95-ton Consolidations, standard gauge.

3—10x16 18-ton Saddle Tank, 36-in. gauge.

Steam Shovels

1—Model 31 Marion, caterpillar traction, high lift boom, 22 ft. 6 in., dipper stick 18 ft. 6 in., ¾-yd. dipper. One year old.

2—Erie Type "B," traction wheels, ¾-yd. dipper.

2—Marion 28, traction wheels, ⅝-yd. dippers.

1—Thew Model "O," traction wheels, ½-yd. dipper.

4—Marion 60, standard gauge, 2½-yd. dipper.

1—Marion 70, standard gauge, 2½-yd. dipper.

Cars—R. R. Ditchers—Buckets—Pumps, Etc.

ALL OF ABOVE LOCATED AT OUR SHOPS, PITTSBURGH

H. KLEINHANS COMPANY

Union Trust Bldg., Pittsburgh, Pa.

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ASPHALT PLANT

1—1850 sq. yd. Semi-portable Cummer, with two 12-ton capacity asphalt melting kettles, with 35-hp. Farquhar boiler and engine plant in A-1 shape.

The Public Works Construction Company
Wiggins Block, Cincinnati O.

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At a Sacrifice

ASPHALT PLANTS

2—Merriman. Price low for quick sale.

P. O. BOX 1488, GREENSBORO, N. C.

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CONTRACTORS' PLANT

Locomotive Cranes, Derricks, Concrete Mixers, Steam Shovels, Locomotives, Cars, Rails, Hoisting Engines, Electric Hoists, Cableways. All necessary equipment for complete plant.

JOHN M. GREENE
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1924 will be a year of contentment and joy—

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DECO
REBUILT

"DECO" Protects the Purchaser

LOCOMOTIVE CRANES

1—40-ton Industrial, 80-ft. boom.
* 1—25-35-ton, Type J. McMyler, with new A.S.M.E. boiler. 50-ft. boom. Bucket operating.
1—30-ton Ohio, 50-ft. boom.
* 3—25-ton Brownhoist, broad gauge, 1 electric and 2 steam.
1—25-ton Industrial, 70-ft. boom.
1—20 ton Brownhoist, 8-wheel, bucket operating.
* 1—20-ton Browning, 8-wheel, 50-ft. boom. Bucket operating.
* 1—15-20-ton Ohio, 50-ft. boom.
* 1—Osgood 7½-ton, 4-wheel, standard gauge, 40-ft. boom. Bucket operating.
* 3—Osgood 7½-ton, 4-wheel, standard gauge, 40-ft. boom. Single line.
1—Erie, 36-ft. boom, ¾-yd. c.s.
1—205 P & H, gasoline, c.s. and d.l. bucket.

DRAGLINES

2—Class 24 Bucyrus, 100-ft. booms.
1—Class 175 Bucyrus, 125-ft. boom.
1—3-T Monighan Walker, 60-ft. boom.
1—Class 9½ Bucyrus, 60-ft. boom.

STEAM SHOVELS

Caterpillar Type

1—Marion 31, High lift or standard.
1—Marion 28, High lift.
1—Osgood 29, High lift.
1—Osgood 18, High lift or standard.
1—Erie B.

STEAM SHOVELS—Cont.

Traction Type

2—Erie ¾ High lift, 1 year old.
1—Thew ¾ High lift, 1 year old.
6—Erie, Osgood, Marion, Thew ¾ yd.

Railroad Type

Marion 40, 41, 60, 70, 92.
Osgood 43, 69, 73.
Bucyrus 45C, 70C, 95C, 175.

TRACTORS

2— 5-ton Holt Caterpillar.
1—10-ton Holt Caterpillar.

LOCOMOTIVES

1—63-ton Baldwin Mogul.
* 1—50-ton, 6-wheel switcher, I.C.C. condition.
* 1—30-ton, American, 4-wheel S. T. air brakes.
1—28-ton Porter, Std. gauge.
1—25-ton Baldwin. Almost new. Standard gauge, gasoline. Cost $25,000. Will sell at a bargain.
* 1—21-ton, Vulcan. Standard gauge. New A.S.M.E. boiler
* 1—21-ton, Vulcan, 36-in. gauge, S. T.
2—18-ton Vulcan, 30-in. gauge.
* 1—12-ton Baldwin, 36-in. gauge, S.T.

DUMP CARS

*20—Western 12-yd. air dump cars.
9—K. & J. 16-yd. Automatic.
*50—Western and K. & J. 4-yd.; 36-in gauge.
10—4-yd., 30-in. gauge.
20—Western and Koppel, 6-yd. Standard gauge.
20—Western 12-yd. All steel. Hand dump.

OVERHEAD CRANES

Ton	*Span* *Ft. In.*	*Make*	*Motors*	*Control*
5	33–5	Niles	3-220 VDC	Cage
15	54–3	Niles	3-550 VDC	Cage
20	46	Shaw	4-220 VDC	Cage
20	75	Shaw	4-220 VDC	Housed
25	78	Niles	1-550 VDC	To suit
30	59–6	Morgan	4-220 VDC	Cage
40	48	Alliance	4-220 VDC	Cage

1—Jordan Spreader
1—Western Spreader
1—Western 36-in. Gauge

****"DECO" Rebuilt Equipment***

Davis Equipment Company

50 Church Street **Tel. Cortland 2895** **New York City**

---

823 H. P. Stirling Water Tube Steam Boilers

From the Old Hickory Powder Plant, Old Hickory, Tennessee. Used less than ninety days, and in excellent condition. Inspection invited.

OFFERED AT MONEY SAVING PRICES

SPECIFICATIONS

Class M-30, each unit having 8226 sq. ft. heating surface, in accordance with following specifications and A.S.M.E. Code.

The heating surface of each boiler consists of three steam and water drums and a mud drum, as follows:

3—Steam Drums 42-in. diameter, 17-ft. 1⅜-in. long, ⅝-in. plate.

1—Mud Drum. 48-in. diameter, 16-ft. 7⅝-in. long, 1-in. plate.

Drums connected by 630 tubes, 3¼-in. diameter, connections made by expanding wrought tubes into reamed tube seats.

Space occupied by each boiler 18-ft. wide, 23-ft. 3-in. deep, 29-ft. 9-in. high.

DRUM CONSTRUCTION

All flanges for blow-off, feed, safety valve and water column connections made of wrought steel and riveted to the drums. The cylindrical portions of each drum made of a tube plate and a shell plate. Longitudinal seams double riveted, butt joint, circular seams, single riveted, lap joint.

TUBES

Tubes, 3¼ in., hot rolled, seamless steel, No. 10 gauge, for working pressure of 180 pounds to and including 225 pounds. Spaced alternately wide and narrow to facilitate replacement.

VALVES AND FITTINGS

Each boiler supplied with the following valves and fittings:

4—4½-in. Safety Valves, nickel seat, set to blow at 200 pounds.
1—15-in. Ashcroft Steam Gauge with 12-in., 400-lb. dial.
1—Water column fitted with bronze mountings for glass water gauge with special shut-off device operated from fire-room floor to allow renewal of glass under pressure. Three try cocks with lifting handles for operating from fire-room floor, fitted with steam metal valves. Independent blow-off pipes from bottom of column and glass gauge, carried down the front, terminating in the ash pit, fitted with valves at height of hand.
1—3-in. Hancock Bronze Stop Valve and one 3-in. Hancock Bronze Check Valve for feed.
2—2½-in. Blow-Off Valves and two Stop Cocks.
2—2½-in. Bronze Stop Valves on steam dusting hose connection.

STOKER ENGINE

1—8x8-in. Buffalo Vertical Engine, single acting, inclosed type, Class A, rated at 32 hp., 350 r.p.m., equipped with one 2½-in. Buffalo governor. Engine and accessories by Buffalo Forge Company.

Write for Special Bulletins

on New and Used Equipment at Old Hickory Powder Plant.

No. 7	Tanks
No. 8	General Equipment
No. 11	Blowers Equipment
No. 12	Industrial Railway
No. 20	Scales.

Write for illustrated folder and prices.

FIXTURES

A full set of cleaning and ash doors and frames for side and rear walls, giving access to all parts for exterior cleaning. A large circular door and frame for access to mud drum manhead.

One cast iron damper box, damper and operating rig all supported from boiler structural supports, arranged for connection to horizontal breaching in rear, and operated from front of boiler.

Necessary buckstays and tie rods for securing all parts in position, and supports for baffle walls.

WORKING PRESSURE

The boilers were constructed for a working pressure of 200 pounds per square inch. All drums were tested and made tight under hydrostatic pressure of 300 pounds. When erected complete the boilers were tested and made tight under hydrostatic pressure of 250 pounds.

ACCESSORIES

Accessories furnished in addition to those mentioned:

1—8-in. Foster Non-return Valve.
1—6 Element Vulcan Soot Blower complete with all piping and valves.
1—Bailey Flow Meter, Type D-25, Class 56; rated flow 28,000 pounds per hour; maximum flow 70,000 lbs. per hour.

STOKERS

8-Retort Westinghouse Double Dump Underfeed Stoker, with line shaft, sprockets, transmission guards, extension coal hopper, etc.

FAN AND TURBINE

1—Buffalo Turbo-Conoidal Fan, Type T-D 9½, double inlet. Capacity 100,000 cu. ft. per minuate at 6-in. water pressure and 970 r.p.m. Driven by 225-hp. horizontal multi-stage, non-condensing Moore turbine and reduction gear. Gear ratio, 3600 r.p.m.—970 r.p.m. Throttle valve 3 in. Steam consumption at 180 hp.—31.6 pounds; at 225 hp.—33.2 pounds.

OLD HICKORY POWDER PLANT, Old Hickory, Tennessee

CRANES

2—20-ton **Brown Hoist**, double drums, 45-ft. booms.
1—20-ton **Ohio,** double drums, 50-ft. boom.
1—20-ton **Link Belt**, double drums, 50-ft. boom.
1—25-ton **Browning,** double drums, 60-ft. boom.
1—25-ton **Industrial**, double drums, 50-70 ft. boom.
1—25-ton **McMyler,** double drums, 45-65-ft. boom.
1—30-ton **Ohio,** double drums, 50-ft. boom.
1—40-ton **Industrial,** double drums, 50-70-90-ft. boom.
1—Type B **Erie** Caterpillar, 40-ft. boom.

STEAM SHOVEL

1—Type B **Erie,** full revolving, new 1923, all steel caterpillar, A.S.M.E. boiler, ¾-yd. dipper; high lift boom 21 ft.; dipper handle 15 ft.; boom hoist, used 3 months, guaranteed perfect condition.

GREY STEEL PRODUCTS CO.
111 Broadway, New York, N. Y.

FOR SALE

Cranes—Shovels

1—No. 45 Bucyrus, 1¾-yd. **R.R. Steam Shovel,** in A-1 used condition. Price, $4500. Located Minnesota.
1—No. 1-T Monighan **Gasoline Dragline,** 1-yd. Page bucket, 50-ft. boom. New walker just installed.
1—7-ton O & S **Crane,** 35-ft. boom, ¾-yd. clam shell; used only 6 months. Price with bucket $4,200.
1—21-E Foote **Caterpillar Paver,** boom and bucket. Used only 9 months, $4,500.
1—Keystone No. 6, just overhauled, $3,200.
1—**Stiff Leg Derrick,** Amer., 7x10 double drum hoisting engine, 60-ft. boom, 36-ft. mast. Located Southern Illinois.

G. C. WILLIAMS
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Phone, Wabash 9327.

FOR SALE

Locomotive Cranes

2—Browning, 20-ton, 8-wheel, 65-ft. boom—Portland, Maine.
1—Browning, 15-ton, 8-wheel, 38-ft. boom—Townley, N. J.
1—O. & S. 15-ton, 8-wheel, 50-ft. boom—New York.
1—Interstate, 15-ton, 8-wheel, 50-ft. boom—Townley, N. J.
1—Brownhoist, 20-ton, 8-wheel, 40-ft. boom—Townley, N. J.

Hoisting Machinery Co.
50 Church St., New York, N. Y.

LOCOMOTIVE CRANES, ETC.

No. 3 Byers, 32-ft. boom, ¾-yd. bucket, steam.
BYERS AUTOCRANE, 30-ft. boom, 1-yd. bucket.
GYRATORY and ROLL CRUSHERS.

STEAM SHOVELS

Model 28 MARION, ⅝-yd. dipper, railway type.
3—Model 60 Marion, 2½-yd. dipper, rway. type.
225-B Bucyrus Electric Shovel, 5-6-8-yd. buckets.
No. 0 Thew and No. 31 Marion.

BOILERS, AIR COMPRESSORS, ETC.

50—5000-ft. Air Compressors, steam and electric.
100-hp., 125-150-lb. Boiler, encased type.

HOISTS, ETC.

25 and 50-hp. Elec. Hoists, D.D. Dragline, 440-v., 60-cy., 3-ph. Motors.
100-hp. Thomas, 2 speed, 220 v., 3 ph., 60 cy
No. 3 GYRATORY PORTABLE CRUSHER.
6-8-10 and 12-in. Pump, Water and Gravel.

ROSS POWER EQUIP. CO.
Indianapolis, Ind.

FOR SALE

Farrell Jaw Crusher

1—36x18, first class condition, Manganese fitted.

INTERSTATE CRUSHED STONE CO.
Springfield, N. J.

BUY NOW and SAVE!

These items represent an investment amounting to thousands of dollars. We have concluded to turn this stock into ready cash in the shortest possible time. Everything is offered for

IMMEDIATE SALE!

To do this we realize that we must make our prices so attractive that alert buyers will be quick to snap up these wonderful values.

What Can You Use?

1—95-ton **Bucyrus Railroad Type Steam Shovel,** with 5-yd. Dipper.

3—70-ton **Bucyrus Railroad Type Steam Shovels,** with 2½ yd. Dippers.

Above Shovels are rebuilt—

Available for prompt shipment

60—12-yd. **All Steel Hand Dump Cars**—Standard Gauge.

1—10-in.x16-in. **Buchanan Jaw Stone Crusher.** Style "B." Mounted on Trucks.

1—**Kent Crushing and Pulverizing Mill.**

1—9-in.x10-in. No. 924 **Goulds Triplex Vertical Power Pump.** single acting. Iron plungers. Capacity 350 gals. per minute, pressure up to 100 lbs., 6-in. suction, 5-in. discharge. Tight and loose pulleys 20-in.x8-in.

1—8-in.x8-in. **Deane Triplex Vertical Power Pump.** Capacity 235 gals. per minute, 6-in. suction, 5-in. discharge, tight and loose pulleys, 30-in.x7-in.

1—10-in.x6-in.x18-in. **Cameron Steam Pump.** Capacity 175 gals. per minute, 4-in. suction, 3-in. discharge.

1—14-in.x10¼-in.x10-in. **Worthington Duplex Steam Pump.** Capacity 700 gals. per minute, 8-in. suction, 7-in. discharge.

1—**Rotary Drum Sand Dryer.** Drum 36-in. dia., 15 ft. long. Equipped with coal or wood burning furnace.

2—7½-in.x10-in. **Dake Double Cylinder Steam Hoists,** with single geared drum. Equipped with reversing throttle valve.

1—24-in. **Horizontal Centrifugal Pump,** 24-in. suction, 24-in. discharge, suitable for head up to 50 ft. Belt pulley 32-in.x20-in. Manufactured by Kingsford Machine Company.

1—10-in. **Horizontal Centrifugal Pump,** 12-in. suction, 10-in. vertical top discharge, suitable for head up to 50 ft. Belt pulley 18-in.x15-in. Manufactured by Fulton Machine Company.

1—10-in.x16-in. **Erie City Automatic Center Crank Steam Engine**—50 hp.

500 Ton **I-Beams, Channels, Angles, Re-inforcing Rods, Etc.**

300 Ton **New Steel Plates,** 7/16-in., ½-in., 9/16-in. thick, 18-in. to 48-in. wide, 14 to 24 ft. lengths.

6—30-in. dia. 70-ft high **Steel Self-Supporting Smoke Stacks.** Lower half made of ¼-in., upper half 3/16-in. plate. Bell bottom 48-in. dia., with heavy cast iron base plates.

4—7000-gal. **New Steel Storage Tanks.** Square. Size 6-ft. 9-in.x 10-ft.x16-ft. 3-in. Thickness of plate ⅛-in. Weight about 17,000 lbs.

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My business is more than merely buying and selling used cranes. It is knowing exactly what service cranes are capable of and how different types should be used. When you are in the market for a locomotive crane, I can help you select the one best suited for your needs—and probably save you money on your purchase.

Locomotive Cranes

1—Rebuilt **Industrial**, 20-25 ton cap., double drums, 50-ft. boom, outriggers, 8-wheel MCB. Like new. Guaranteed. Located Bay City, Mich.

1—23-ton **McMyler**, 8-wheel MCB., double drums, 45-ft. boom, with 7½ kw. Engberg Generator. Located Buffalo, N. Y.

1—20-ton cap. **Brown Hoist** single drum, 40-ft. boom, 8-wheel M.C.B. Located Philadelphia, Pa.

1—20-ton cap. **Industrial**, 8-wheel MCB., double drums, 50-ft., boom, 1½-yd. clamshell bucket. Located La Salle, Ill.

1—25-ton cap., Model "E" **Ohio**, 8-wheel MCB., double drums, 50-ft. boom. **Brand New.** Located Bucyrus, Ohio.

1—30-ton cap. Model "F" **Ohio**, 8-wheel MCB, double drums, 50-ft. boom. Overhauled; like new. Located Hartford, Conn.

1—7½-ton cap. **Osgood**, double drums, 4-wheel, standard gage, 40-ft. boom. Located Kingston, N. Y.

Philip T.
KING
"The Crane Man"

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I will rent any of my Cranes on a straight rental basis or with a view to purchase. Terms exceptionally favorable to you.

Philip T. KING 30 Church St. New York

SELECTED ITEMS

From Our Large Stock of New and Overhauled Equipment

1—9x10 American Hoist 3-drum double cylinder with boiler, 100 lb. steam pressure, New York certificate.

1—8¼x10 Lidgerwood Hoist, 3-drum double cylinder, with A.S.M.E. boiler, New York or Penn. certificate.

1—8¼x10 Lidgerwood Hoist, D.D.D.C. with boiler (Mass. Standard).

1—7x10 Lidgerwood Hoist, D.D.D.C. with boiler and geared swinger attached, 100 lb. pressure, New York State.

1—7x10 Stroudsburg Cableway Hoist D.D.D.C. reversible link motion, with Mass. boiler.

1—7x10 Mead-Morrison D.D.D.C. Skeleton Hoist.

1—7x10 Mead-Morrison S.D.D.C. Skeleton Hoist.

1—6½x10 Lambert D.D.D.C. Hoist, with boiler, New York State certificate, 100 lb. pressure, geared swinger attached.

2—5½x8 American Hoists, D.D.D.C., with boilers and geared swingers.

Also Forms, Graders, Concrete Mixers, Road Pumps, Shovels, Buckets, etc.
Write for complete list.

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MAIN OFFICE: 452 Lexington Ave., New York, N. Y. Vanderbilt 1465
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PUMPS

1—"New" 10-in. Hill Centrifugal direct connected to 4 cylinder gasoline motor, 4x6-in. cylinder. **"New."**

Motor Driven Centrifugals

4—3 in., 2½ hp., 220 v. D.C.
1—5 in., 10 hp., 220 v. D.C.
1—4 in., 10 hp., 220 v. A.C.
1—4 in., 15 hp., 220 v. D.C.
2—6 in., 35 hp., 220 v. D.C.
2—8 in., 35 hp., 220 v. D.C.

A. J. O'Neill Company

1524 Chestnut St., Philadelphia, Pa.

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CORLISS ENGINES

2—Monarch Cross Compound, size 16x32x42 in., built for 160-lb. steam pressure, and 85 r.p.m. Manufactured by H. N. Strait Mfg. Co. Are in good condition. May be seen in operation.

Kansas Portland Cement Co.

1608 Federal Reserve Bank Bldg.,
Kansas City, Mo.

FOR SALE

100,000 lbs. Capacity Flat Car

38 ft. long, steel underframe.
First class condition. Immediate shipment.

ZELNICKER IN ST. LOUIS

We Buy and Sell Rails, Cars, Steel Piling, Etc.

LOCOMOTIVES, NEW

30-in. and 36-in. gauge, 23 tons, Tractive Power 9170 lbs. Coal, oil or wood burners.

Very Attractive Prices

R. POLIAKOFF

709 Sixth Ave., New York, N. Y.

FOR SALE OR RENT

STEAM SHOVELS

1—Model 29 Osgood, revolving, Shop No. 1118, mounted on caterpillars, 30-ft. boom, 20-ft. dipper handle, ¾-yd. dipper.

3—70C Bucyrus, Railway type, Shop Nos. 1457, 1499 and 1582, standard gauge, 2½-yd. dippers.

1—Little Giant, Railway type, standard gauge, equipped with standard boom, 1¼-yd. dipper.

1—Model 28 Marion, Shop No. 2804, revolving, traction wheels, standard boom, ¾ yd. dipper.

AIR COMPRESSORS

8—Sullivan, belt driven, 20x12x14 in., displacement of 1100 cu. ft. air per minute, 110 lbs. pressure. Machines complete with lubricators, automatic unloaders and wrenches.

DERRICK

1—Timber Stiff-Leg Derrick complete, 60-ft. boom, with all cables, double cylinder, double drum, Lidgerwood hoist and vertical boiler.

CHANNELERS

20—Sullivan Stone Channelers, cyl. 8 in. diam., depth of cut without change of steel 3 ft. Weight 24450 lbs.

TRACTORS AND TRAILERS

1—10-ton Holt Caterpillar Tractor.

1—5-ton Troy Trailer.

24—Troy Wagons, 4-yd., reversible spreader type, practically new.

DRAGLINES

1—Class 14 Bucyrus, skids and rollers, steam operated, 60-ft. boom, 2-yd. bucket.

1—Class 14 Bucyrus caterpillars, steam operated, 60-ft. boom, 2-yd. bucket.

1—Class 20, Bucyrus, steam operated, special over size Johnston Bros., butt-strapped boiler, skids and rollers, 85-ft. boom 3½-yd. bucket.

1—Class 24, Bucyrus, steam operated, skids and rollers, 100-ft. boom, 3½-yd. bucket.

1—Class 24 Bucyrus Electric skids and rollers, 100-ft. boom, 3½-yd. bucket.

1—Special Monighan, steam operated, over size, butt-strapped boiler, skids and rollers, 80-ft. boom, 2-yd. bucket.

The above list is constantly changing. No matter what your machinery requirements are, write us—we may have it.

BECK & BABB, 29 La Salle Street, CHICAGO, ILL.

HOISTS
DERRICKS

The undersigned having purchased the remaining HOISTS and DERRICKS from THE ELECTRIC HOIST AND DERRICK COMPANY, including HOIST PARTS and DERRICK FITTINGS, beg to announce that these HOISTS and DERRICKS are equal to any that were in the original purchase from the HOG ISLAND SHIPYARD, and are offering them to the public at the following prices: **HOISTS, $1500 each f.o.b. Baltimore, Maryland. DERRICKS, $600 each f.o.b. White Hill, Pa., at Harrisburg.**

MALLORY MACHINERY CORPORATION, Baltimore, Md.

Tank Cars

8,000 gal., all-steel construction, with steam, coils. Bargain price. In stock for immediate shipment, cars of any kind, both passenger and freight.

Houston Ry. Car Co.
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7—Mattson Air Locks.
2—Concrete Locks.
2—Pieces 36 in.x12 ft. Shafting.

HOLBROOK, CABOT & ROLLINS CORP.
52 Vanderbilt Ave., New York, N. Y.

FOR SALE

1—Thew Shovel ¾-yd. Caterpillar.
6—12-in. Centrifugal Pumps.
2—5-in. High Lift Cent. Pumps.
1—20-ton Locomotive Crane 50-ft. boom.
100-ton Lack. Piling 24-28-ft.
1—6-ton Kelly Springfield Roller.
2—10x16 36-in. Gage Locomotives.
1—Erie Shovel, ¾-yd.
1—8¼x10 3-drum Hoist and Boiler.
Air Compressors: 2—500-ft. & 1—1200-ft.

J. T. WALSH,
500 Brisbane Bldg., Buffalo, N. Y.

LOCOMOTIVES

3—20x26-in. American 6-wheel switchers. 180 lbs. working pressure; piston valves; weight 72 tons.
1—19x24-in. American 6-wheel switcher. 180 lbs. working pressure.
3—70-ton standard gauge Shay geared locomotives, built 1912, 1914, 1917.
2—42-ton standard gauge Shay geared locomotives, built 1913 and 1917.
Also other locomotives, steam shovels, steel rails, etc. Complete list sent on request.

Birmingham Rail & Locomotive Co.
Birmingham, Ala.

Construction WE BUY, SELL and RENT *Equipment*

HOISTS
1—Mundy, 7¼x10, D.C., 3-D, with boiler.
1—Lidg. 8¼x10, D.C., D.D., with boiler.
1—Mead-Morrison, 8¼x10, D.D. erectors outfit.
1—Flory, 8¼x10, D.C., 3-D, with boiler.
1—Lambert, 7x10, D.C., D.D., with boiler.
1—O.&S., 6¼x8, D.C., D.D.

CARS
6—24-in. Western, 1½ yd.
40—24-in. gauge, Lakewood, All-Steel Flat.
9—24-in. V-shape, 21 and 36-ft. cars.

LOCOMOTIVES
2—24-in. ga., 3-Ton Plymouth Gas.
4—24-in. ga., 6-Ton Whitcomb Gas.
3—36-in. ga., 10x16 Davenport, Vulcan, Porter.
1—Std. ga., 30-Ton Davenport Dinkey.
1—Std. ga., 50-Ton American Switcher.
2—Std. ga., 20-Ton Porter and American.

CLAM SHELL BUCKETS
6—½ to 2-yd. Owen, Standard, Hayward, Williams, etc.

DERRICKS
1—Wood Stiff-Leg Derrick, bucket operating.
1—Steel Stiff-Leg, 80-ft. boom.

PUMPS
1—Morris 8-in. Centrifugal, with Engine.
1—No. 6 Pulsometer.
3—Morris 6-in. Centrifugal Sand Pump with Eng.
1—6-in. Morris Cent. Water Pump with Eng.
1—4-in. Morris Cent. Water Pump with Eng.

DRAG LINES
3—Monighan, 1-T, 2½-T, 3-T, Walker type.
1—Marion 221 Drag Line and Shovel.
1—Bucyrus 24.

STEAM SHOVELS
5—¾-yd. Erie, Marion, Osgood and Thew, Caterpillar and Traction.
3—Bucyrus 70C, 70-ton, 175-B.
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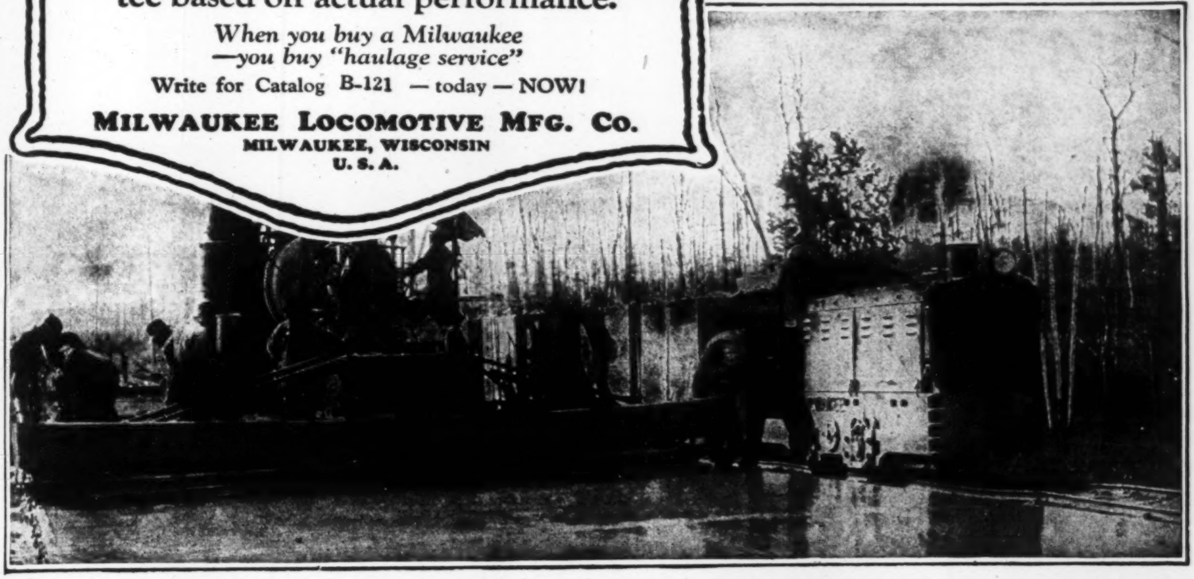

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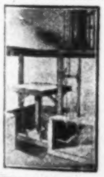

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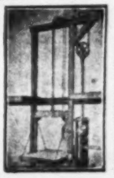

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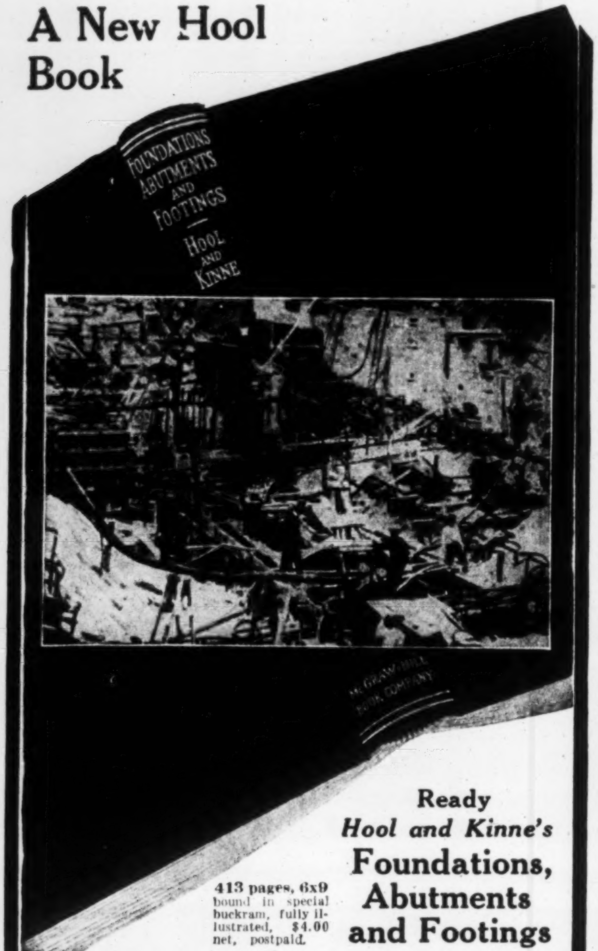

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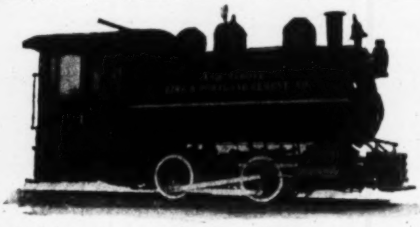

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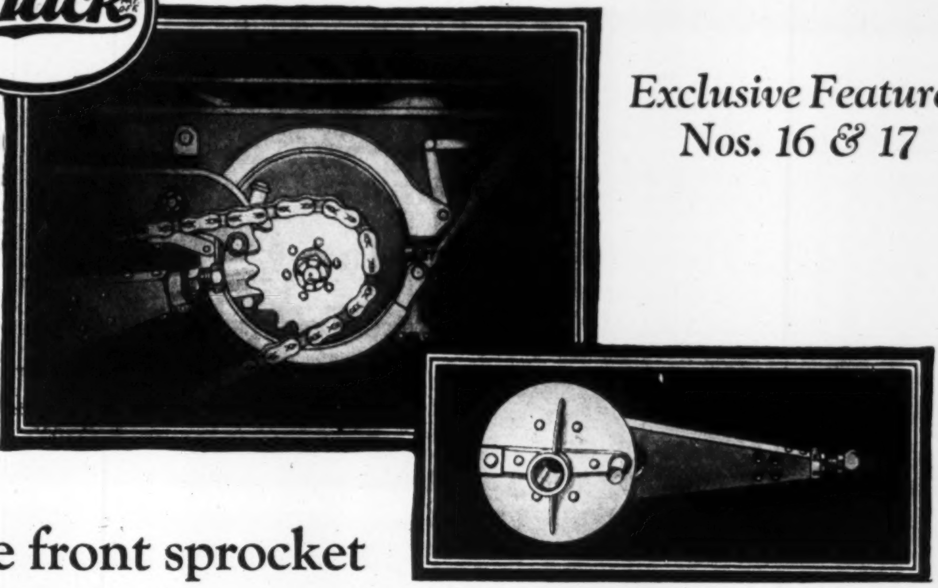

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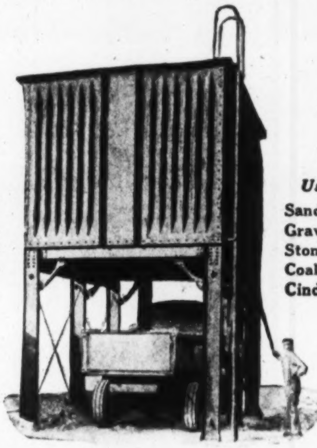

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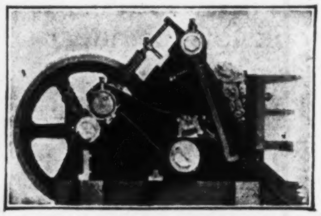

We manufacture a complete line including, *Crushers, Elevators, Screens, Bins, Sweepers, Car-Unloaders, etc.* Write for Catalogue.

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for
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GUARD RAIL

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Protect the edges of Street, Road, Curb, and Street Railway Paving

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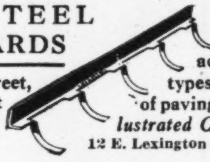

Various sizes and shapes adaptable to all types and character of paving. *Write for Illustrated Catalog No.* 21.
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FOR PAVING AND CURBING
The Granite Paving Block Mfgrs. Assoc. of the U.S. Inc.
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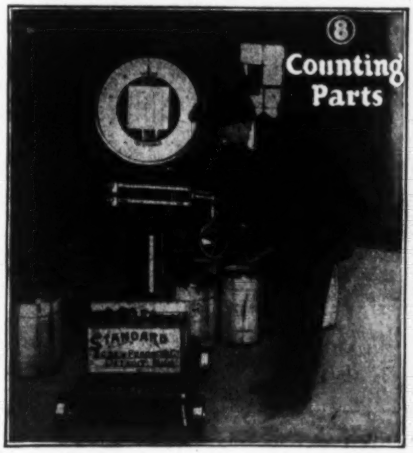
Representing The World's Greatest Granite Quarries



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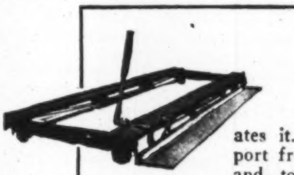

A hand operated belt float and bridge for concrete road construction.

Travels on the side forms. One man operates it. Also furnishes a support from which to edge joints and touch up surface of the pavement for final finishing.

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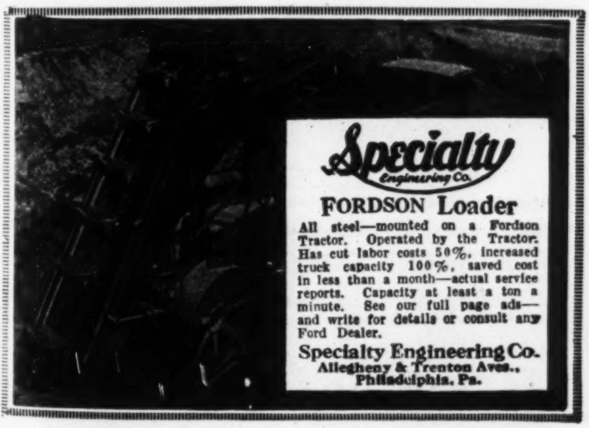

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TESTED BY FIRE

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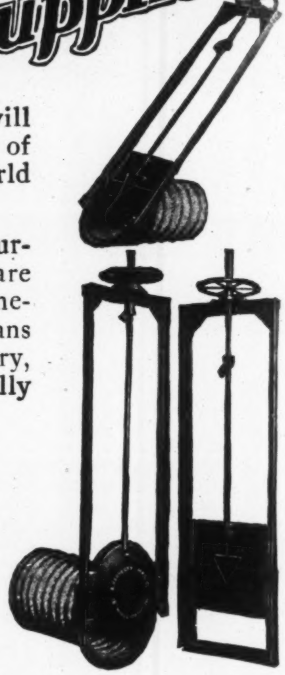

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15,000,000 Cubic Yards of Reinforced Slag Concrete

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"ACME" (Nestable) and IMPERIAL Riveted Corrugated Culverts.
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An excellent investment for machine shops, loading platforms, foundries, warerooms, pickling rooms and other parts of the plant where the floors receive hard wear.

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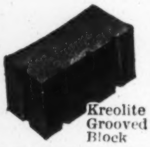

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We also furnish Kreolite Wood Blocks for Street Pavements, Bridge Floors and Stable Floors, treated ties, piling timbers, fence posts, etc., framed to your plan, if desired, before treatment.

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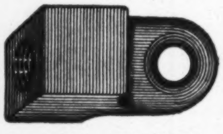

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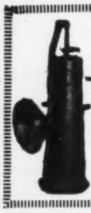

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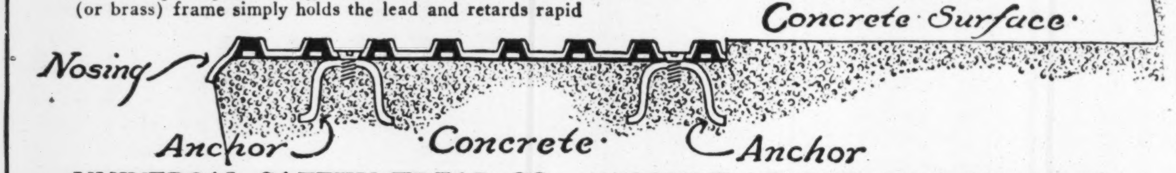

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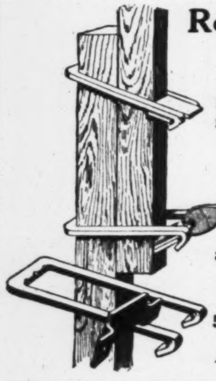

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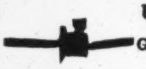

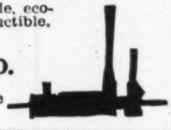

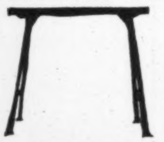

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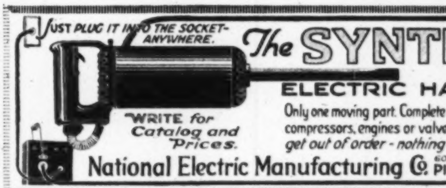
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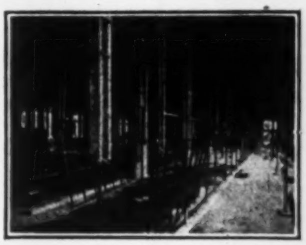

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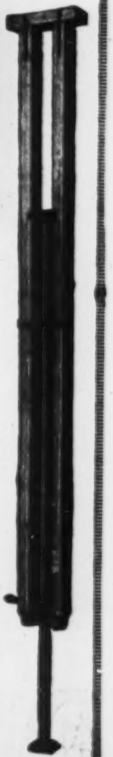

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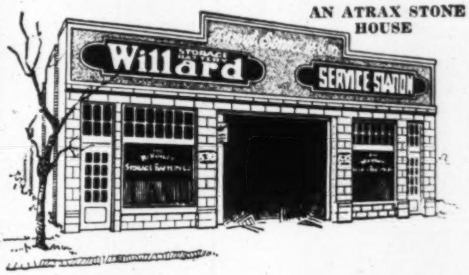

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No more dusting and wearing of the concrete floors in your factory. Just flush on

LAPIDOLITH
TRADE MARK

the liquid chemical hardener which has been the standard for twelve years.

Lapidolith makes concrete floors non-absorbent and resistant to acids and alkalis.

Look over your floors. If they dust apply Lapidolith.

Write for sample and testimonials

L. SONNEBORN SONS, INC.
Dept. 6, 116 Fifth Avenue, New York

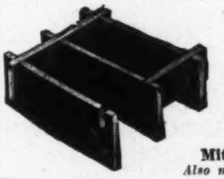
SONNEBORN

SIDE WALL STEEL SASH

STEEL CONSTRUCTION FOR LIGHT AND VENTILATION IN BUILDINGS

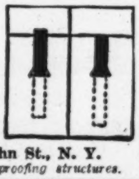
All types for factory, power house and office. Continuous steel sash for monitors and sawtooth construction. Operating devices for all types of movable sash and doors. Steel skylight and ventilators, steel office partitions, hinged steel floors, sliding steel doors.

ALLISON STEEL PRODUCTS CO.
CHESTER, PA.



"MITCO"
INTERLOCKED GRATINGS

No bolts. No rivets. No bent metal. Every joint locked by metal spread in dovetail. No clogging. Write for data. See half page advertisements.



Mitchell-Tappen Co., 15 John St., N. Y.
Also makers of "S.M.C." for fireproofing structures.

R.I.W.
REMEMBER IT'S WATERPROOF
REG. U.S. PAT. OFF.

Swimming Pool Peru State Normal School and Teachers College, Peru, Nebraska.

POUR CONCRETE *with* PLUGGED PORES

After you have *finished* pouring concrete floors, walls, bridges, piers, etc., there is no use *wishing* you had waterproofed them. Eliminate porosity by using—

R.I.W.
REMEMBER IT'S WATERPROOF
Reg. U. S. Pat. Off.

TOXEMENT

—a scientific powder which lubricates concrete, increases its workability, plasticity and flowability, and waterproofs thoroughly.

Also furnished in paste form for waterproofing cement mortar and stucco.

There's a special "R. I. W." Protective Product to protect all structural materials under every known condition of service.

Write Dept. R for information on "the right paint or compound for your purpose."

Toch Brothers

Established 1848 Incorporated 1922
TECHNICAL AND SCIENTIFIC PAINT AND VARNISH MAKERS
110 EAST 42ND STREET, NEW YORK
Opposite the Grand Central Terminal
WORKS: LONG ISLAND CITY, N. Y.

CONCRETING IN WINTER
SAFE ——— ECONOMICAL
FREE PAMPHLET

VULCANITE PORTLAND CEMENT CO
PHILADELPHIA BOSTON NEW YORK

WEBER
INTRUSION
WORK
and Improved Cement Grouting

for water-elimination in tunnels and mineshafts, sealing of dams, reservoirs, closing of water bearing rock, springs, etc., and consolidation of ruptured concrete and masonry.

CEMENT-GUN WORK
of every description

especially for lining of tunnels, mineshafts and reservoirs, encasing of structural steel work, bridges, tanks, chimney and repair of disintegrated masonry and concrete.

High class work at low prices.
Write us for literature and further information

Weber Engineering Corporation
Singer Bldg., New York City, N. Y.

Business Established 1832
The Lawrence Cement Co.
No. 302 Broadway New York, N. Y.
Selling Agents for
Dragon
PORTLAND CEMENT
In Successful Use a
Third-Century

PENNSYLVANIA
PORTLAND CEMENT
Highest Quality
Manufactured by
Pennsylvania Cement Co.
New York Boston Philadelphia Buffalo

"CEMENT GUN" WORK
TRADE MARK
Contracting—Renting—Managing—Operating
BUILDINGS—DAMS—RESERVOIRS—BRIDGES
Estimates and Bids Promptly Furnished
CEMENT GUN CONTRACTING COMPANY
Contracting Dept., Cement Gun Co., Inc.
ALLENTOWN, PA.
Fulton Bldg., Pittsburgh, Pa.; Chamber of Commerce Bldg., Chicago, Ill.; 30 Church St., New York City.

We Do the Work
with
CEMENT - GUNS
Get our prices and estimates before contracting, renting, buying or selling.
Cement-Gun Construction Co.
537 So. Dearborn St. *Pittsburgh Branch*
Chicago, Illinois Oliver Building

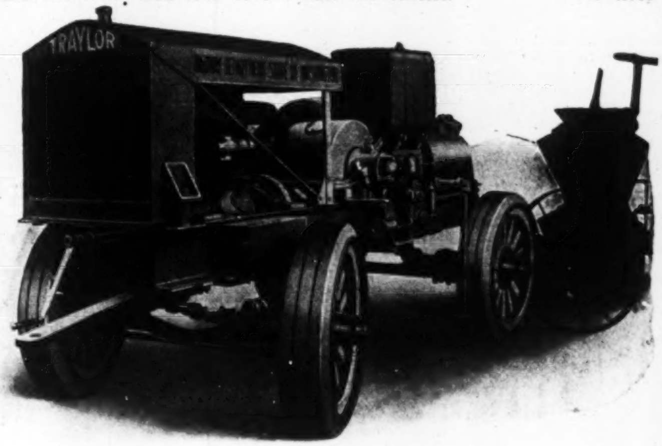
ANTI-HYDRO
FOR PERMANENT CONCRETE
HARDENS WATERPROOFS
FOR HARDENING & WATERPROOFING CONCRETE
A liquid integral hardener makes concrete dustless and waterproof. Used successfully for nineteen years. Write for details.
ANTI-HYDRO WATERPROOFING COMPANY, Newark, N. J.

Specialists in
CEMENT GUN CONSTRUCTION
Engineering—Contracting—Renting—Operating
Estimates Promptly Furnished
Contracts Executed Anywhere
PRATT-THOMPSON CONSTRUCTION COMPANY
Cement Gun Department—Barclay A. Greene, Mgr.
114 West Tenth Street, Kansas City, Mo.

Get a Compressor You Can Keep on the Move

TRAYLOR

Get a compressor that will go to the point wanted—from job to job—or here and there on the job—and stand the wear and tear of constant movement.



Made in two sizes. Also mounted on standard iron wheels, if desired

Get a Traylor Portable Compressor. Note the heavy, substantial wheels, the *shock-absorbing* rubber tires and axles and springs. The Traylor will handle all kinds of pneumatic work. Horizontal "straight-line" type—double acting; spiral gear drive—slow speed—vibrationless—needs no blocking up. For electric or gasoline operation. Pump for supplying water under pressure.

Write for Bulletins.

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New York Chicago Pittsburgh
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HENDRICK SCREENS

for every purpose

ELEVATOR BUCKETS (plain and perforated) **STACKS AND TANKS**
GENERAL SHEET AND LIGHT STRUCTURAL WORK
LIGHT AND HEAVY STEEL PLATE CONSTRUCTION

HENDRICK MFG. CO. CARBONDALE, PENNA.
New York Office, 30 Church St. Pittsburgh Office, 544 Union Trust Bldg.
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AMBURSEN DAMS

Best for Any Foundation

High Safety Factor Low First Cost
Rapid Construction No Maintenance

Send for
Cost Data, Literature, Photos.

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Parsons, Klapp, Brinckerhoff & Douglas

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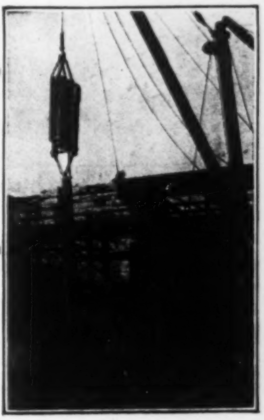
Engineers—Constructors—Managers

Design, Estimates, Supervision, Operation and Management, Examination and Reports

What's the life of your Steel Sheeting?



UNION PILE HAMMERS
DRIVE AND PULL

THE present cost of steel sheeting prohibits leaving it in the ground after it has served its use for cofferdams, etc.

UNION Pile Hammers

first *Drive* steel sheeting without injury and then *Pull* it so you can use it for the next job.

Photograph shows a typical instance. All you have to do, to pull with a Union, is to insert a one-way valve. Steam or air is used with no change whatsoever.

Have you a NEW Union Catalog?

UNION IRON WORKS

Lackawanna Siding, Hoboken, N. J.

Dredging

Filling, Land Reclamation, Canals and Port Works

River and Harbor Improvements,
Deep Waterways and Ship Channels

We are equipped to execute all kinds of dredging, reclamation and port works anywhere in the United States.

CONTRACTORS to THE FEDERAL GOVERNMENT

Correspondence Invited from Southern Officials and Corporate and Private Interests Everywhere.

Largest Plant Longest Experience

Atlantic, Gulf and Pacific Co.

Houston, Texas: Scanlon Bldg.
New York: 21 Park Row

CONVERTIBLE Attachment Operates ¾-yd. clamshell, skimmer, scoop, ditcher scoop, drag line, shovel, magnet, or hook.

With Skimmer Scoop

As a Ditcher

See Skimmer Scoop our ad in last issue.

BAY CITY CRANE EXCAVATOR

Model 16

One machine—Many uses
The Versatile Bay City never need be idle.
A profitable investment for every contractor.

Write for Circular 12

Builders of

CRANES
EXCAVATORS
LAND DREDGES

Walking, Track Crawler and Floating Type

BAY CITY DREDGE WORKS

2603 Center Ave., Bay City, Mich.

CONSTRUCTION SPECIALTIES CO., INC.

West Ave. and Seventh St.,
Long Island City, N. Y.

We build Special Construction Equipment and Devices from your own plans. Also Light Structural Steel and Sundry Iron Work

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DIG ROCK QUICKLY

There's a Sullivan Drill of just the right size, type and power to get rid of your rock most quickly and cheaply. *Ask for Drill booklet No. 4118.*

SULLIVAN MACHINERY CO.
124 S. Michigan Avenue, Chicago

A Service Tested Wire • Rope

The use of HERCULES (Red-Strand) Wire Rope on heavy duty equipment is not an experiment, for its many years of actual service have demonstrated that it is a safe and economical rope for such conditions. Its one red strand is our guarantee of constant quality.

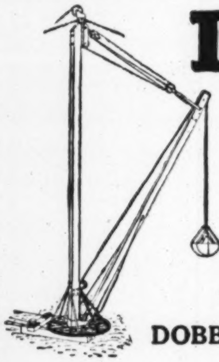
A. LESCHEN & SONS ROPE CO.
HERCULES WIRE ROPE
LESCHEN
ST. LOUIS

Established 1857

A. LESCHEN & SONS ROPE CO.

St. Louis, Mo.

New York, Chicago,
Denver, San Francisco



Dobbie Derricks and Hoists

Stocks of Fittings, Blocks, Sheaves, Winches, etc., carried by our agents:
G. S. Green Co., New York
Beckwith Machinery Co., Pittsburgh, Cleveland, Charleston, W. Va.
P. I. Perkins Co., Boston

DOBBIE Foundry & Machine Co.
Manufacturers
Niagara Falls, N. Y.

"MORETRENCH" Conveying Excavator

Digs and backfills trenches in one operation. Any size—any depth. See our big advertisement next week. Write or phone.

Moore Trench Machine Co.
Rockaway, New Jersey

PARSONS

TRENCH EXCAVATORS—BACKFILLERS

THE PARSONS COMPANY
NEWTON, IOWA

UNDERPINNING & FOUNDATION CO., INC.

Specialists in
Pneumatic, Steel Cylinder and Concrete Pile Foundations
342 Madison Ave., New York City

VULCAN IRON WORKS

THE WARRINGTON (VULCAN)
STEAM PILE HAMMERS
PILE DRIVERS AND PILE DRIVING MACHINERY
327 NO. IRVING AVE. —— CHICAGO

MacArthur Piles

A Special Pile for Every Condition
Not One Pile for All Conditions

A permanent casing where necessary.

Not useless expense where a permanent casing is unnecessary.

Under most conditions a compressed shaft, taking advantage of maximum skin friction, is preferable.

BUT We Drive

- Compressed straight shaft uncased Piles.
- Compressed Pedestal uncased Piles.
- Straight Shaft Piles with a permanent Casing.
- Pedestal Piles with a permanent Casing.
- Composite Piles (Wood and Concrete) with concrete section uncased.
- Composite Piles (Wood and Concrete) with concrete section in permanent Casing.
- Open ended Steel Pipe Piles.
- Closed ended Steel Pipe Piles.
- Wooden Piles.
- Pulled Down Piles.

If your conditions call for piles, we have the economical and efficient answer to your problem.

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FOUNDATION CO., INC.
55 John Street, New York City

SIMPLEX CONCRETE PILE ASSOCIATION, Inc.

2 RECTOR ST., NEW YORK CITY

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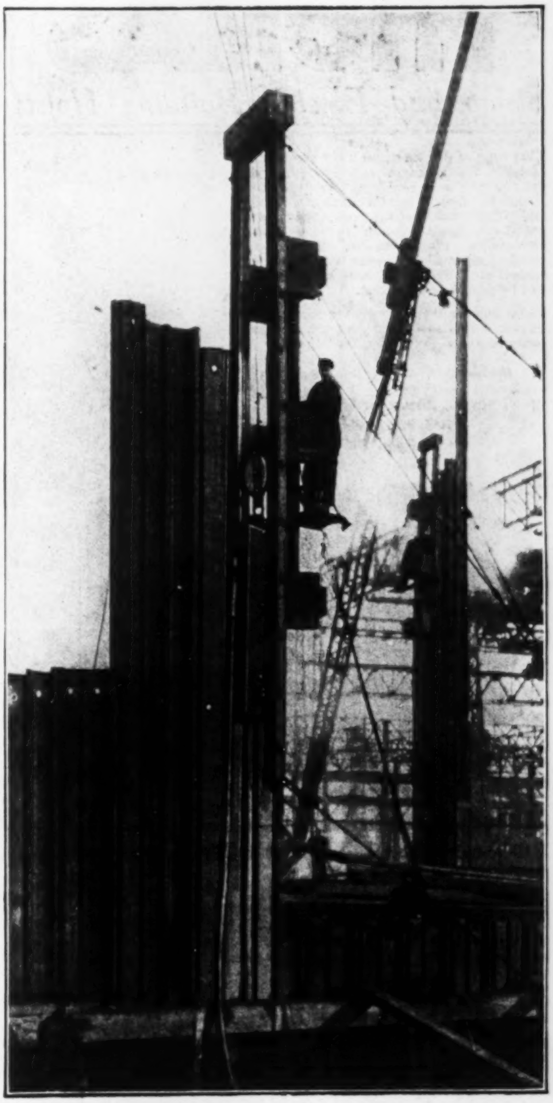
ENGINEERING & CONSTRUCTION
SIMPLEX CONCRETE PILING, OPEN CAISSONS
DIFFICULT FOUNDATIONS

American Steel
American Wire Rope
AND
AERIAL WIRE ROPE TRAMWAYS
Send for Illustrated Catalogue
American Steel & Wire
Chicago New York Company



McKiernan-Terry Hammers building for the Brooklyn Edison Co.

11 Cofferdams enclosed with 15-in. steel sheet piling in 70-ft. lengths driven with 9-B Pile Hammers. Two of the five hammers used on this operation were subsequently employed for driving 14-in. timber piles 15 to 25 ft. long within the cofferdams, to grade, which submerged the hammers 30 to 40 ft. below water level.

Driving above or below water is done with equal success by the B-line of pile hammers; they are as efficient one way as the other.

Send for descriptive bulletins

McKiernan-Terry Drill Company

Rock Drills **Pile Hammers** **Lifting Jacks**
Mining and Quarrying Machinery
13 Park Row, New York

Works at Dover, N. J.

Agencies in the following Cities: Boston, Chicago, Pittsburgh, Cleveland, Detroit, St. Paul, San Francisco, Columbus, O., New Orleans, Philadelphia, Portland, Oregon. *Foreign Representatives:* British Steel Piling Co., London, England.

THOMAS

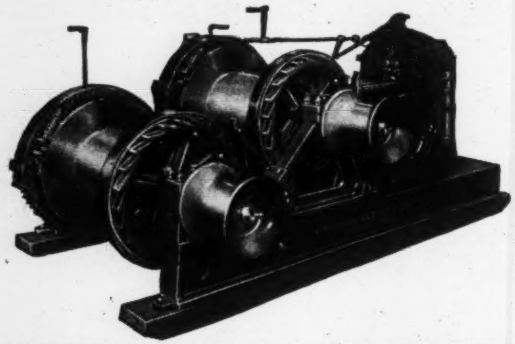
Steam and Electric Building Hoists

This type of double drum Thomas building Hoist is aiding many contractors to speed up the job and make money. Like all Thomas Hoists, it is a thoroughly well-built and dependable unit, equipped with patented band friction and automatic irreversible motor brake, turned and brushed drums, cut gears, variable speed motor, etc. Friction driven boom swinger can be added at any time.

These hoists are *built* to give the dependable service which successful contracting necessarily requires. Write for Bulletin 15.

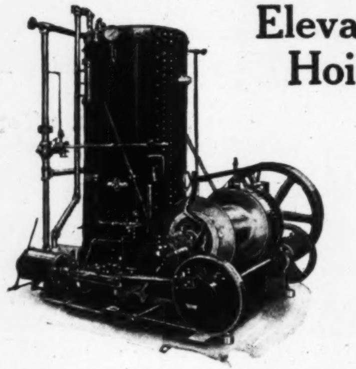
Builders of Hoists for over 30 years

Thomas Elevator Company
24 S. Hoyne Ave.
Chicago, Ill.



MUNDY
TRADE MARK
ESTABLISHED 1869

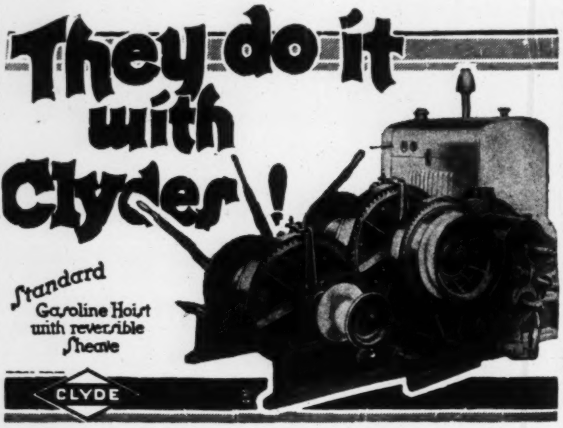
Brick Mason's Elevator Hoist



IDEAL for use in building construction for light hoisting. It is especially adapted for double elevators carrying building materials, being provided with large elevator sheave wheel clutched to the drum shaft.

Write for Catalog No. 17

J. S. Mundy Hoisting Engine Co.
Manufacturers of High Grade Hoisting Equipment
New York Sales and Export Office: 30 Church Street
Newark, New Jersey, U. S. A.



W. F. Creighton, president Foster & Creighton Co., Nashville, says: "We are very pleased with the two Gasoline Hoists; they are a step forward in building-industry equipment. * * * One of these has been operating a double cage brick hoist and a concrete tower at the same time. This has never been equalled by any other type of engine we have owned."

A multiple cylinder engine with silent belt chain drive—easily portable by truck and unusually economical of operation. Write for details.

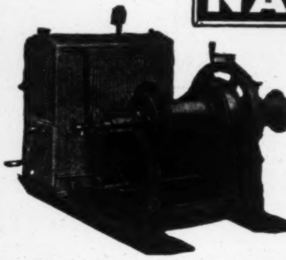
You'll take pride in your CLYDE!

Clyde Iron Works Sales Company
DULUTH, MINN., U. S. A.

Sole Distributors for Clyde Iron Works

NEW YORK NEW ORLEANS SEATTLE CINCINNATI
CHICAGO JACKSONVILLE MEMPHIS PORTLAND

NATIONAL



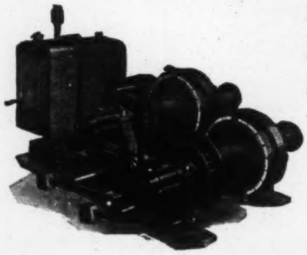
15 HP. with Le Roi Engine

Gasoline Hoists

Send for Catalog

National Hoisting Engine Co.
Office and Works:
300 Bergen St.,
Harrison, N. J.

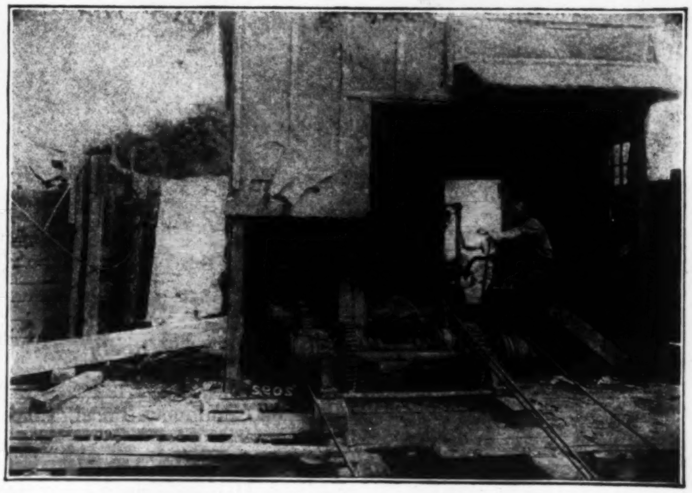
Stroudsburg Gasoline Hoists
Available from Stock



Builders of Steam, Electric and Gasoline Hoists.

Write for Bulletins

Stroudsburg Engine Works
Stroudsburg, Pa.



LIDGERWOOD HOISTS

Steam—Electric—Gasolene

for all Contractors' Uses

They Do the Work

Illustration shows a two-drum hoist with boom swinging gear, operating derrick placing granite blocks on dam walls.

Used by H. Nawn Contracting Co., in building the Gilboa Dam, New York City Water System.

CABLEWAYS—DERRICKS

Catalogs upon request.

Our engineers always at your service.

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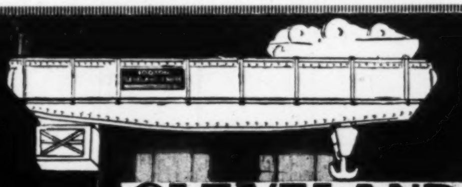
96 Liberty Street, NEW YORK

Philadelphia Pittsburgh Chicago Cleveland Los Angeles Seattle Detroit
Portland, Ore. Birmingham, Ala. Sao Paulo, Brazil Rie de Janeiro, Brazil
Woodward, Wight & Co., Ltd., New Orleans London, Englnd
Canadian Allis-Chalmers, Ltd., Toronto Mexico, D. F. Apartado 812



CLEVELAND CRANES

Conserve overhead space, side clearance and runway space. They save in the building cost. *May we explain?*

The Cleveland Crane & Engineering Co.
Wickliffe, Ohio

Sales Offices: 50 Church St., New York; 511 Farmers Bank Bldg., Pittsburgh. 149 E. Larned St., Detroit. 557 Ry. Exchange Bldg., Chicago. 500 Arch St., Pittsburgh. 2401 Chestnut St., Phila. 1309 Pine St., St. Louis.

McMYLER-

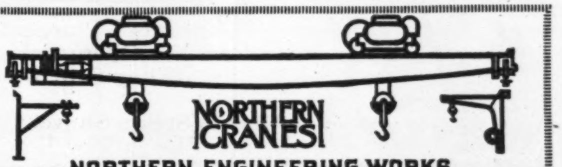
cranes

Locomotive—Crawler—Traction

Pile Drivers—Car Dumpers
Equipment for Moving Materials

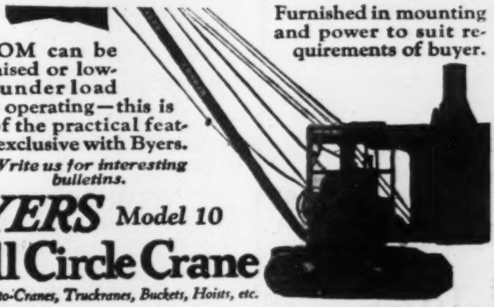
THE McMYLER-INTERSTATE CO.
CLEVELAND
Sales Offices in All Principal Cities

INTERSTATE



NORTHERN CRANES

NORTHERN ENGINEERING WORKS.
ELECTRIC HOISTS DETROIT, MICH. U.S.A. AIR HOISTS



Get a Practical Crane

Furnished in mounting and power to suit requirements of buyer.

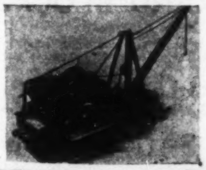
BOOM can be raised or lowered under load while operating—this is one of the practical features, exclusive with Byers.

Write us for interesting bulletins.

BYERS Model 10
Full Circle Crane

Also Auto-Cranes, Truckranes, Buckets, Hoists, etc.

THE BYERS MACHINE COMPANY, 250 Sycamore St., Ravenna, O.



FLORY HOISTS
for every requirement
STEAM—ELECTRIC
GASOLINE

S. Flory Manufacturing Co.
95 Liberty St., New York. Bangor, Pa.

Up-to-date Machinery

OSGOOD 73—3½ yd. on Traction Wheels

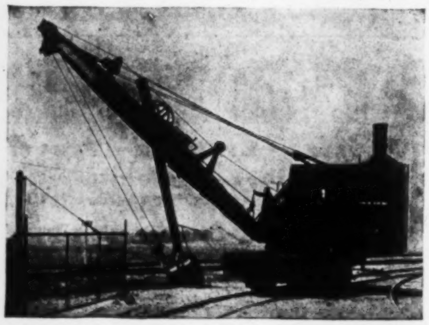
is essential to the operation of modern business. You cannot afford to fool with obsolete equipment. OSGOOD Steam Shovels are the last word in steam-shovel design. Labor-saving devices and mechanical improvements are the result of years of practical steam shovel building. You will make no mistake on an OSGOOD.

A wide range of capacities on Continuous Tread, Traction or Railroad Mountings.

1½ to 6 Cu. Yd. Railroad Type Steam Shovels

¾—1—1¼ Cu. Yd. Revolving Steam Shovels, Clamshells, Draglines and Cranes

The OSGOOD Company, Marion, Ohio, U. S. A.



With Dipper Attachment This

INDUSTRIAL CRANE

Makes a combination tool that is of great value. Dipper sizes from ¾ to 1½ yard. When equipped with standard crane, boom is available for clamshell bucket and hook work, giving maximum efficiency as a crane and a digging machine.

Our Golden Anniversary Catalog fully illustrates These Types

INDUSTRIAL WORKS
BAY CITY, MICHIGAN
NEW YORK CHICAGO PHILADELPHIA DETROIT
Sales Engineers in all Principal Cities
1873 BUILDERS OF CRANES FOR 50 YEARS 1923

"TOLEDO CRANES"

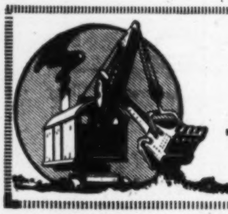
Fulfill Every Requirement
Save Time, Labor and Space

THE TOLEDO CRANE CO.
BUCYRUS, OHIO

CRANES All Types

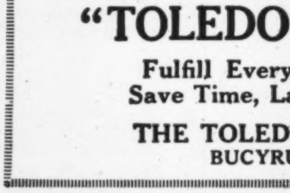
WHITING CORPORATION
HARVEY-ILL. U.S.A.
(CHICAGO SUBURB)

Foundry Equipment



—"Marions" Pioneered In Big Operations—They Still Lead

The Marion Steam Shovel Co.
Marion, Ohio, U. S. A.



STAR BRAND BLOCKS

Are Standard

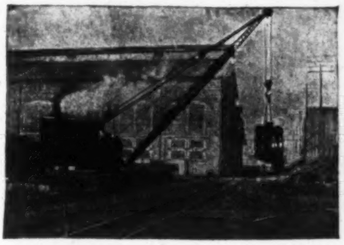
For any lift or difficult working condition they are safest, strongest and most durable.

Boston & Lockport Block Co.
108 Condor St., East Boston, Mass.

New York City
33 South St.

Chicago
413 Fort Dearborn Bldg.

O. S. Dependable



We build cranes of all types for all places.

They are built of the best workmanship and materials throughout. O. S. Cranes offer the correct solution to your problems.

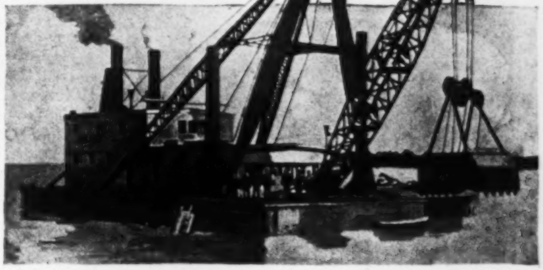
Above we illustrate an O. S. 40-ton, 8-wheel locomotive crane that is unsurpassed for simplicity and accessibility—there are few working parts and all of these are exceptionally large and strong.

Let us show you this type of Crane in action

ORTON & STEINBRENNER CO.
Offices: Chicago, Ill.
Factory: Huntington, Ind.

Cranes—Shovels—Buckets

"With our 5-yd. WILLIAMS: 'Special Dredging' Bucket, we have excavated as high as 174,000 cu. yds. per month," writes F. P. Gillen, Pres. & Gen. Mgr. of the Edw. Gillen Dock, Dredge & Constr. Co., Beardstown, Ill.



For any kind of hard digging—

get the bucket that gives you biggest output

The large output that you get with the **WILLIAMS** Special Dredging Bucket comes from its speedy action, and the power that the **WILLIAMS** tandem sheave closing arm gives for a big fast bit into tough materials.

Under water, a bucket runs into large boulders, imbedded timbers, etc., that finish an ordinary bucket in short time. But—

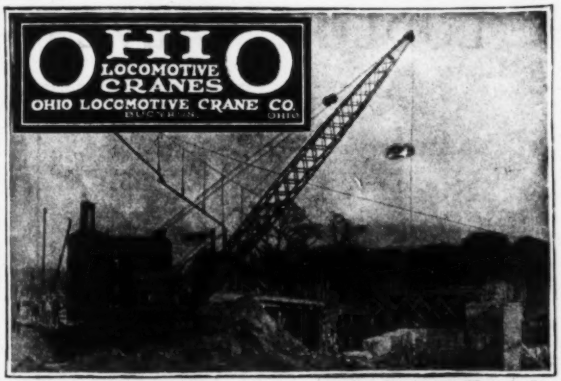
With a WILLIAMS "Special Dredging" you are protected by the WILLIAMS guarantee—"all parts guaranteed against breakage, as long as the bucket is used for the work intended."

We have a 60-page catalog that shows working photos and full descriptions of every bucket in the complete WILLIAMS line. Write for Catalog N-60.

G. H. WILLIAMS CO., Erie, Pa., U. S. A.

WILLIAMS

QUICK-ACTING CLAMSHELLS
All Parts Guaranteed Against Breakage



OHIO LOCOMOTIVE CRANES
OHIO LOCOMOTIVE CRANE CO.
BUCYRUS, OHIO

Chicago, Railway Exchange Bldg. **New York, 30 Church St.**

VULCAN

Clamshell and Orange-peel Buckets

Dredging Buckets. Hydraulic Dredging Equipment. Complete Dredges. All work designed and finished in our own plant. Backed by 50 years' experience. Repairs to all types of Buckets and Dredges.

ESTB. 1848

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Iron Works, Inc.
Jersey City, N. J.

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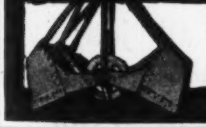

Clam Shell, Orange Peel, Electric Motor, and Drag Scraper Buckets for all excavating, dredging, and rehandling purposes. Ask for Catalog 43, or consult our engineers gratis.

The Hayward Co., 48-50 Church St., N. Y.

BUCKETS

for all kinds of digging and rehandling
for any crane. Built by Master Builders.
BLAW-KNOX COMPANY PITTSBURGH PA.

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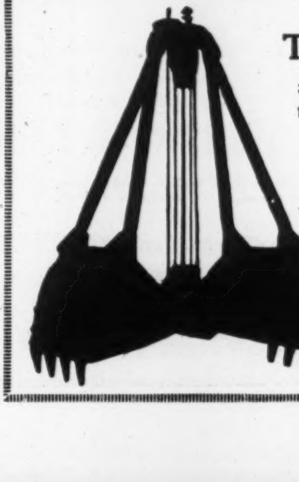
Type "J" Buckets



are designed for the Contractor. Simple and rugged in construction, less wearing parts, guaranteed against breakage, and a powerful digger. *Ask for Type "J" Pamphlet.*

THE OWEN BUCKET CO.
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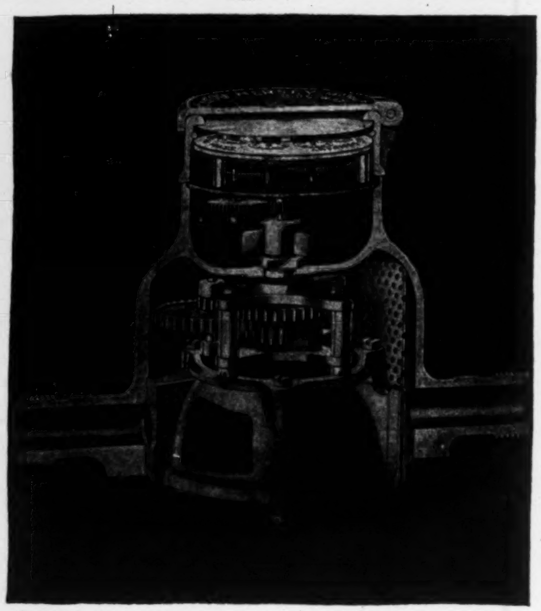

HERSEY DISC METER, MODEL HF which is the Highest type of Frost protected Meter and HERSEY DISC METER, MODEL HD which is the Highest type of Divided or split-case Meter, are the product of thirty-five years' experience and refinement in the manufacture of Water Meters. These Models excel all Meters of all makes in all those essentials which go toward making exceptionally desirable Meters.

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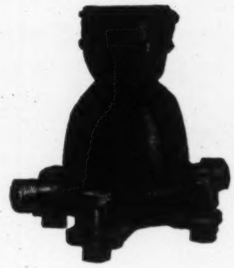


WATER METERS

Accurate
Durable
Efficient

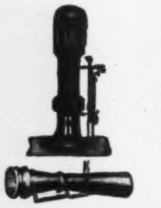
GAMON METER COMPANY
Main Office and Works:
NEWARK, NEW JERSEY

Number ten of a series of advertisements explaining the use of Simplex Venturi Tube Meter and its practical application

THE SIMPLEX
Venturi Tube Meter

is admirably adapted for Filter Plants

The present practice is to check the performance at all times of the entire plant, or any of its units, by measuring the raw water delivered to the sedimentation basin, the daily amount handled by the filters, the amount of wash water required and the gallons per day consumed by the distribution system. The Simplex meter is an ideal device to determine these data and for regulating the amount of chemical solutions that must be added to the water in proportion to the rate of flow.



Cut shows standard Simplex Meter Register connected to a Venturi tube which is inserted in the pipe line.

Repeat orders from many engineers and water works managers are the testimonials of the faith placed in Simplex Devices for their filtration plant.

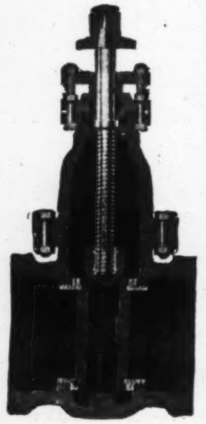
"Simplex Installations Give Satisfaction"

Simplex Valve and Meter Company

300 Fidelity Building, Philadelphia

MANUFACTURERS OF METERS AND RATE CONTROLLERS OF THE VENTURI TYPE, GAUGES AND OTHER WATER WORKS DEVICES

LUDLOW VALVES



FEATURES

of Ludlow Double Gate Valves, one of our best known products:

1—Simple in construction—few parts.

2—No locking or wedging of gates, till directly opposite port of valve opening.

3—No grinding or dragging faces of gates on seats.

4—No binding of stem in wedge.

5—No stripping thread from stems.

6—Less wear of faces and gates.

7—Work equally well with pressure on either side of gate.

Make a "once for all" job!

Get a Ludlow Catalog

The Ludlow Valve Mfg. Co.

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BRANCHES: New York, 62 Gold Street; Boston, 112 Water Street; Philadelphia, Harrison Building; Pittsburgh; First National Bank Building; Chicago, 633-635 The Rookery; Kansas City Office, R. A. Long Building; San Francisco, Calif.; W. P. Horn Co., Rialto Building; Los Angeles, Calif., W. P. Horn Co., Kerckhoff Building.

Southern Representative:
W. F. Wilcox, 1206 Fourth National Bank Bldg., Atlanta, Ga.

"IN the elder days of art
Builders wrought with greatest care
Each minute and unseen part
For the Gods see everywhere."

—*LONGFELLOW* (*The Builders*)

TODAY that same spirit dominates the automatic machinery in the Neptune Meter Plant—for everywhere the eyes of the waterworks field are upon Trident Meters. That Trident Meters are "wrought with greatest care" is one reason why over 2,500,000 are in use today, and over 200,000 were made and sold during 1922.

Neptune Meter Company

Pioneers in Meter Progress

50 East 42nd Street, New York City

Boston Chicago San Francisco Atlanta Los Angeles Seattle Portland St. Louis, Mo.

WATER METERS

ARCTIC
Frost Bottom

KEYSTONE
COMPOUND

EUREKA
Current

KEYSTONE
All-Bronze

PITTSBURGH METER COMPANY
East Pittsburgh, Pa.

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Made for maximum service not merely the average

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Jenkins Bros

Time-Tested Quality

The design and construction of Jenkins Valves represent the accumulated knowledge gained from 59 years of valve manufacturing experience.

They have proved their quality by years of unfailing valve service.

This time-tested quality is symbolized and protected by the Jenkins signature and "diamond," cast on the body. Look for these marks, they assure you of durability and dependability in valves.

Valves in bronze, iron and steel for all requirements. At supply houses everywhere.

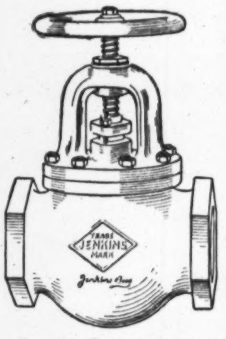

Fig. 141, Screwed, Standard Iron Body Globe Valve.

JENKINS BROS.

80 White Street.................New York, N. Y.
524 Atlantic Avenue............Boston, Mass.
646 Washington Boulevard....Chicago, Ill.
133 No. Seventh Street, Philadelphia, Pa.

Always marked with the "Diamond"

Jenkins Valves

2827-J SINCE 1864

PROTECT THE METERS

Winter weather need not cause trouble if

DICKEY METER BOXES

are used to house the meters. Dickey Meter Boxes are made of Vitrified Salt Glazed Clay and will not decay or disintegrate.

Write for catalog and prices.

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Established 1885
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ELECTRIC CONTROL UNIT

FOR THE MOTOR OPERATION OF LARGE GATE AND GLOBE VALVES

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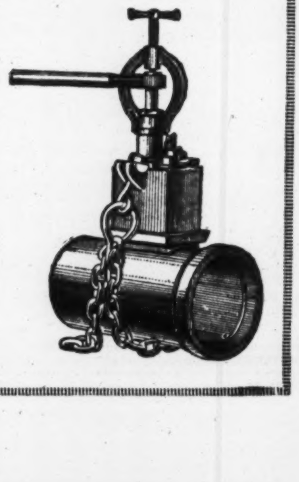
Easily Carried By One Man

This light, durable machine will be sent on approval for 30 days trial If not as represented, send it back.



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Write for latest bulletins of this and other waterworks appliances.

The A. P. Smith Mfg. Co.
East Orange, N. J.

R. D. WOOD & CO.
ESTABLISHED 1803
PHILADELPHIA, PA.

"Mathews" Reg. U. S. Pat. Off. **Fire Hydrants**
Valves
Gate, Foot and Check

Cast Iron Pipe and Fittings, Special Castings
For Water, Gas and High Pressure Service

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For every material handling need.

We design, manufacture and erect BELT CONVEYORS, BUCKET ELEVATORS, SKIP HOISTS, COAL AND COKE CRUSHERS, "PERFEX" SCREENS, COAL STOCKING AND RECLAIMING BRIDGES and many other types of material handling equipment. *Write for Handbook of Conveyor Practice.*

ROBINS CONVEYING BELT COMPANY

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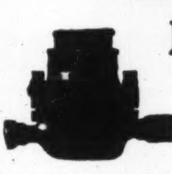
WORTHINGTON

Meters



Meter frozen, showing compression of frost clamps

The upkeep cost of 35,000 Worthington Model "G" meters was four cents a year. Worthington frost clamps save money in winter, too. Ask for proof.

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THE VENTURI METER

"VENTURI" Registered Trade Mark

For Water, Sewage, Gas, Air, Steam— in fact everything that flows.

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PIONEER MANUFACTURERS of LIQUID CHLORINE
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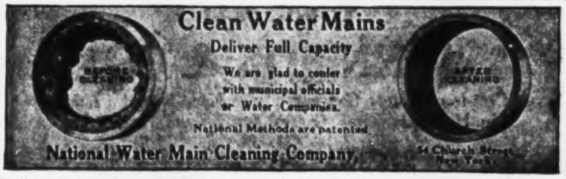

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Deliver Full Capacity

We are glad to confer with municipal officials or Water Companies.

National Methods are patented

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Steel
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Water Softeners for Boiler Feed-Water. Hot Process, Cold Continuous, and Zeolite Softeners. Pressure and Gravity Filters. Water Heaters. We make all successful types.

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WATER-*fit for use*

Filtration and Water Softening Plants

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A sterilized water supply guarantees that the water will not cause disease because the microbes of disease are killed.

Can any community afford not to have this protection?

WALLACE & TIERNAN
COMPANY, INCORPORATED
Manufacturers of Chlorine Control Apparatus
NEWARK, NEW JERSEY

15

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AMERICAN WATER SOFTENER COMPANY
4th and LEHIGH AVES. PHILADELPHIA, PA.
No affiliation or working agreement with any of our competitors

WATER SOFTENING AND FILTRATION PLANTS

INTERNATIONAL FILTER CO.
333 West 25th Place, Chicago
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CF Co

WATER

FILTERS
SOFTENERS
STERILIZERS

Industrial-Municipal-Domestic-Swimming Pools

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For Purifying Water

Pennsylvania Salt Mfg. Company, Philadelphia, Pa., U. S. A.

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Made in continuous lengths up to 30 lineal feet. Smooth on inside and true to diameter. We specialize in dredging pipe. We also make welded Spiral-Seam pipe of special analysis hard sheet steel for heavy duty service. Write for particulars.

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Pipe Specialists for 48 years
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SPECIAL CASTINGS
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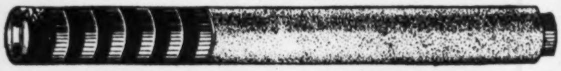

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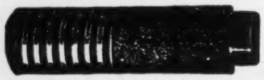
Will furnish Pipe to suit Conditions.
Standard Wood Pipe Company, Williamsport, Pa.



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CONTINUOUS STAVE AND MACHINE BANDED
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CREO-WOOD FLUME WOOD CONDUIT
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McWANE PRECALKED JOINT PIPE **CAST IRON**

Sizes 1¼ in. and Up
Standard fittings used. Catalog N.
McWANE CAST IRON PIPE CO.
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No Bell Holes

GLAMORGAN PIPE & FOUNDRY CO.
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Manufacturers of
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Registered U. S. Patent Office
FOR JOINTING CAST IRON WATER MAINS
NO CAULKING
Saves 50% to 75%
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Standard Capacities up to 60,000 pounds
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Standard or Special Design
DAYTON GLOBE IRON WORKS
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FLEXIBLE JOINTS
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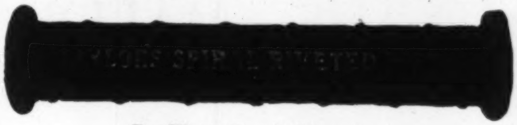

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Mines, Mills, Hydraulic Operations, Hydro-Electric Plants, Dredging, etc.

Furnished Asphalted or Galvanized from 3 to 42 inches diameter and fitted with forged steel connections

Hydraulic Giants, Flexible Joints, Valves and Fittings for complete installations

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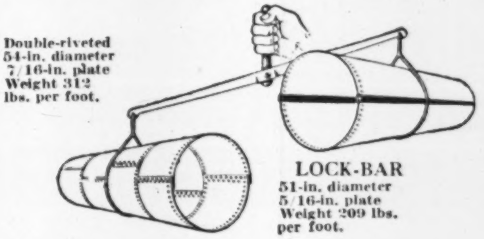

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Before *Closing*
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"The Automatic"
Heavy Oil Engine

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All the simplicity and pick-up of the best gasoline engine with the fuel economy of a heavy oil engine.

Learn how this lighter, simpler more efficient power unit can save its cost in a year on your job.

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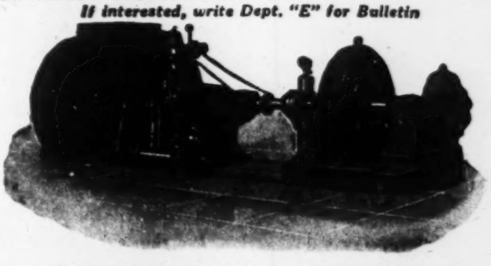
if water-power users would replace their antiquated and inefficient water wheels with SMITH TURBINES.
If interested, write Dept. "E" for Bulletin



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Hydraulic Engineers
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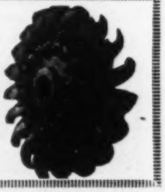

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STEAM PUMP
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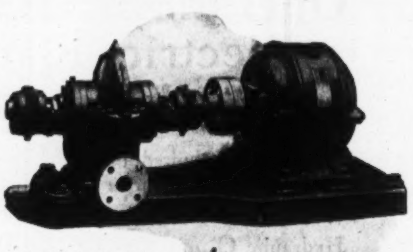
One of four 72-inch Drainage Pumps furnished the City of Memphis, Tenn.

FROM THE LARGEST TO THE SMALLEST

Allis-Chalmers Centrifugal Pumps are built for the largest special installations and in the smaller standard sizes with the same careful consideration of all details, consequently they can be depended upon to meet your requirements for practically any kind of pumping work.

Our sixty-page bulletin describing Allis-Chalmers single and multistage pumps and including other valuable information ought to be in the reference library of every user of centrifugal pumps. Your copy will be sent on request.



A 1½-inch motor driven type GS pump.

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WELL DRILLS AND EXCAVATORS

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DEEP WELL AND CENTRIFUGAL PUMPS

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KEYSTONE DRILLER CO., Beaver Falls, Pa.
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MORRIS Since 1864
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Since 1864 we have been building Centrifugal Pumps, Hydraulic Dredges and Steam Engines.
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Fig. 45

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will handle your liquids with solids in suspension at the minimum cost. Belt, motor or steam direct drive.
Send for Bulletin 35
ERIE PUMP & ENGINE WORKS
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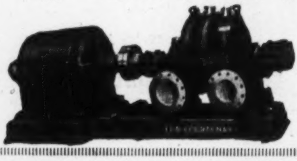

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LECOURTENAY CO.
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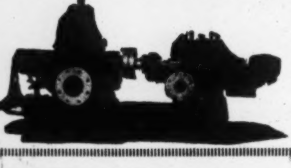

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For all purposes where Centrifugal Pumps of the better class are adapted.
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RoTURBo CENTRIFUGAL PUMPS
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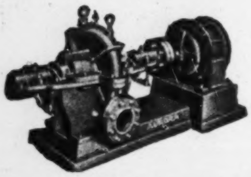

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AURORA PUMP & MFG. CO.,
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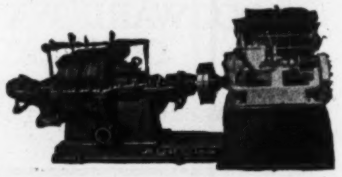
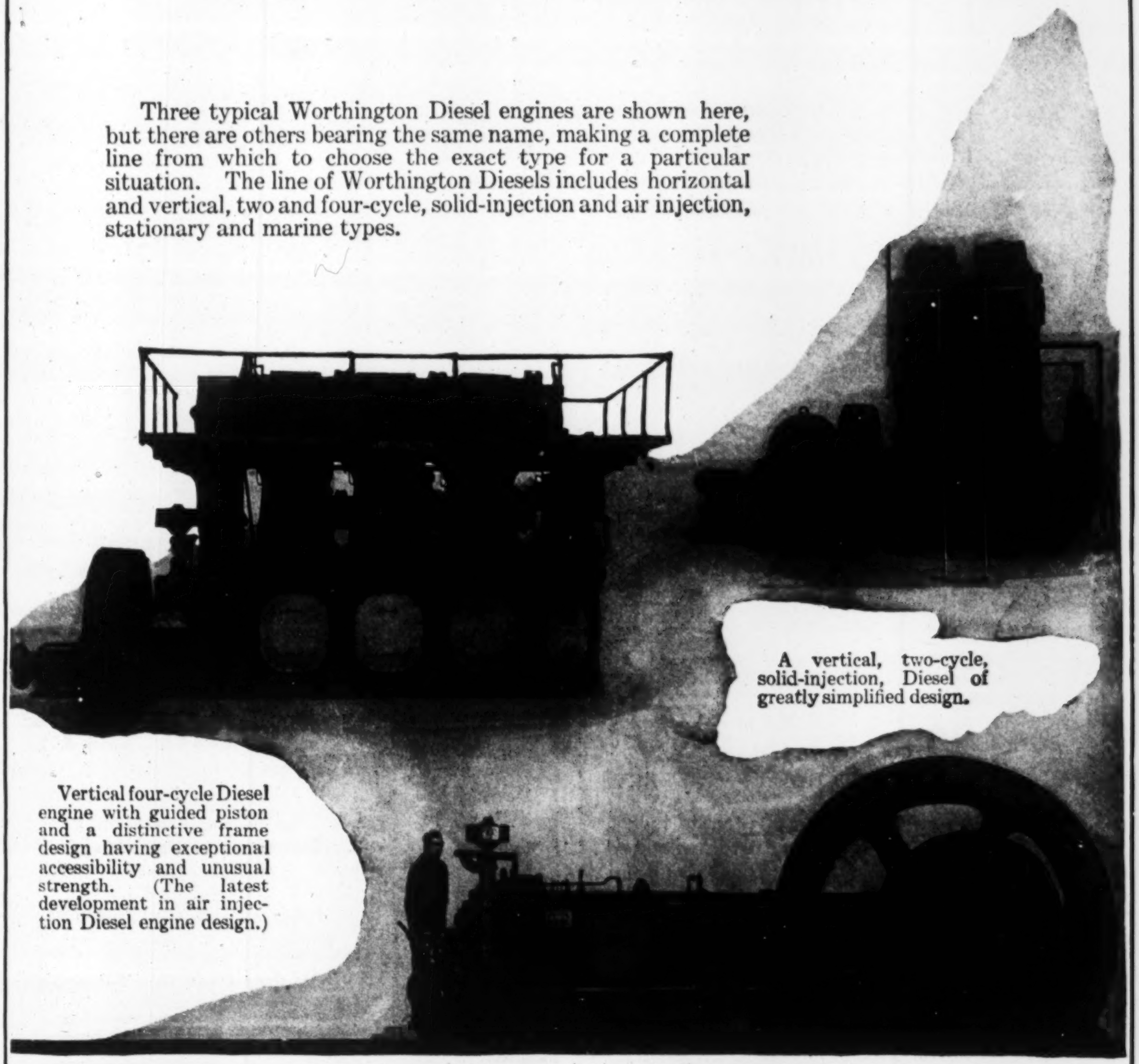


Worthington Diesel Engines A type for every service

Three typical Worthington Diesel engines are shown here, but there are others bearing the same name, making a complete line from which to choose the exact type for a particular situation. The line of Worthington Diesels includes horizontal and vertical, two and four-cycle, solid-injection and air injection, stationary and marine types.



A vertical, two-cycle, solid-injection, Diesel of greatly simplified design.

Vertical four-cycle Diesel engine with guided piston and a distinctive frame design having exceptional accessibility and unusual strength. (The latest development in air injection Diesel engine design.)

The Worthington-Snow horizontal four-cycle Diesel engine, a massive, sturdy engine for heavy duty.

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Laidlaw Works, *Cincinnati, Ohio.*

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Gas Engine Works, *Cudahy, Wis.*
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Alphons Custodis Chimney Construction Co.

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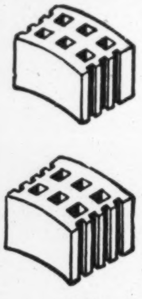

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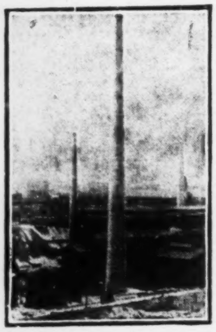

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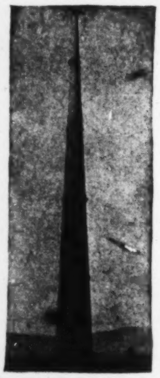

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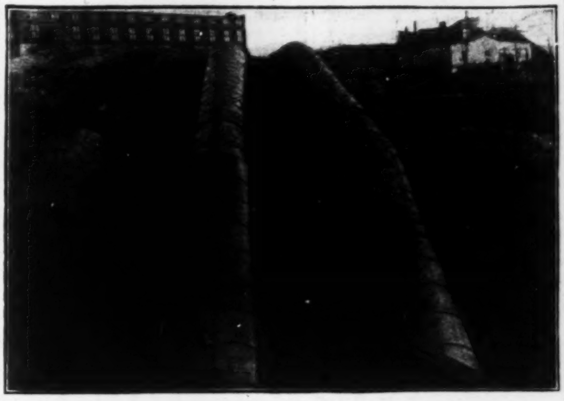

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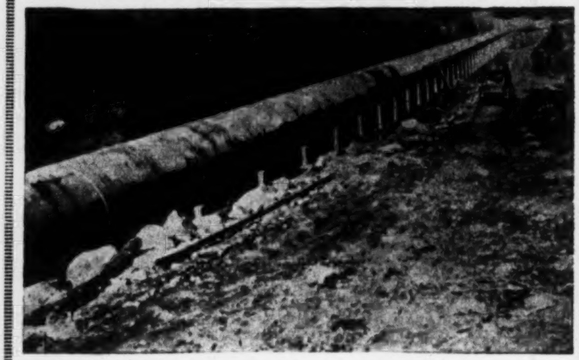

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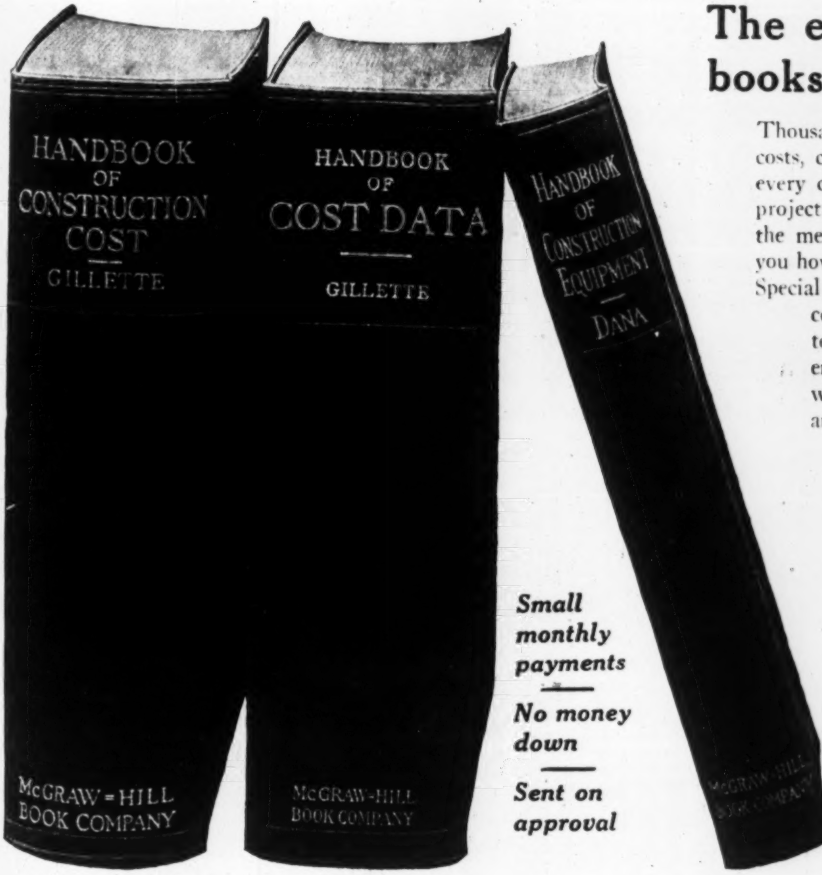

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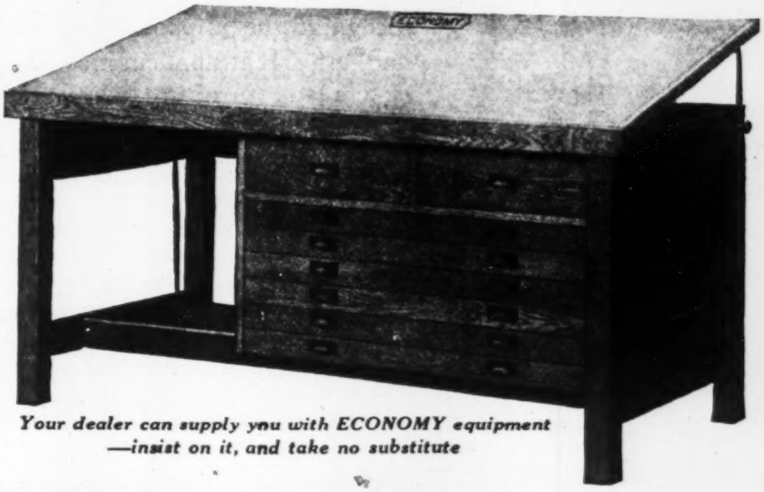

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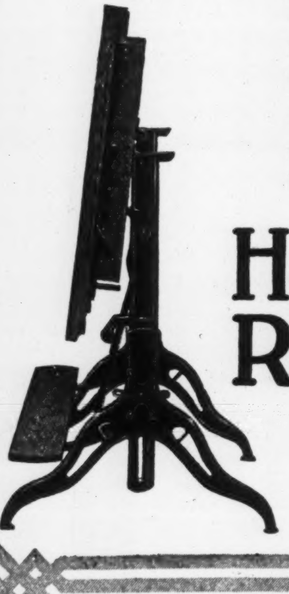

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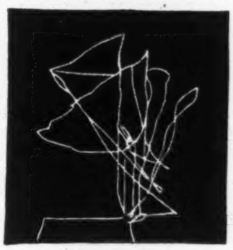

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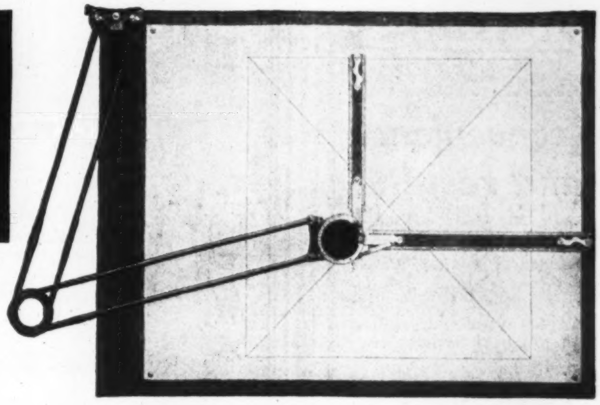

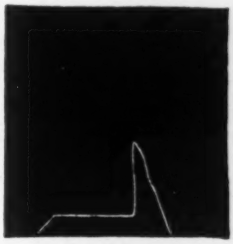

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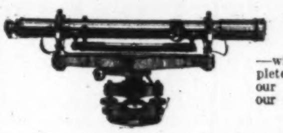

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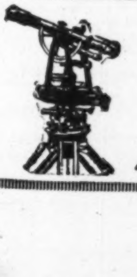

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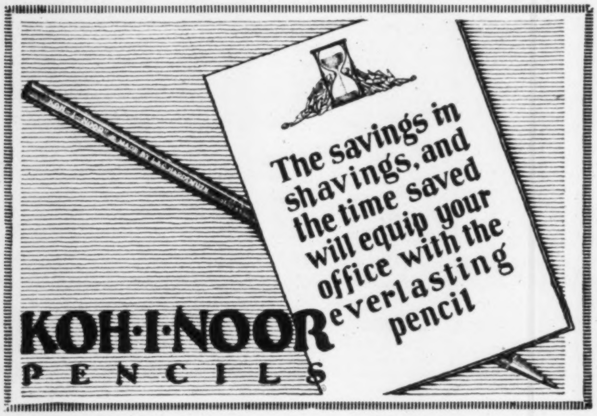
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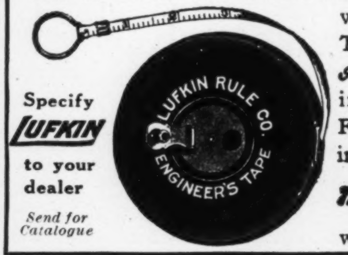

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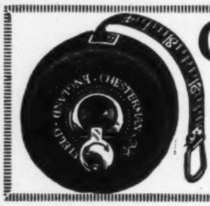

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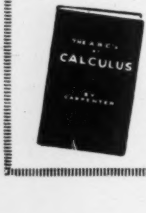

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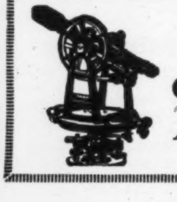

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See Searchlight Section for used Equipment.

Adding Machines
Monroe Cacul. Mach. Co.

Asbestos & Asbestos Prods.
Carey Co., The Philip

Ash Handling Machinery
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Specialty Engr. Co.

Asphalt
Carey Co., The Philip
Gilmore Oil Co.
Standard Oil Co. of N. Y.

Asphalt Plants
Austin Machinery Corp.

Back-Fillers
Austin Machinery Corp.
Moore Trench Mch. Co.
Parsons Co.
Pawling & Harnischfeger Co

Banking & Financing
Stone & Webster, Inc.
Ulen & Company

Bar Benders & Cutters
Ransome Concrete Mach. Co

Bar Chairs, Reinforcing
Concrete Steel Co.
Corrugated Bar Co.
Universal Clamp Co.

Barges, Concrete
Ambursen Construction Co.

Barges, Steel
Graver Corpn.

Bars, Iron & Steel
Bethlehem Steel Co.
Ryerson & Son, Joseph T.

Batchers, Adjust. Measuring
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.

Beam Wrapping
Mitchell-Tappen Co.

Belting
Robins Conveying Belt Co.

Bins, Storage
Berger Mfg. Co.
Blaw-Knox Co.
Brown Hoisting Mach. Co.
Heltzel Steel Form & Iron Co.

Blocks, Segment
Dickey Clay Mfg. Co.

Blocks and Tackle
Boston & Lockport Block Co

Blowpipes, Welding & Cutting
Oxweld Acetylene Co.

Blue Print Drying Machines
Pease Co., The C. F.

Blue Printing Machines
Pease Co., C. F.
Wickes Bros.

Boilers
Abendroth & Root Mfg. Co.
Babcock & Wilcox Co.

Boiler Settings
Ballard, Sprague & Co.

Bolts, Nails, Nuts, Rivets & Spikes
Bethlehem Steel Co.
Foster Co., L. B.
Ryerson & Son, Joseph T.

Bonding Companies
See Searchlight Section

Books, Engineering and Technical
Carpenter, C. C.
McGraw-Hill Book Co.

Boxes, Annealing
Blaw-Knox Co.

Brakes, Air
Westinghouse Tr. Brake Co.

Bridges
Belmont Iron Works
Berlin Constr. Co.
Bethlehem Steel Co.
Blaw-Knox Co.
Boston Bridge Works
Brown Hoisting Mach. Co.
Eastern Bridge & Struc. Co.
Fort Pitt Bridge Works
Independent Bridge Co.
Kenwood Bridge Co.
McClintic-Marshall Co.
Milwaukee Bridge Co.
Morava Construction Co.
Mount Vernon Bridge Co.
Parsons, Klapp, Brinckerhoff & Douglass
Penn. Bridge Co.
Phoenix Bridge Co.
Pittsb'gh-Des Moines St. Co.
Raymond Concrete Pile Co.
Riverside Bridge Co.
Shoemaker Bridge Co.
Strobel Steel Constr. Co.
Virginia Bridge & Iron Co.
Wisconsin Bridge & Iron Co.

Bridges, Bascule
Strobel Steel Constr. Co.

Bridge Operating Mchy.
Earle Gear & Machine Co.
Steele & Condict, Inc.

Buckets, Clam Shell
Blaw-Knox Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Hayward Co.
Industrial Works
Lakewood Engineering Co.
McMyler Interstate Co.
Mead-Morrison Mfg. Co.
Orton & Steinbrenner Co.
Owen Bucket Co.
Vulcan Iron Works of N. J.
Williams Co., G. H.

Buckets, Concrete
Insley Mfg. Co.
Ransome Concrete M'chy. Co.
Union Iron Works

Buckets, Dragline
Brown Hoisting Mchy. Co.
Hayward Co.

Buckets, Dredging and Excavating
Blaw-Knox Co.
Haiss Mfg. Co., Inc., Geo.
Marion Steam Shovel Co.
Mead-Morrison Mfg. Co.
Osgood Company
Owen Bucket Co.
Union Iron Works
Williams Co., G. H.

Buckets, Elevator
(See Elevators, Bucket)

Buckets, Orange Peel
Hayward Co.
McMyler Interstate Co.
Mead-Morrison Mfg. Co.
Orton & Steinbrenner Co.
Owen Bucket Co.
Vulcan Iron Works of N. J.

Building Paper
Carey Co., The Philip

Buildings, Steel
Belmont Iron Works
Blaw-Knox Co.
Corrugated Bar Co.

Cableways
Blaw-Knox Co.
Flory Mfg. Co., S.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Roebling's Sons Co., J. A.

Cableway Excavators
(See Excavators Cableway)

Caissons
Bethlehem Steel Co.
Graver Corpn.

Calculating Machines
Monroe Calcul. Mach. Co.

Cars, Concrete
Ransome Concrete Mchy. Co.

Cars, Industrial V Dump
Insley Mfg. Co.
Lakewood Engineering Co.
Ramapo Ajax Co.
Western Wheeled Scraper Co

Carts, Concrete
Insley Mfg. Co.
Ransome Concrete Mchy. Co.

Castings, Iron and Steel
Amer. Cast Iron Pipe Co.
Bethlehem Steel Co.
Central Foundry Co.
Fox & Co., John
Jeffrey Mfg. Co.
McWane Cast Iron Pipe Co.
Marion Malleable Iron Wks.
Marion Steam Shovel Co.
U.S. Cast Ir. Pipe & Fdy. Co.
Vulcan Iron Works of Pa.
Warren Fdry. & Pipe Co.

Castings, Street and Sewer
Central Foundry Co.
U. S. C.I. Pipe & Fdry. Co.

Cement
Carney Co., The
Lawrence Cement Co.
Pennsylvania Cement Co.
Portland Cement Assn.
Vulcanite Port. Cement Co.

Cement-Guns
Cement-Gun Co.

Cement-Making Machinery
Allis-Chalmers Mfg. Co.
Austin Machy. Corp.
Vulcan Iron Works of Pa.
Worthington Pump & Mchy. Corp.

Centers, Steel, Collapsible
Blaw-Knox Co.

Chain, Steel and Malleable Sprocket
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Geo.
Jeffrey Mfg. Co.
Ryerson & Son, Joseph T.

Channelers
Sullivan Mchy. Co.

Chimneys, Concrete
General Concrete Constr. Co.
Heine Chimney Co.
Rust Engineering Co.
Summerhays & Sons Co.,
Weber Chimney Co.
Wiederholdt Construction Co

Chimneys, Radial Brick
American Chimney Corp.
Ballard, Sprague & Co.
Custodis Chimney Construction Co., Alphons
Heine Chimney Co.
Heinicke Inc., H. R.
Kellogg Co., M. W.
Rust Engineering Co.
Summerhays & Sons Co.,
Wiederholdt Construction Co.

Chimneys, Steel
Blaw-Knox Co.
Chicago Bridge & Iron Wks.
Graver Corpn.
Honhorst Co., The Jos.
Littleford Bros.

Chloride of Lime
Penna. Salt Mfg. Co.

Chlorinators
Wallace & Tiernan Co., Inc.

Chlorine, Liquid
Electro Bleaching Gas Co.
Wallace & Tiernan Co., Inc.

Chutes, Concrete
Insley Mfg. Co.
Lakewood Engr. Co.
Ransome Concrete Mchy. Co

Clips, Wire Rope
Laughlin Co., The Thos.

Coal & Ore-Conveying Mchy.
Brown Hoisting Mchy. Co.
Byers Machine Co.
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Lidgerwood Mfg. Co.
McMyler Interstate Co.
Mead-Morrison Mfg. Co.
Specialty Engr. Co.

Coal-Storage Systems
Haiss Mfg. Co., Geo.
Jeffrey Mfg. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.

Cofferdams, Steel
Bethlehem Steel Co.

Column Clamps
Concrete Steel Co.
Pyle-Rogers Corp.
Universal Form Clamp Co.

Column Forms
Blaw-Knox Co.
Concrete Steel Co.
Heltzel Steel Form & Ir. Co.

Compressors, Air, Heavy Duty
Allis-Chalmers Mfg. Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
McKiernan-Terry Drill Co.
Sullivan Mchy. Co.
Westinghouse Tr. Brake Co.
Worthington Pump & Mchy. Corp.

Compressors, Air, Portable
Cement-Gun Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Sullivan Mchy. Co.

Concrete Floor Hardener
Anti-Hydro Waterpr'f'g Co.
Detroit Graphite Co.
Sonneborn Sons, Inc., L.
Toch Brothers
Truscon Laboratories

Concrete Making Machinery
Ransome Concrete Mchy. Co

Concrete Reinforcement
American Steel & Wire Co.
Berger Mfg. Co.
Bethlehem Steel Co.
Brown Hoisting Mchy. Co.
Carnegie Steel Co.
Concrete Steel Co
Consolidated Expanded Metal Cos.
Corrugated Bar Co.
Keystone Gypsum Fireproofing Co.
Laclede Steel Co.
Mitchell-Tappen Co.
National Steel Fabric Co.
Northwestern Expanded Metal Co.
Ryerson & Son, Joseph T.

Condensers
Ingersoll-Rand Co.
Worthington Pump & Mchy. Corp.

Contractors
Cement-Gun Construction Co
Cement-Gun Contracting Co.
MacArthur Conc. Pile & Fdation. Co.
Pratt-Thompson Constr. Co.
Spencer, White & Prentis
Stone & Webster, Inc.
Terry & Tench Co., Inc.

Conveyors, Belt
Austin Western Rd. Mch. Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Robins Conveying Belt Co.
Specialty Engr. Co.

Conveyors, Bucket
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Jeffrey Mfg. Co.
Specialty Engr. Co.

Corner Bead Metal
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.

Cranes, Crawling Tractor
Industrial Works
Universal Crane Co.

Cranes, Electric
Universal Crane Co.

Cranes, Locomotive
Bay City Dredge Works
Brown Hoisting Mchy. Co.
Byers Mach. Co.
Clyde Iron Works Sales Co.
Erie Steam Shovel Co.
Industrial Works
McMyler Interstate Co.
Marion Steam Shovel Co.
Ohio Locomotive Crane Co.
Orton & Steinbrenner Co.
Osgood Company
Pawling & Harnischfeger Co.
Universal Crane Co.
Thew Shovel Co.

Cranes, Motor-Truck
Byers Machine Co.
Universal Crane Co.

Cranes, Traveling
Brown Hoisting Mchy. Co.
Cleveland Crane & Eng. Co.
Northern Engineering Wks.
Pawling & Harnischfeger Co
Toledo Crane Co.
Whiting Corporation

Cranes, Wrecking
Industrial Works

Creosoted Blocks, Timber Poles, Cross-Arms Lumber,
Amer. Creosoting Co. (Ky.)
Amer. Creosoting Co. (N.Y.)
Colonial Creosoting Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Long-Bell Lumber Co.
Republic Creosoting Co.
Wyckoff Pipe & Creo. Co.

Creosoting
Amer. Creosoting Co. (Ky.)
American Creosote Works
Barrett Company
Colonial Creosoting Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Wyckoff Pipe & Creo. Co.

Creosoting Oils
Barrett Company
Protexol Corp.

Crushers and Pulverizers
Allis-Chalmers Mfg. Co.
Austin-Western Rd. Mch.Co.
Brown Hoisting Mchy. Co.
Jeffrey Mfg. Co.
Universal Road Mchy. Co.

Culverts, Corrugated
Armco Culvert & Flume Mfrs. Assn.
Austin-Western Rd. Mch.Co.
Canton Culvert & Silo Co.
Hardesty Mfg. Co., The R.

Culverts, Metal
Amer. Sheet & Tin Plate Co.
Armco Culvert & Flume Mfrs. Assn.
Austin-Western Rd. Mch Co
Hardesty Mfg. Co., The R
U.S. Cast Ir. Pipe & Fdy. Co

Culverts, Nestable & Riveted Corrugated
Armco Culvert & Flume Mfrs. Assn.
Canton Culvert & Silo Co.

Curb Guards, Steel
Godwin Co., Inc., W. S.

Curbs, Steel Protected
Concrete Steel Co.

Dams
Amburson Construction Co.

Dealers, Equipment
See Searchlight Section

Derricks and Derrick Fittings
Byers Mach. Co.
Clyde Iron Works Sales Co.
Dobbie Fdry. & Mach. Co.
Haiss Mfg. Co., Geo.
Hayward Co.
Insley Mfg. Co.
Lidgerwood Mfg. Co.
McMyler Interstate Co
Mundy Hoist. Eng. Co., J. S.

Distributors, Pressure Oil
(See Road Oilers, Pressure)

Ditching Machinery
(See Excavators)

Docks and Harbor Work
Parsons, Klapp, Brinkerhoff & Douglass
Raymond Concrete Pile Co.
Snare Corp., Frederick

Drafting Machines
Universal Drafting Mch. Co.

Drafting Room Furniture and Supplies
Dietzgen Co., Eugene
Economy Drg. Table & Mfg Co.
Hamilton Mfg. Co.
Pease Co., C. F.

Draglines
Universal Crane Co.

Drawing Instruments
Pease Co., The C. F.

Drawing Materials
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Keuffel & Esser Co.
Koh-I-Noor Pencil Co.
Pease Co., The C. F.
Wood-Regan Instr. Co.

Drawing Tables
(See Tables and Bds. Drg.)

Dredges
Bay City Dredge Works
Hayward Co.
Lidgerwood Mfg. Co.
Marion Steam Shovel Co.
Osgood Company

Dredges, Dipper
Austin Mchy. Corp.
Erie Steam Shovel Co.
Osgood Company

Dredges, Hydraulic
Atlantic Gulf & Pacific Co.
Marion Steam Shovel Co.
Morris Machine Co.

Drills, Core
Ingersoll-Rand Co.
Keystone Driller Co.
McKiernan-Terry Drill Co
Sullivan Mchy. Co.

Drills, Rock
Chicago Pneumatic Tool Co
Jeffrey Mfg. Co.
Ingersoll-Rand Co.
McKiernan-Terry Drill Co
Sullivan Mchy. Co.

Drums, Holding
Blaw-Knox Co.
Haiss Mfg. Co., Inc., Geo
Hayward Co.

Dryers
Blaw-Knox Co.

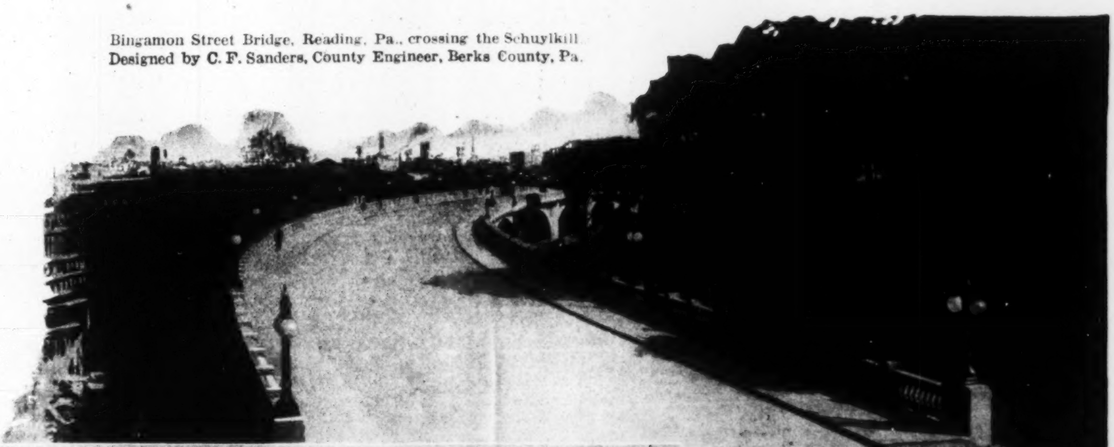
Dryers, Sand and Gravel
Vulcan Iron Works of Pa

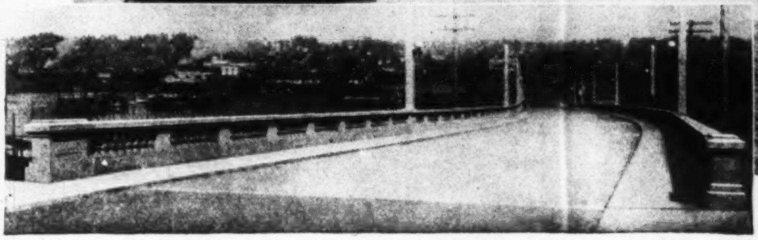
Elevators, Bucket
Austin-Western Rd. Mch.Co.
Brown Hoisting Mchy. Co
Haiss Mfg. Co., Inc., Geo
Hendrick Mfg. Co.
Jeffrey Mfg. Co.
Monighan Mach. Co.
Ohio Locomotive Crane Co.

Elevators; Contractors' Material
Austin-Western Rd. Mch Co
Byers Mach. Co.
Clyde Iron Works Sales Co
Haiss Mfg. Co., Inc., Geo.
Insley Mfg. Co.
Ransome Concrete Mchy. Co
Thomas Elevator Co.

Elevators, Factory
Ridgway & Son Co., Craig

Bingamon Street Bridge, Reading, Pa., crossing the Schuylkill
Designed by C. F. Sanders, County Engineer, Berks County, Pa.





Bridge at Olympia, Wash. Elastite Expansion Joint used.

Protecting great bridges against temperature

TEMPERATURE fluctuation, and the consequent expanding and contracting of these great concrete masses, are rendered harmless to the durability of big bridges and viaducts by the installation of Elastite Expansion Joint at regular intervals.

The fact that Elastite Expansion Joint, "the sandwich joint," is handled as a slab, in any dimension and thickness, makes installation comparatively simple and easy. It is the practical joint used exclusively by practical engineers and contractors. It is easily cut to shape with an old saw, or can be supplied cut to exact fit to meet your requirements.

When you need "joint," remember that there are big stocks of Elastite Expansion Joint in seventeen cities. Your order will be immediately shipped to your job from the nearest point. Send for sample and all the facts.

THE PHILIP CAREY COMPANY
18 Wayne Ave., Lockland, Cincinnati, Ohio

Carey Elastite Expansion Joint is used in these bridges and viaducts

Akron Ohio	North Hill Viaduct
Augusta, Ga.	Archibald W. Butts Memorial Bridge
Bethlehem, Pa.	Hill-to-Hill Bridge
Cincinnati, Ohio	Park Avenue Bridge
Fort Wayne, Ind.	Harrison Street Bridge
Galveston, Texas	Galveston Causeway
Hawkinsville, Ga.	Ocmulgee River Bridge
Kansas City, Mo.	Benton Boulevard Viaduct
Little Rock, Ark.	Broadway Bridge
Oahu, Hawaii	Heeia Viaduct
Pulaski, New York	Salmon River Bridge
Reading, Pa.	Bingamon Street Bridge
St. Louis, Mo.	Chauteau Avenue Viaduct
St. Louis, Mo.	Jefferson Avenue Bridge
Laredo, Texas	Laredo International Bridge
Washington, D. C.	Key Bridge
Watertown, New York	Grove Street Bridge

Carey Elastite
Trade Mark Reg. U S Pat Office
EXPANSION JOINT
PROVED AND ACCEPTED

Carey Elastite Expansion Joint is an asphaltic body, formed of a high-grade asphaltic compound carefully refined and tempered, sandwiched between two walls of asphalt-saturated felt forming an elastic, compressible joint. It is made in lengths, widths and thicknesses as required, can be cut to crown or to any special shape and comes to the job ready to use.

12-23

Engineers, Roofing
Federal Cement Tile Co.
Marks Corp., The H. E.

Engineers
(See also Directory of Engineers)
Atlantic Gulf & Pacific Co.
MacArthur Conc. Pile & Fdation. Co.
Parsons, Klapp, Brinckerhoff & Douglas
Raymond Concrete Pile Co.
Spencer, White & Prentis
Stone & Webster, Inc.
Terry & Tench Co., Inc.

Engineers' and Draftsmen's Instruments and Supplies
Beckmann Co., L.
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lufkin Rule Co.
Monroe Calcul. Mch. Co.
Weber Co., The F.
Wiebusch & Hilger, Ltd.
Wood-Regan Instr. Co.

Engines, Gas, Gasoline & Oil
Allis-Chalmers Mfg. Co.
Automatic Machine Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Worthington Pump & Mchy. Corp.

Engines, High Duty Water-Works
Morris Machine Works

Engines, Hoisting
(See Hoists)

Engines, Steam
Chicago Pneumatic Tool Co.

Engines, Traction
Best Tractor Co., C. L.

Excavator, Cableway
Clyde Iron Works Sales Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Sauerman Bros.

Excavators, Ditch & Trench
Austin Mchy. Corp.
Bay City Dredge Works
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Moore Trench Mch. Co.
Osgood Company
Parsons Co.
Pawling & Harnischfeger Co.
Thew Shovel Co.

Excavators, Dragline
Austin Machinery Corp.
Bay City Dredge Works
Byers Mach. Co.
Erie Steam Shovel Co.
Hayward Co.
Marion Steam Shovel Co.
McMyler-Interstate Co.
Mead-Morrison Mfg. Co.
Osgood Company
Pawling & Harnischfeger Co.
Sauerman Bros.

Expanded Metal
Berger Mfg. Co.
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.

Expansion Bolts
National Lead Co.

Filters, Water, Municipal and Industrial
Amer. Water Softener Co.
California Filter Co.
International Filter Co.
Roberts Filter Mfg. Co.

Fireproofing Material & Construction
Berger Mfg. Co.
Marks Corp., H. E.
Northwestern Expanded Metal Co.

Floor, Asphalt Mastic
Standard Oil Co. of N. Y.

Floor Hardener, Concrete
(See Conc. Floor Hardener)

Floor, Wood Block
Barrett Company
Jennison-Wright Co.
Republic Creosoting Co.

Flooring, Fireproof
Irving Iron Works
Marks Corp., H. E.
Universal Safety Tread Co.

Flumes, Iron & Steel
Armco Culvert & Flume Mfrs. Assn.
Blaw-Knox Co.
Hardesty Mfg. Co., R.

Forgings
Bethlehem Steel Co.
Carnegie Steel Co.

Form Clamps
Concrete Steel Co.
Insley Mfg. Co.
Pyle-Rogers Co.
Universal Form Clamp Co.

Form Tighteners
Concrete Steel Co.
Marion Malleable Iron Wks.

Forms, Culvert, Road, Sewer, Tunnel, etc.
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.
Lakewood Engr. Co.

Forms for Curb and Gutter
Blaw-Knox Co.

Forms for Walls, Building Construction, etc.
Berger Mfg. Co.
Blaw-Knox Co.
Concrete Steel Co.
Heltzel Steel Form & Ir. Co.

Foundations
McArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.
Spencer, White & Prentis.
Simplex Concrete Pile Assn.
Underpinning & Found. Co.

Frogs and Switches, Railway
Bethlehem Steel Co.
Foster Co., L. B.
Ramapo Ajax Corp.

Garbage Disposal Apparatus
Jeffrey Mfg. Co.

Gas Producers
Blaw-Knox Co.

Gate, Hoist
Dayton Globe Iron Works

Gates, Sluice
Chapman Valve Mfg. Co.
Coffin Valve Co.
Coldwell-Wilcox Co.
Crane Company, The
Dayton Globe Iron Works
Hardesty Mfg. Co., R.

Gauges, Loss of Head
Simplex Valve & Meter Co.

Gauges, Rates of Flow
Simplex Valve & Meter Co.

Gears
Earle Gear & Mach. Co.

Generators, Electric
Allis-Chalmers Mfg. Co.

Glass, Fireproof
(See Wire Glass)

Governors, Waterwheel
Woodward Governor Co.
Worthington Pump & Machy. Corp.

Graders, Road
Adams & Co., J. D.
Austin-Western Rd. Mchy. Co.
Erie Steam Shovel Co.
Hadfield-Penfield Steel Co.
Western Wheeled Scraper Co.

Granite
Granite Paving Block Mfrs.'

Graphite
Detroit Graphite Co.

Gratings, Subway
Irving Iron Works
Mitchell-Tappen Co.
Universal Safety Tread Co.

Gravel Washing Plants
Sauerman Bros.

Gypsum
Keystone Gypsum Fireproofing Co.
Marks Corp., H. E.

Hammers, Electric
National Elec. Mfg. Co.

Hammers, Pneumatic
Chicago Pneumatic Tool Co.

Hammers, Steam Pile
(See Pile Hammers, Steam)

Heaters, Tar & Asphalt
Honhorst Co., The Jos.
Littleford Bros.

Hoists, Concrete Tower
Clyde Iron Works Sales Co.
Insley Manufacturing Co.
Lakewood Engr. Co.
Mead-Morrison Mfg. Co.
National Hoisting Eng. Co.

Hoists, Contractors' Electric
Allis-Chalmers Mfg. Co.
Bay City Dredge Works
Byers Mach. Co.
Clyde Iron Works Sales Co.
Dobbie Foundry & Mach. Co.
Flory Mfg. Co., S.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J.S.
National Hoisting Eng. Co.
Northern Engineering Wks.
Porter Co., H. K.
Ransome Con. Mchy. Co.
Stroudsburg Engine Works
Thomas Elevator Co.
Vulcan Iron Works of Pa.

Hoists, Contractors' Gasoline
Clyde Iron Works Sales Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J.S.
National Hoisting Eng. Co.
Stroudsburg Engine Works
Thomas Elevator Co.

Hoists, Contractors' Steam
Allis-Chalmers Mfg. Co.
Byers Mach. Co.
Clyde Iron Works Sales Co.
Ingersoll-Rand Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist Eng. Co., J. S.
National Hoisting Eng. Co.
Stroudsburg Engine Works
Thomas Elevator Co.
Vulcan Iron Works of Pa.

Hoists, Hydraulic Head Gates
Dilts Machine Wks., Inc.

Hoists, Motor, Truck
Mead-Morrison Mfg. Co.
Wood Hyd. Hoist & Body Co.

Hoists, Pneumatic
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Stroudsburg Engine Works
Sullivan Machinery Co.

Hoists, Skip
Mead-Morrison Mfg. Co.

Hoppers, Concrete
Insley Manufacturing Co.
Ransome Concrete Mchy. Co.

Hoppers, Steel
Harris Brothers Co.
Heltzel Steel Form & Ir. Co.
Honhorst Co., The Jos.

Horses, Steel
Economy Scaffold Co.

Hose, Air
Chicago Pneumatic Tool Co.

Hydrants
Chapman Valve Mfg. Co.
Ludlow Valve Mfg. Co.
Smith Mfg. Co., A. P.
Wood & Co., R. D.

Incinerators
Powers Specialty Co.

Inserts, Concrete
Concrete Steel Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Brandis & Sons
Buff & Buff Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lietz Co., A
Weber Co., The F.

Iron Work, Structural and Ornamental
Hendrick Mfg. Co.
Irving Iron Works Co.
Ryerson & Son, Jos. T.
Snead Architect. Iron Wks.
Universal Safety Tread Co.

Jacks, Lifting
McKiernan-Terry Drill Co.
Norton, Inc., A. O.
Roos Company, H. W.

Joints, Expansion Paving
Barrett Company
Carey Co., The Philip

Joints, Filler Paving
Barrett Company
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Central Foundry Co.
Crane Company, The
U. S. Cast Ir. Pipe & Fdy. Co.

Kilns, Rotary
Vulcan Iron Works of Pa.

Lath, Expanded Metal
Armco Culvert & Flume Mfrs. Assn.
Berger Mfg. Co.
Mitchell-Tappen Co.
Northwest'n Exp. Metal Co.

Leadite
Leadite Co., Inc., The

Lead Pencils
Koh-I-Noor Pencil Co.

Lights, Contractors'
Carbic Manufacturing Co.

Loaders, Wagon
(See Wagon Loaders)

Locomotives, Compressed Air
Baldwin Locomotive Co.

Locomotives, Electric
Baldwin Locomotive Co.
Jeffrey Mfg. Co.

Locomotives, Gasoline
Baldwin Locomotive Co.
Fate Root Heath Co.
Hadfield-Penfield Steel Co.
Milwaukee Loco. Mfg. Co.
Vulcan Iron Works of Pa.
Whitcomb Co., Geo. D.

Locomotives, Steam
Baldwin Locomotive Co.
Davenport Locomotive Wks.
Vulcan Iron Works of Pa.

Locomotives, Storage Battery
Ironton Engine Co.
Jeffrey Mfg. Co.
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Lumber
Eppinger & Russell Co.
Lawson & MacMurray
Long-Bell Lumber Co.

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Central Foundry Co.

Manometers
Simplex Valve & Meter Co.

Meter Boxes
Pittsburgh Meter Co.

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Hersey Mfg. Co.
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry

Meters, Current
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry
Wallace & Tiernan Co., Inc.

Meters, Venturi
Builders Iron Foundry

Meters, Water, Oil, etc.
Builders Iron Foundry
Gamon Meter Co.
Hersey Mfg. Co.
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Worthington Pump & Machy. Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Austin Machinery Corp.
Cement-Gun Co.
Lakewood Engineering Co.
Ransome Concrete Mchy Co.

Mixers, Grout
Austin Machinery Corp.
Ransome Concrete Mchy Co.
Union Iron Works

Mixers, Hot
Austin Machinery Corp.

Mixers, Mortar
Austin Machinery Corp.
Ransome Concrete Mchy Co.

Mixers, Paving
Austin Machinery Corp
Ransome Concrete Mchy. Co.

Mixers, Pneumatic
Ransome Concrete Mchy. Co.

Mortar
Carney Co., The

Motors, Electric
Allis-Chalmers Mfg. Co.
Westinghouse Tr. Brake Co.

Motor-Truck Bodies
Wood Hyd. Hoist & Body Co.

Motor Truck Tires
Ajax Rubber Co.

Motor Trucks
(See Trucks, Motor)

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Blaw-Knox Co.
Oxweld Acetylene Co.

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Jenkins Bros.

Paints, Graphite
Detroit Graphite Co.
Truscon Laboratories

Paints, Light Reflecting
Detroit Graphite Co.
Truscon Laboratories

Paints, Metal Protective
Barrett Company
Carey Co., The Philip
Detroit Graphite Co.
National Lead Co.
Protexol Corp.
Toch Brothers
Truscon Laboratories

Paving, Asphalt
Carey Co., Philip
Standard Oil Co. of N. Y.

Paving Blocks, Creosoted Wood
(See Creosoted Block Timber, Poles, Cross-Arms, Lumber)

Paving Blocks, Granite
Granite Paving Block Mfrs.

Paving Breakers
Ingersoll-Rand Co.

Paving, Cold Patching
Standard Oil Co. of N. Y.

Paving Guards, Steel
Godwin Co., Inc., W. S.

Penstocks
Blaw-Knox Co.

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McKiernan-Terry Drill Co.
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Pile Hammers, Steam
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Vulcan Iron Works of Chic

Piles, Concrete
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Spencer, White & Prentis

Piles, Creosoted Wood
Jennison-Wright Co.
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Pipe, Bends
East Jersey Pipe Co.
National Valve & Mfg. Co.

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Central Foundry Co.
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Glamorgan Pipe & Fdry. Co
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Pipe, Concrete
Lock Joint Pipe Co
Newark Concrete Pipe Co

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Austin-Western Rd. Mch. Co.
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Hardesty Mfg. Co., The R

Pipe Covering, Asbestos
Carey Co., The Philip

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Michigan Pipe Co.
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Builders Iron Foundry
Central Foundry Co.
U.S. Cast Ir. Pipe & Fdy. Co
Westinghouse Tr. Brake Co

Pipe Joint Compounds
Leadite Co., Inc., The

Pipe, Lock Bar
East Jersey Pipe Co.

Pipe, Lock Joint
Lock Joint Pipe Co.

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Standard Wood Pipe Co.
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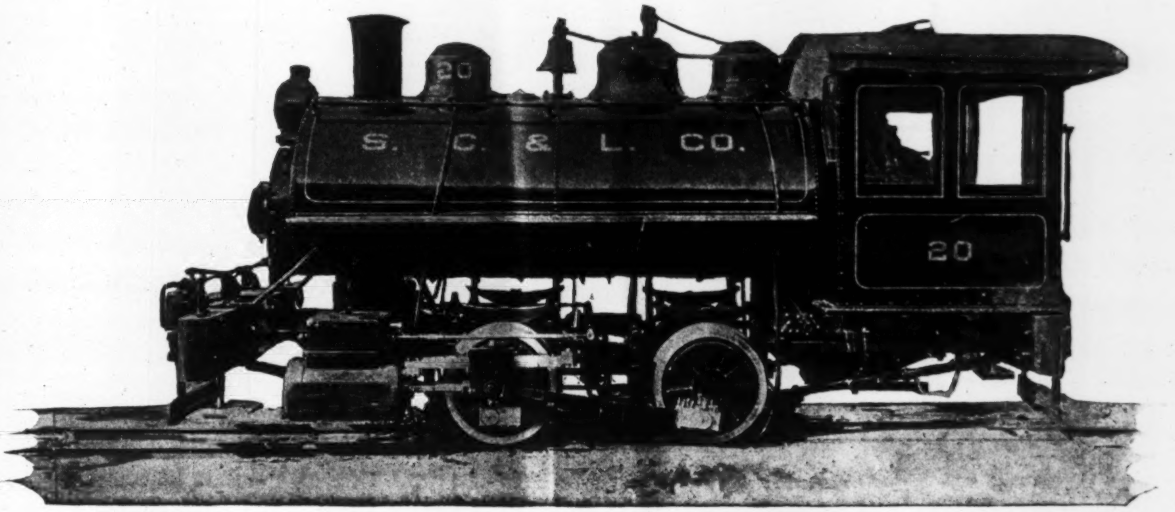

"Have used all makes of locomotives for 20 years and the Vulcan is far superior"

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This is a fine example of the kind of enthusiasm we hear from Vulcan users in all parts of the country.

The Vulcan shown in the photo is the 12x16-in. cylinder, standard gauge, four-coupled saddle tank type, weighing 25 tons.

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- Gasoline Locomotives
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- Gears, Moulded and Cut Teeth
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Established 1849
1737 Main Street, Wilkes-Barre, Penn.
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(See Window Sash)

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Turbine Sewer Mach. Co.

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Marion Steam Shovel Co.
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Thew Shovel Co.

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Blaw-Knox Co
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Heltzel Steel Form & Tr. Co.
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Littleford Bros.
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Construction Specialties Co.
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Barrett Company

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Automatic Electric Co.

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Ties, Creosoted Wood
Amer. Creosoting Co. (Ky.)
Colonial Creosoting Co.
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Jennison-Wright Co.

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Tile, Roof Cement
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Chicago Pneumatic Tool Co.
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Torches, Welding & Cutting
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Towers, Concrete
(See Hoists, Conc. Tower)

Towers, Radio
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Towers, Transmission
Blaw-Knox Co.

Track, Industrial & Portable
Bethlehem Steel Co.
Foster Co., L. B.
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Tractors
Best Tractor Co., C. L.
Eagle Wagon Works
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Transits and Levels
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Concrete Steel Co.
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Trolleys, I-Beam
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Trucks, Motor
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Ford Power Equip. Exp.
International Motor Co.
Watson Truck Corp.

Tunnel Liner Plates
Blaw-Knox Co.

Turbines, Hydraulic Impulse and Reaction
Allis-Chalmers Mfg. Co.
Pelton Water Wheel Co.
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Worthington Pump & Machy. Corp.

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Turnbuckles
Laughlin Co., The Thos.

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Unloaders, Car
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Coffin Valve Co.
Crane Company, The
Golden-Anderson Valve Specialty Co.
Ludlow Valve Mfg. Co.
National Valve & Mfg. Co.
Simplex Valve & Meter Co.
Smith Mfg. Co., A. P.

Valves, Altitude
Golden-Anderson Valve Specialty Co.
Ludlow Valve Mfg. Co.

Valves, Angle, Check, Gate and Globe
Chapman Valve Mfg. Co.
Coffin Valve Co.
Golden-Anderson Valve Specialty Co.
Jenkins Bros.
Ludlow Valve Mfg. Co.
National Valve & Mfg. Co.
Simplex Valve & Meter Co.
Westinghouse Tr. Brake Co.

Valves, Automatic
Golden-Anderson Valve Specialty Co.
Ludlow Valve Mfg. Co.
Westinghouse Tr. Brake Co

Valves, Control Electric
Chapman Valve Mfg. Co
Dean, Ltd., Payne

Valves, Control Hydraulic
Chapman Valve Mfg. Co

Valves, Float
Golden-Anderson Valve Specialty Co.

Valves, Regulating
Golden-Anderson Valve Specialty Co.
Ludlow Valve Mfg. Co.
Simplex Valve & Meter Co.

Valves, Return
Golden-Anderson Valve Specialty Co.

Valves, Safety
Golden-Anderson Valve Specialty Co.

Valves, Sewage
Chapman Valve Mfg. Co.

Valves, Sluice
Chapman Valve Mfg. Co
Coffin Valve Co.

Wagons, Asphalt
Eagle Wagon Works
Watson Truck Corp.

Wagons, Dump, Auto
Austin-Western Rd. Mch.Co.
Eagle Wagon Works

Wagons, Dump
Austin-Western Rd. Mch.Co
Watson Truck Corp.

Wagon Loaders
Austin Machinery Corp.
Austin Western Rd. Mch. Co
Barber-Greene Co.
Erie Steam Shovel Co.
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Dobbie Frdy. & Mach. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoisting Eng. Co.J.S

Window Sash Putty
Truscon Laboratories

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Mississippi Wire Glass Co.

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Wire and Cable, Electrical
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Wood Casings
Michigan Pipe Co., The

Wood Preservatives
Barrett Company
Detroit Graphite Co.
Protexol Corp.
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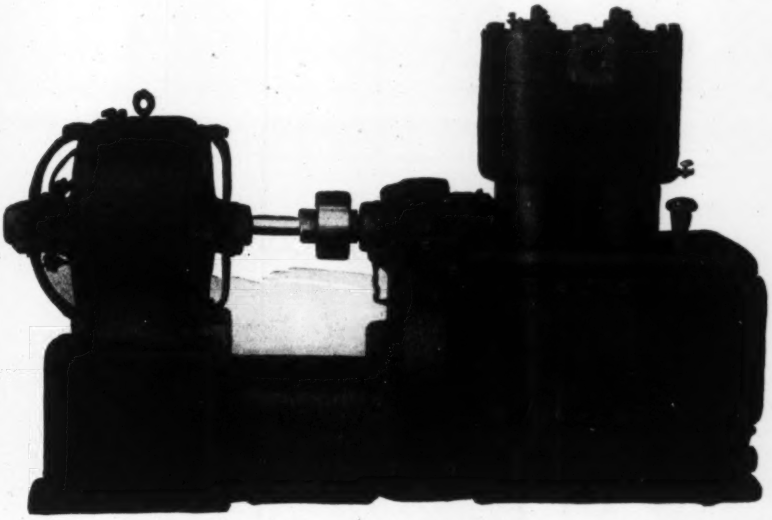

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The Compressor shown here is the E-4 Type. It is a motor-driven unit with piston displacement of 110 cu. ft. per minute. This is but one of many Westinghouse-National types, which are built in all sizes from 11 to over 600 cu. ft. capacity. Write for the Westinghouse-National catalog.

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This special type of control is an exclusive feature, found only on Westinghouse-National Compressors.

Westinghouse Traction Brake Company
General Office and Works: Wilmerding, Pa.

WESTINGHOUSE-NATIONAL
Air Compressors

"QUALITY MACHINES FOR QUALITY SERVICE"

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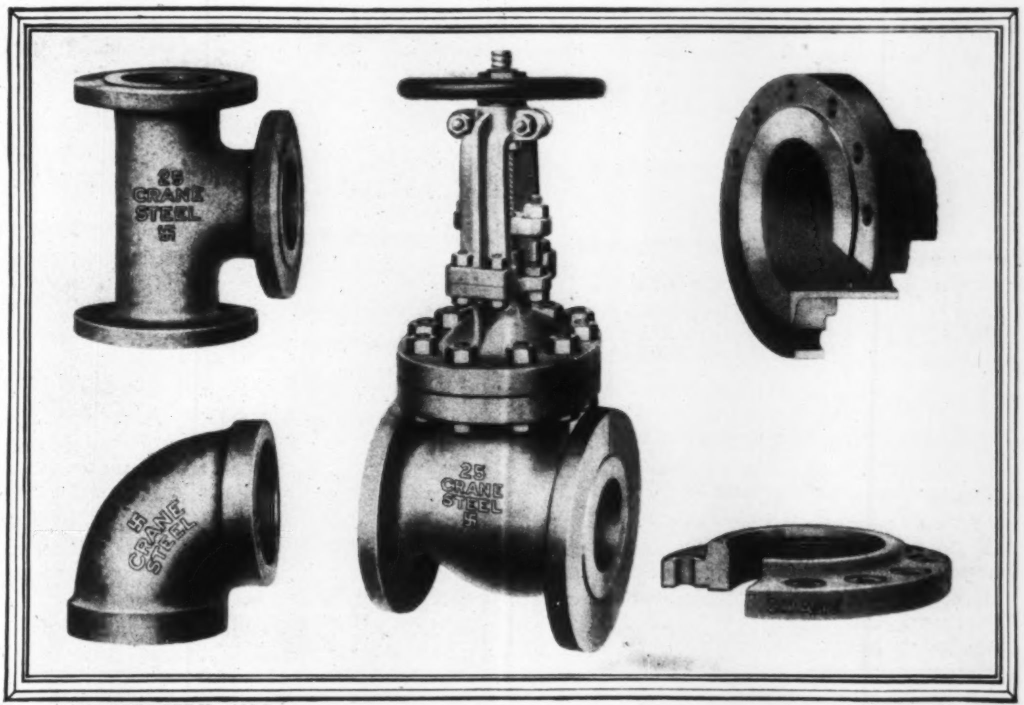

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CRANE "SERIES 25" CAST STEEL MATERIALS

For use in power plants where pressures run as high as 250 pounds and total steam temperatures may reach 750 degrees, Crane has developed a new specialized line of piping materials, designed by engineers of wide experience, known as "Series 25."

Valve bodies, bonnets and discs are cast steel; seat rings, disc rings and stems are monel metal. Fittings are Crane cast steel, accurately machined.

For descriptive literature and specifications of Crane's six new lines of steel valves and fittings, telephone or write the Crane representative at the Crane branch near you.

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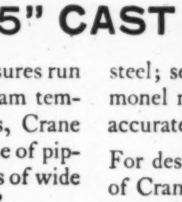


Crane "Norfolk" Lavatory

Barrett ROOFINGS

Roofs That Don't Talk Back!

Fourteen Barrett Specification Roofs on the three great plants of the American Thread Company. Seven of these roofs have an area each of 23,000 feet or more. And every one of them is bonded against repair expense for a long term of years.

That's the sort of roofs that busy mill executives want on their buildings—roofs that can be laid and forgotten—roofs so free from trouble that you need never give them a thought. That's why the engineers of the construction companies who reared these buildings specified Barrett Specification Roofs.

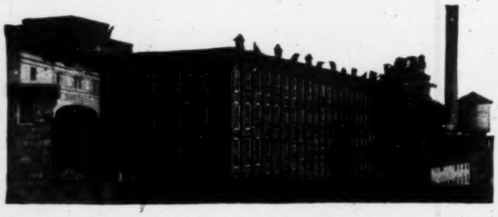
The Barrett Specification standardizes every detail of material, workmanship and inspection. Barrett inspectors follow the job to see that the Specification is absolutely followed. The man who lays the roof must have a recognized standing for good workmanship to secure the Surety Bond for the building's owner.

Because experience has proved that Barrett Specification Bonded Roofs far outlast the guaranteed period, we are able to bond them against all repair expense for 20 years.

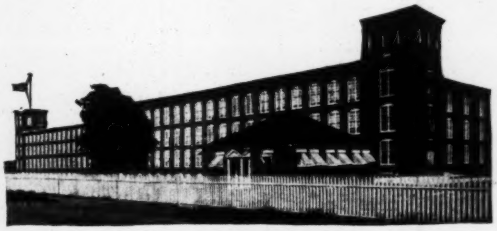
But whether your roof is constructed according to The Barrett Specification or whether it is a roof built to your own specification—

Whether it is on an old building or on a new one—

Experience has shown that it pays to see that the felt used and the pitch used are both labeled Barrett.



Barrett Specification Bonded Roof on American Thread Co., Willimantic, Conn., Roofer: C. G. Bostwick, Hartford, Conn.



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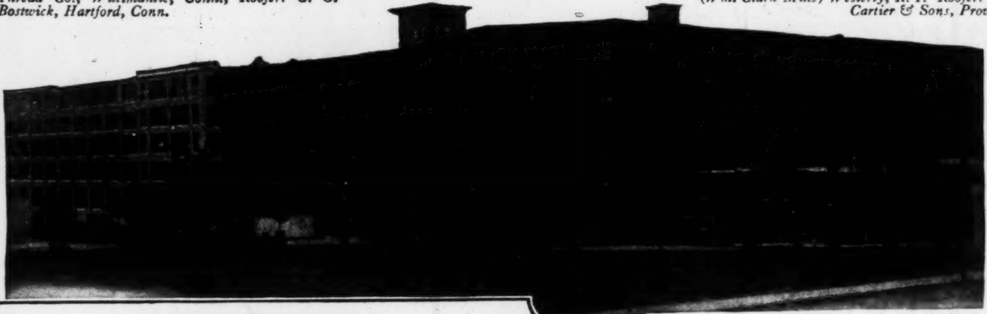

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Facts First

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For flat (or nearly flat) roofed buildings, there is a wide line of Barrett Built-Up Roofs of which the Barrett Specification is the leader.

For all steep-roofed buildings, there are four types of shingles—durable, fire-resistant, surfaced with everlasting mineral in red, green or blue-black. In roll roofings, a wide variety—both plain surfaced or mineral surfaced.

Write for copies of The Barrett Specification and for booklets describing the Barrett Ready Roofings in detail.

The Barrett Company

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